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January 13, 2010

BY COURIER

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

Dear Ms. Walli:

## EB-2009-0349 – OEB Review of Rate Protection and Direct Benefits Under OReg 330/09 -Hydro One Networks' Comments on Board Staff Paper

Attached are three (3) paper copies of Hydro One Networks' comments on the Board Staff Discussion Paper Discussion Paper that was issued on December 14, 2009.

I have also attached proof of successful submission of these comments through the Board's Regulatory Electronic Submission System.

Sincerely,

ORIGINAL SIGNED BY SUSAN FRANK

Susan Frank



## HYDRO ONE COMMENTS ON BOARD STAFF DISCUSSION PAPER: PROPOSED FRAMEWORK FOR DETERMINING THE DIRECT BENEFITS ACCRUING TO CUSTOMERS OF A DISTRIBUTOR UNDER O. REG. 330/09

Hydro One Networks ("Hydro One") is pleased to provide comments on the Board Staff Discussion Paper ("the paper") dated December 14, 2009, titled "Proposed Framework for Determining the Direct Benefits Accruing to Customers of a Distributor under Ontario Regulation 330/09."

These comments complement Hydro One's Distribution's Green Energy Plan, updated September 25, 2009, and filed as part of Hydro One's distribution rates application EB-2009-0096 (Exhibit A, Tab 14, Schedule 2). The Green Energy Plan ("GEP") identifies estimates and proposes the allocation of direct benefits of certain eligible "green energy" investments as discussed on pages 17-23 of Exhibit A, Tab 14, Schedule 2.

This submission consists of three sections:

- 1. Introduction and General Comments
- 2. Responses to Board Staff's Issues for Comment
- 3. Summary of Key Messages

#### **1.0 INTRODUCTION AND GENERAL COMMENTS**

The discussion paper proposes principles and criteria that define a "framework" for the estimation of the direct benefits attributable to a distributor's load customers, but ultimately it is left up to each individual LDC to determine how to specifically apply these proposals. Hydro One agrees with this approach at this time. The criteria proposed in Hydro One's GEP for identifying direct benefits are largely consistent with the principles and criteria outlined in the paper. (Hydro One's approach is further outlined in Section 1.4 below.)

As noted in the paper, Hydro One has seen the vast majority of activity related to applications for connecting renewable energy generation development under the Renewable Energy Standard Offer Program ("RESOP"). Hydro One's comments are based on that experience and on the thinking and analysis behind the Company's GEP.

Hydro One's understanding of the mechanism proposed by section 79.1 of the Ontario Energy Board Act ("the Act"), and enabled by Ontario Regulation 330/09 ("the Regulation"), is that "eligible investment costs" may be incurred as either OM&A or Capital expenditures. Capital expenditures would be represented by and recovered through their related period costs – i.e. interest, depreciation (including removals), and a return on capital, as would any other capital costs of the distributor. Thus, both the "eligible" OM&A and the "eligible" capital expenditures can be represented in terms of a revenue requirement. However, unlike other aspects of the distributor's revenue



requirement, the revenue requirement associated with the eligible investments is to be recovered partly from:

- customers of the individual distributor making the eligible investment ("LDC customers"), and partly from
- all Ontario electricity consumers ("provincial consumers").

As noted in the paper, the distributor would recover from its own LDC customers the revenue requirement for the "net costs" or "direct benefits" of the eligible investments, and recover the revenue requirement for the remaining portion of the eligible investments from Provincial consumers.

### **1.1** A common yardstick for all Distributors

The paper correctly notes there is diversity among distributors in relation to renewable energy generation. For example, certain distributors' territories may attract a disproportionate level of renewable generation projects. Hydro One believes that, in the long term, the Board should apply assessment requirements that vary based on the types of <u>specific</u> eligible investments undertaken by the distributor. For example, large investments may be subject to more rigorous analysis than smaller, less materially significant investments. A uniform expectation of rigour, detail and effort should be applied to all distributors for a given size of investment, to ensure that the Board and all distributors comply with the expectations of the Act and the regulation in determining direct benefits.

At this time, as noted in the paper, there is insufficient information to develop a common approach for all distributors. Hydro One therefore recommends that each distributor intending to access the provincial ratepayer pool for funding of its eligible investments should be required to file its own proposal for the allocation of direct benefits (likely through its "GEA Plan"<sup>1</sup>). In fact, Hydro One suggests that a common guideline detailing the specific methodology for calculating the direct benefits is not required at this point. Once more experience is gained with these types of investments, it will be possible for the Board to develop a common guideline.

Hydro One suggests that in keeping with the new objective of the Board under Section 1.(1) of the Act<sup>2</sup>, one of the guiding principles for allocation of direct benefits should be *the promotion of timely and efficient connections of renewable energy generators*. Many distributors are facing, or will soon face, the challenges of connecting a significant number of renewable generators. It would be undesirable to risk the delivery of distributors' green energy programs by burdening them with excessive regulatory

<sup>&</sup>lt;sup>1</sup> The requirement for a "GEA Plan" is contemplated in the draft filing requirements issued December 18, 2009, under EB-2009-0397 - Filing Requirements: Distribution System Plans under the Green Energy Act

<sup>&</sup>lt;sup>2</sup> To promote the use and generation of electricity from renewable energy sources in a manner consistent with the policies of the Government of Ontario, including the timely expansion or reinforcement of transmission systems and distribution systems to accommodate the connection of renewable energy generation facilities. 2004, c. 23, Sched. B, s. 1; 2009, c. 12, Sched. D, s. 1.



expectations for more rigorous and detailed assessments. Such expectations lead to higher costs for those LDCs' ratepayers, and, by distracting resources, could come at the expense of efficient execution of the actual work represented by the eligible investments.

Hydro One urges the Board to establish a common, reasonable yardstick for all distributors in terms of the effort to be expended on identifying direct benefits, while still allowing the methodology to accommodate the diversity among distributors. At this time, each distributor requiring provincial funding should be encouraged to file its own proposal consistent with the principles and criteria outlined in the paper, but based on available information and experience of the utility. As evidenced by the GEPs filed by Toronto Hydro and Orangeville Hydro, not all distributors require provincial funding. As more industry experience is gained, and after appropriate studies are completed, a common methodology for the longer term could be adopted, as appropriate. That methodology can also apply higher rigour to individual investments that justify it (e.g. based on their cost or specific characteristics).

### **1.2** Precision at What Price?

Hydro One notes Board staff's observation that the costs of estimating the net direct benefits will ultimately be recovered from LDC customers, and the suggestion that these costs should therefore be kept reasonable. Board staff states that "it would be pragmatic to avoid an outcome whereby the costs incurred by a distributor to estimate the direct benefits exceed the direct benefits that the distributor is estimating." This seems to set an extreme upper limit on the costs that would be viewed as acceptable if incurred by distributors. Hydro One encourages the Board to assess all implementation costs against the results that would be derived from them. Specifically, the key question is "What is the value of increased accuracy and precision in determining the direct benefits, and does it justify the associated costs?"

As an example, suppose that a distributor "misallocates" \$10 million in capital investment by failing to recognize that this entire amount is in fact a direct benefit to its LDC customers ( i.e. a sizable "error"). Provincial consumers would be 'incorrectly' held responsible for the recovery of the revenue requirement associated with the capital expenditures, which would be about \$1 million per year, or roughly \$0.25 per customer per year. On the other hand, LDC customers would benefit from unwarranted rate protection of \$1 million per year. If the distributor in question were Hydro One, the benefit to each of its customers would amount to less than \$1.00 per year, although it would be offset by an unwarranted charge of \$0.25 (which he/she would have to pay as a provincial consumer). So in total, the resulting disparity would be that Hydro One's customers are undercharged by less than \$0.75 per year, and other provincial consumers are overcharged by \$0.25 per year.

Board Staff acknowledges, and Hydro One agrees, that there is little history and experience to draw upon at this time for accurately determining the direct benefits. Based on this, Board staff appears to reject a less resource-intensive standard approach or



methodology, in favour of the more detailed framework it proposes in Section 3.3.2.1 of the paper.

Hydro One comes to the opposite conclusion. It is Hydro One's view that a resourceintensive approach that strives for accuracy and precision is premature at this time. It would lead to the investment of yet undetermined, but likely significant, resources in search of direct benefits that may or may not exist (and even if they do, may or may not be material).

Instead, Hydro One proposes that the Board initially pursue a more pragmatic and measured approach. For this "first generation" of direct benefits, distributors should use a methodology that focuses on the more <u>obvious and material benefits</u> to be identified and quantified in a responsible manner that does not hinder delivery of the connections program. At the same time, work can be initiated by the Board and distributors to refine the methodology over time (e.g. by pursuing improved quantification and identifying other, less obvious benefits), based on growing experience, and to the extent that the additional effort can be justified. This is consistent with the approach that Hydro One used in its GEP.

### **1.3** The Expected Framework -- Ex Post or Ex Ante, and Who files When?

Section 3.3.2.1 and other parts of the paper refer to the "framework" for the estimation of the direct benefits related to improved capability of the distribution system. The criteria proposed by Board staff appear reasonable and are consistent with Hydro One's Distribution Application EB-2009-0096.

Hydro One proposes that in applying the principles and criteria proposed by Board Staff, a high-level approach, similar to the one used in Hydro One's GEP, is the best approach at this stage.

Hydro One acknowledges that benefits may accrue to LDC customers from reduced Transmission Charges and WMSC. However, Hydro One does not agree with the paper's proposal that that these charges are most appropriately handled on an ex post basis. Distributors can and should estimate these benefits on an ex ante basis as part of a cost of service application that includes charges to the provincial consumers. This point is covered later on in the detailed issue-by-issue discussion below (Issue 2).

The current regulatory construct in Ontario is based on forecast and forward-looking information. Hydro One's view is that the attribution of direct benefits must be performed in a manner consistent with this form of rate-making. Each distributor wishing to access the provincial ratepayer pool for funding should be required to file its proposed allocation of direct benefits as part of its "GEA Plan" with its cost of service application. By necessity, this must be done on a forecast, i.e. ex ante, basis. Applying the analysis on an ex post basis would be inconsistent with Distribution regulation in Ontario.



While the paper does not state whether the benefits associated with improved capability of the distribution system should be assessed on an ex post basis or on an ex ante basis, Hydro One's view is that only an ex ante approach would be consistent with the Regulatory framework in Ontario.

In conclusion, Hydro One does not support the application of any ex post calculation of any direct benefits, whether related to the WMSC, to transmission charges, or to specific investments. Hydro One believes that a higher-level, ex ante, approach similar to the one used in its GEP is a more prudent approach until more experience is gained to justify further refinements.

#### 1.4 Summary of Hydro One's Approach in its GEP

This section is provided for the information of the Board and interested parties.

In its current Distribution Cost of Service Application Hydro One has proposed a methodology for determining the direct benefits of eligible investments in a manner that is largely consistent with the principles and proposed criteria outlined by the Board in its paper.

For eligible "Expansion" investments, Hydro One has proposed both Asset Replacement and Load Growth criteria.

The Asset Replacement critierion aligns with the Board's proposed "asset condition" criterion by examining the benefit to its own LDC customers from those eligible investments that extend the useful life of the affected assets and defer the need for future The methodology is detailed in the GEP on pages 17-18, and in an investment. interrogatory response at Exhibit H, Tab 7, Schedule 21. Hydro One estimates, on an ex ante basis, the benefit to its customers based on the net present value of the full replacement cost of poles aged 40 years or over, and of the "consumed portion" of the poles that have not yet reached that age. For simplicity and practicality, Hydro One has done its assessment across all of Hydro One's service territory by using the existing pole age distribution to determine the benefit from replacement of its wood pole assets, with age acting as a proxy for asset condition. Only the replacement of wood pole assets is considered to provide a material benefit since most of the other distribution line assets would either be "run-to-failure" (i.e. assets are not proactively replaced, such as pole-top transformers) or have a very long life (e.g. conductor, power transformers). In either case, the premature replacement of these assets is not expected to provide any material benefits given they are not normally required to be replaced except to accommodate the connection of renewable generation. The Asset Replacement criterion has been used to determine a benefit to Hydro One's load customers of 15% of the eligible investment. Hydro One's proposal does not examine the replacement of any other asset types, as they are not considered to provide material benefits, and there is simply insufficient information to apply this criterion more specifically than on a utility-wide basis.



The *Load Growth* criterion assumes a 1% annual load growth to estimate the number of feeders that will reach their capacity over the next twenty years regardless of renewable generation investment. It was also assumed that generation-driven eligible investments would provide a benefit for only 20% of the required investments in areas experiencing load growth. (Many expansions have little potential benefit to Hydro One customers due to the remote locations of renewable resources and the adequacy of the existing system in those areas to serve any future load customers.) Hydro One's assumptions align with the Board's proposed criteria with respect to "customer density" and "load growth". Once again, for simplicity and practicality, Hydro One has done its assessment across all of Hydro One's service territory using a planned, ex ante, approach. The Load Growth criterion has been used to determine a benefit to Hydro One's load customers of 3% of the eligible investment.

Hydro One has also considered the direct benefits of improved Service Quality. For Renewable Enabling Improvement ("REI") eligible investments, Hydro One has estimated the benefits associated with specific investments by taking into account the potential benefits to its customers from improved monitoring processes and the potential improvement in service quality. The methodology is detailed on pages 21-23 of its GEP, and aligns with the Board's proposed "service quality" criterion and the principle of identifying the extent to which the eligible investment will also be used by the distributor's load customers. Only two REI investments were considered to provide direct benefits - the SCADA associated with Distribution Station (DS) automation and automated feeder reclosers. It was estimated that 30% of DSs to be modified to accommodate renewable generation should be monitored regardless of the generation. These DSs are selected based on criteria such as voltage level, station loading and location. Among these 30% of DSs, Hydro One proposed 50% investment to be direct benefit to LDC ratepayers based on equal sharing of the benefit. For automated feeder reclosers, the benefit was estimated based on the potential to reduce travel time of field crews to allow for faster customer restoration. Hydro One's criterion also recognizes there are no benefits to its customers in cases where the REI investment is undertaken solely to facilitate the connection of renewable generation. The benefits to Hydro One customers for eligible REI investments range from 0% to 9%, depending on the specific REI investment.

#### 2.0 RESPONSES TO BOARD STAFF'S ISSUES 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?

Hydro One does not propose any other direct benefits for the Board's consideration.



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?

#### Hydro One's view of benefits from reduced transmission and WMSC charges:

Hydro One did not identify reduced Network transmission and WMSC charges as a potential source of direct benefits in its GEP. Hydro One does recognize that a reduction in these charges can indeed be a benefit to consumers. However, it could be questioned, in the context of section 3 of the Regulation, whether these benefits arise "*as a result of*" *eligible investments by the distributor*, and whether the redistribution of these benefits is best addressed more broadly, and outside the scope of this initiative.

Hydro One's comments assume that the Board deems that these benefits do in fact qualify as direct benefits consistent with the Regulation.

- If so, potential exists for benefits to be realized from a reduction to Transmission <u>Connection</u> charges, as well as Network Charges.
- The materiality of the reduction in transmission charges may be limited, as these charges are typically incurred during peak, while renewable generation (and especially wind generation) would not necessarily operate during peak.
- In cases where "reverse flow" conditions are caused by renewable generation that exceeds local loads, there is power flow on to the transmission system. In these cases, only the amount of renewable generation that reduces the energy withdrawn to zero should be considered. A one-to-one correlation between the amount of energy produced by embedded generators and the reduction in quantities used to calculate WMSC does not always hold.

The processes and systems needed to forecast, and especially to track on an ex post basis, the reduction of Transmission charges and WMSC due to renewable energy generation are not readily available and could be costly to implement. Hydro One respectfully suggests that addressing these benefits should be a later priority, especially since these benefits are not likely to be significant during the initial implementation. The Board and distributors may wish to study this issue for a "next generation" determination of this benefit and to evaluate the materiality and costs (e.g. system/ resource requirements) of quantifying it.

Consideration should be given to the materiality of the generator size to be accounted for in determining the benefit due to reduced charges for transmission and WMSC. Hydro One believes that the impact of micro-generators will be immaterial in terms of the reduction of either transmission charges or WMSC given the very small individual output of such generators compared to utility loads. This will be particularly true in the near term. However, the relatively large number of such micro-generators will cause a disproportionately large administrative effort, which would ultimately be borne by LDC customers. Thus Hydro One proposes that micro-generators should not be included in the assessment of direct benefits due to reduced transmission and WMSC charges.



As a distributor, Hydro One realizes no reduction in Transmission Connection charges for embedded renewable generators equal to or greater than 2 MW as the output of such generators is included in the application of gross load billing but may see a reduction in such charges due to embedded renewable generators < 2 MW.

Finally, section 3.2.1 of the paper includes a table with respect to reduced WMSC charges to a distributor as related to the share of energy supplied by generation. The assumptions and calculations used to produce this table are not specified, and it is unclear how, or if, the values in this table are intended to be used for the purpose of quantifying the benefits associated with network transmission charges and WMSC.

#### Hydro One's view of the proposed ex post approach:

Section 1.3, above, details Hydro One's concerns with the proposed ex post approach.

Hydro One notes that an *annual* ex post process that accounts for all qualifying generation connected to the distributor, and to distributors embedded within it, would be a very significant and labour-intensive effort. Additionally, settlements-related timing constraints would further delay the implementation of the ex post adjustments.

Specifically, the financial settlements results from a given year are not known until at least mid-January of the following year with respect to IESO final settlement data.

Hydro One anticipates that determining this benefit on an ex post basis would be resource-intensive and would necessitate the development of systems and processes specifically for this purpose. The calculation of the reduced charges will be complex and data-intensive, relying on bi-directional interval meter and/or bi-directional smart meter data and hourly production data from generators and embedded distributors, as the total and peak-hour generation must be summed from these sources. The accuracy of the ex post approach, when used by host distributors, relies on the provision of relevant information (e.g. metered operating data from generators) by embedded distributors. This is an aspect that is not within the control of host distributors.

Instead of pursuing annual ex post adjustments at this time, the Board is encouraged to initiate a study to review the relevant information and the materiality of this benefit, and to determine an appropriate methodology that could be applied on an ex ante basis to reflect it in distributors' forecasts.

# 3) Are there any potential refinements to the proposed Guiding Principles discussed above?

Hydro One strongly agrees with the first principle, that the "benefit is directly attributable to only the customers of the distributor making the investment (i.e., limited to distribution system investments) and the benefit is readily quantified in monetary terms."



Specifically, Hydro One's view is that this principle should more explicitly acknowledge that by default, eligible investments are assumed to provide zero benefit to the distributor unless the benefit can be quantified in monetary terms.

Hydro One is in general agreement with all of the proposed principles and notes only some clarifications that may helpful in applying them:

- (i) The second principle states that the "level of detail and analysis provided by a distributor underlying the estimation of the direct benefits should be commensurate with the circumstances of the distributor". This principle should not be misconstrued as promoting inconsistent treatment of distributors and holding them to varying standards of detail and analysis. The level of detail and analysis should be a function of the specific investments.
- (ii) The third principle states: "Portions of certain eligible investments may not ultimately be used by only qualifying renewable generation facilities to which the Board's new cost responsibility policies apply. Consistent with O. Reg. 330/09, to the extent the investment is used for other purposes (e.g., connect a load customer(s), that portion of the investment would not be recovered through the provincial recovery mechanism." Our understanding of this principle is that, to the extent that there is *incremental* use from these facilities, that benefit should be attributed to the users. That is, eligible investment for upgrading/modifying existing facilities that were already adequate for other purposes (e.g. connecting a load customer) would not qualify as a direct benefit.
- (iii) The fourth principle states that "where any existing distribution asset is replaced to accommodate qualifying renewable generation, customers of the distributor making the investment will realize a direct benefit of some magnitude and therefore a certain portion of the costs should not be recovered through provincial recovery mechanism." Hydro One notes that some assets are so long-lived or the cost of their ultimate replacement is so low as to render this direct benefit immaterial.

### 4) Should any additional Guiding Principles be considered by the Board?

Hydro One proposes the addition of two principles to state that:

- the methodology and processes for allocation of direct benefits should be consistent with the Board's objectives in Section 1. (1) of the Act and should not hinder the *timely and efficient connections of renewable energy generators*; and
- that the Board and distributors consider materiality to balance the incremental costs associated with identifying, estimating and applying direct benefits against the resultant incremental accuracy and precision. The costs considered should include information collection, storage, and processing, as well as the process development and implementation costs.

The challenge will be for the Board and distributors to balance these principles, e.g. promoting efficient and timely connections, while attributing costs to the appropriate ratepayers at a reasonable cost and with appropriate precision.



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

Hydro One has detailed its own proposed application of the asset replacement, load growth and service quality improvement criteria in Section 1.4.

#### Portion of the Eligible Investments not used by Qualifying Generators

Hydro One is unclear on the role that the paper attributes to "additional distribution revenues" for assessing the direct benefits. Hydro One's view is that the direct benefits resulting from the investment stem from the <u>avoided infrastructure cost</u> that would have been required to serve the customers. Hydro One is also unclear on the role of density in establishing the direct benefits, beyond the implicit consideration of density in assessing the load growth benefits, and welcomes Board Staff clarification of this section.

The paper suggests a "detailed density study" without specifying what information is to be used to determine the area density. Assuming that the paper is alluding to density information for an individual projects, this would require data for individual feeder and feeder sections. Today, Hydro One does not have sufficient information for detailed density studies at the feeder/feeder section level. If and when this information becomes available, carrying out detailed density studies for individual renewable generation (DG) connections can lead to an intense work load. Once this suggestion is clarified, Hydro One would need to assess whether it has the density information that is contemplated by the Board Staff.

It is noteworthy that many expansions have little potential benefit to Hydro One customers due to the remote locations of renewable resources and the adequacy of the existing system in those areas to serve any future load customers. Since, in Hydro One's case, the majority of the large renewable energy generator connections locate in remote areas with low density and low load growth, the direct benefit provided by eligible investments is anticipated to be very small. In fact, load in some Hydro One territory has been declining, and the generator connections could possibly have a negative impact on the load customers (e.g. over-voltage). Investments to mitigate the negative impacts created by renewable generators should *not* be paid for by distribution ratepayers.

#### Customer Load Growth

Hydro One is not supportive of any approach that requires area/regional load growth information at feeder/feeder section level, as that type of information is not available across Hydro One's distribution system, and to the extent that it is not required for any other purpose, is not worth collecting solely for estimating direct benefits..

It should also be noted that REI investment does not have a direct relationship with customer load growth. Therefore, the customer load growth criteria should not be applied to REI investment.



#### Asset Condition

Hydro One is not supportive of an approach that would require this calculation to be done for every project separately, since it requires field asset checks and valuation for each individual project and can be labour-intensive and time-consuming.

Further, the paper states that "where <u>any</u> asset is replaced, it is expected that a certain portion of the costs would be allocated to its own customers, as a replacement asset will always extend the timeframe over which the asset would have needed to be replaced anyway and therefore represent a direct benefit." Hydro One believes that a materiality and reasonability test should be applied here to ensure that the effort expended in estimating the benefit is justified.

#### Size of Renewable Generator(s)

Hydro One agrees with the paper's observations in this regard, but is not clear on the paper's intended use for this criterion. Would the usefulness of the assets being used to connect a generator not already be reflected in the application of the earlier criteria? In Hydro One's GEP, the size of the generator is factored into the determination of the investments required and the assessment of potential benefits. Note that REI investments are typically not directly related to the size of renewable energy generators.

#### Service Quality Improvements

Hydro One's assessment is that there is a limited benefit from a service quality perspective deriving from eligible investments. In fact, increased distributed generation can result in service quality issues for some distribution customers. Where service quality benefits may exist, the following issues are noted:

- Certain service quality improvements could be 'unintended', or incidental, as a result of REI investments, and it is not clear that customers would have wanted these benefits if offered to them at a cost. The distributor may or may not be avoiding costs in cases where REI investments result in service quality improvements that exceed the distributor's targets.
- Some investments in REI such as two-way flow management are strictly for renewable generation and therefore provide zero benefit to load customers.
- The use of customer density information with respect to this criterion is unclear. For Hydro One, as a distributor with low customer density, investments will yield limited benefit to customers, and a "rule-of-thumb" approach should suffice.

#### Line losses

Hydro One concurs with Board staff that expansion and REI investments do not necessarily reduce losses – nor do they necessarily reduce congestion and improve operating efficiency. In cases where generators are causing an increase in line losses,



there could be increased costs to the distributor. Board staff's paper presents similar observations from New Zealand.

In Hydro One's own experience, generators are siting far from load centres. Given some community concerns with siting of generators, Hydro One expects to continue to see generators proposing sites that are far from load centres.

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.

Hydro One does not propose any additional criteria.

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.

Hydro One does not see the need for ranking or weighting the criteria. Each distributor should be able to identify the materiality and relevance of the criteria, and the resources necessary to determine meaningful direct benefits. These could vary from one distributor to another. Since the direct benefit should already have been calculated in monetary terms, the need for ranking or weighing criteria is eliminated.

However, Hydro One does see some benefit in ranking for the purpose of assessing which criteria should be implemented immediately, and which should subjected to further study and field experience before implementation. The Board can then initiate appropriate data collection and studies, possibly as part of the Regulatory Reporting Requirements, for those criteria that are "parked" for possible later implementation.

# 8) Are there any information limitations that may prevent certain distributors from providing an assessment of any criteria above?

Yes. Information on load growth and customer density for particular feeder/ feeder sections is not readily available and is not seen as needed for other purposes in managing the distribution system.

# 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?

See earlier comments.



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?

Hydro One does not have load growth or customer density at the feeder/feeder section level. Hydro One does have load growth information at Transformer Station level, but this level of information is inadequate for assessing individual projects.

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.

This question is unclear. Hydro One's view is that the distributor should only allocate direct benefits to investments where it can be demonstrated and quantified that these benefits exist.

In general, distributors should only make the investment that can be ultimately used. If the generator cancels the contract after the investment has been made, the generator should be responsible for all the related expenses to be paid by provincial ratepayers. Certainly the load customers should not be responsible for these costs.

# 12) Should the Board consider a certain standardized approach? If so, how should the approach be standardized?

Hydro One is in favour of the Board and distributors ultimately developing a more standardized approach, where possible. In the interim, Hydro One's view is that each distributor should make its own proposal, as Hydro One has, based on its own forecasts and as part of its "GEA Plan" with its cost of service filing, if and when it plans to access provincial ratepayer funding for eligible investments.

# 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?

Hydro One believes that this approach would be preferable and should be pursued, initially by individual distributors and later by the Board as a common approach. In cases where certain investments are more material or meet other, yet-to-be determined thresholds, more specific estimates can be used.

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



#### (i) What timeframe would be suitable for implementation?

A standardized approach should be considered after sufficient experience has been gained by the industry, and using the results of specific studies that should be initiated in the interim. Hydro One's view is that at least two full years of data should be acquired and then assessed before a more detailed approach is determined.

(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?

Once a standardized approach is developed, all distributors should be expected to use it, and held to the same standard. The nature of the assessment should be driven by the types of specific eligible investments that the distributor is proposing, and not based on the distributor itself. As with any regulatory standard, distributors will have the option of exceeding it with more information-intensive, detailed analysis, where they deem there is value in such analysis.

### 3.0 SUMMARY OF KEY MESSAGES IN HYDRO ONE'S COMMENTS

- The methodology and processes for identifying and quantifying 'direct benefits' must be consistent and supportive of the Board's objective of promoting the connection of renewable energy generators, and the level of effort and rigour required should not be allowed to become a barrier to timely and efficient connections. Any benefit must be sufficiently material to justify the effort of quantifying it.
- The same threshold for rigour and detail should be applied to all distributors. However, the requirements may well vary, based on the types of specific eligible investments undertaken by the distributor (e.g. large investments may be subject to more rigorous analysis). There is likely insufficient information to do so at this point.
- The identification, quantification, review, approval and recovery of eligible investment costs should be made on an "ex ante", or forecast basis, consistent with other aspects of regulation of distribution costs in Ontario, which are also based on forward looking information.
- Distributors who wish to access the pool of provincial ratepayers for funding eligible investments should file their proposals as part of their Cost of Service Applications, and GEA plans, or apply for variance accounts if the timing is not suitable.



- Until more information is available, the Board should accept a high-level approach and certain appropriate "rules of thumb" that may be proposed by distributors requiring access to the provincial rate pool in identifying 'direct benefits'.
- The Board should initiate specific studies and build on experience gained over the coming years to allow transition to a common set of guidelines, including expectations of how to treat various types of investment.