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Susan Frank

Vice President and Chief Regulatory Officer Regulatory Affairs ONTARIO ENERGY BOARD



BY COURIER

August 24, 2007

Ms. Kirsten Walli Secretary Ontario Energy Board Suite 2700, 2300 Yonge Street P.O. Box 2319

Toronto, ON.

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Dear Ms. Walli:

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EB-2007-0630 – Distributed Generation – Rates and Connection – Hydro One Networks' Written Comments

In response to the Ontario Energy Board web posting on issues of rates and connection in relation to distributed generation on July 13, 2007 Hydro One Networks Inc. is pleased to provide the attached comments.

I am providing three (3) copies of written comments on behalf of Hydro One Networks Inc. Electronic copy in searchable Adobe Acrobat (PDF) is being filed by email to Boardsec@oeb.gov.on.ca.

Sincerely,

Susan Frank

Attach. (3)

# EB-2007-0630, DISTRIBUTED GENERATION: RATES AND CONNECTION HYDRO ONE NETWORKS INC.'S COMMENTS ON DISCUSSION PAPERS

#### INTRODUCTION

Hydro One is pleased to comment on the Ontario Energy Board's Staff Discussion Paper and the related EESC report on Distributed Generation (DG). Hydro One is responsible for connecting, and maintaining the connections of, generators to both its transmission and distribution (wires) systems and has rates which may be affected by the issues raised. Primarily due to its work with the Renewable Energy Standard Offer Program (RESOP), Hydro One has been dealing with the potential connection of a very large number of new generators to the distribution system and hopes that its lessons from this experience, as provided in the perspectives below, can be beneficial.

#### SCOPE AND DEFINITIONS

DG can offer many social and environmental benefits. Hydro One believes these societal benefits should be recognized and supported by a variety of funding or financing avenues which are available. Furthermore, Hydro One believes that electricity distributors should address the costs and benefits of DG accruing to their distribution systems. In this context, we wish to differentiate between two types of DG, load displacement generation (LDG) and merchant generation, as these have different attributes and service needs from wires companies and incur different costs.

LDG involves generation that is used to displace all or part of the customer's electricity demand. It is usually located behind the meter at the customer's site and may not be separately metered. Settlement is done on a net basis. Wires companies will incur costs for stand-by supply, connections and potential reinforcements or other accommodations of their systems to enable the incorporation of these generators, as well as on-going account management services, net of system benefits.

Merchant Generation involves generators with contractual obligations to supply power directly to either the transmission or distribution system (that is, its primary purpose is not to displace or reduce an entity's own electricity use). It will be separately metered. Wires companies will incur costs for station service, connections, potential reinforcements or other accommodations of their systems to enable the incorporation of these generators, as well as on-going account management services, net of system benefits.

## HYDRO ONE'S EXPERIENCE WITH RESOP

Hydro One is anticipating working with a very large number of DG projects, due to the RESOP, which is focused on renewable energy projects up to 10 MW in size. At this

time, there are:

- 1,000 expressions of interest in connecting to Hydro One's distribution system,
- over 550 applications for a full Connection Impact Assessment,
- 40 applications for a cost estimate from Hydro One and
- about 10 generators currently connected to Hydro One's distribution system<sup>1</sup>.

The 1,000 projects for which Hydro One has received expressions of interest comprise 907 mid-size projects (1 to 10 MW in capacity) and 94 small projects (less than 1 MW).

In addition to this work, Hydro One has received 50 requests for initial feasibility assessments of large projects (greater than 10 MW) which are not included within the RESOP scope and is also working on about 35 net metering projects (generally up to 500 kW). Hydro One expects that the 94 smaller projects and the net metering projects will be for the purpose of load displacement.

## SUMMARY OF HYDRO ONE'S POSITION

Hydro One believes there should be no artificial barriers to distributed generation (DG), but also that a balanced assessment of both the benefits and costs of DG as it impacts the wires business, is needed. The extent to which new DG is beneficial to transmission and distribution systems varies widely, depending on the type of generation and its location. To the extent new DG is located in areas which have net loads (that is, the area uses more electricity than it produces), it can defer or avoid new wires facilities. When the DG is located near a load, it can reduce system losses. In particular, well-located LDG that is generally operated at less than the customer's load is likely to result in improved losses in distribution and transmission systems and also has the potential to defer system reinforcement costs. When the DG is located in areas which can benefit from greater diversity of supply sources, the net result can also be an improvement in system reliability.

New DG can also have the reverse effect, however. In particular, much of Ontario's renewable potential is located far from major load centres, sometimes in areas which are already major net exporters of power. Such new supply may actually require increased wires facilities to deliver it to Ontario's consumers. Projects located on lower voltage (and higher loss) distribution lines distant from load, can increase losses, and to the extent that new generators add to, rather than reduce, the usage of transmission facilities, they can increase transmission losses as well. DG can also result in an adverse impact on voltage regulation. Finally, the accumulation of generation on a particular facility or in a particular area, can have a substantial impact on the reliability and operation of the transmission system. Utilities, in these cases, must make new investment to mitigate the negative impacts of these forms of generation.

<sup>&</sup>lt;sup>1</sup> This number is in flux, as some projects which had been underway prior to the implementation of the RESOP, later "switched" to take advantage of the RESOP terms.

When utilities incur net costs to incorporate or accommodate new DG, these should be recovered through their revenue requirement. Hydro One believes that, in addition to the considerations posed by Board staff on pages 5 and 6 of their discussion paper, rates or charges should reflect the following principles:

- The rate design should reflect all wires system costs net of wires system benefits.
- Equitable treatment of distributed generators by all distributors.
- The resulting rates must be comprehensible to customers, and practical and feasible for utilities to implement.

Ensuring revenue neutrality for wires companies raises two main issues: quantification of the system benefits and costs of DG (whether Province-wide, utility-specific or project-specific) and the question of who pays. While the most precise approach to both of these issues would be user pay rates, based on project-specific cost-benefit assessments, the current process for identifying and quantifying these costs and benefits, given the large number of projects anticipated, would be very onerous and time-consuming. Therefore, while a case-by-case cost-benefit assessment may be appropriate for large projects (with capacity >10 MW), a simpler approach to address the needs of medium- and smaller-sized projects is required, particularly while the industry is in its infancy. Hydro One makes some suggestions on this in response to Board Staff questions #4 and #5 on pages 6 and 7 of these comments. We believe these suggestions would help reduce the time required, enabling projects to move forward more quickly.

Distributed generators have also raised utilities' requirement for up-front connection charges as a potential barrier to entry, suggesting that these costs should be addressed through utilities' pooled rates. Hydro One believes that recovering such investment from load customers would require a full evaluation of the benefits of the generation to those customers, quantification of which is not sufficiently defined at this stage. Overall, it is reasonable for distributed generators to pay the connection charge on an up-front basis.

The issue of utility revenue loss due to DG might be one area appropriate for different treatment. While utilities must be concerned about their financial viability and the operational and rate impacts of DG on their customers, it is perhaps unfair to require individual distributed generators to compensate utilities for the revenue losses they may cause. In this case, if one accepts, as other jurisdictions do, that the social and environmental benefits of specific forms of DG accrue to the common good, the concept of socializing utility revenue losses can be rationalized, enabling recovery through additional options such as:

i. Recognition of other forms of funding or financing which may be available. For example, in addition to the OPA's current RESOP, the up-coming Clean Energy Standard Offer Program (CESOP) and Combined Heat and Power (CHP) program, there are other potential avenues for project funding or financing, such as the Ontario Trillium Foundation, Rural Economic Development Program and Northern Ontario Heritage Fund Corporation at the Provincial level and the Green Municipal Funds, ecoEnergy for Renewable Heat and ecoEnergy for Renewable Power, to name a few, at the Federal Government level.

ii. Acceptance that DG projects which arise in the periods between rate-setting, raise the level of business risk (similar to the risk of revenue loss due to external impacts, such as changes to the economy) for distributors and transmitters. Utilities are responsible for forecasting and planning for the impact of LDG on their operations and revenues to the extent possible, prior to each rate-setting period. Therefore, to the extent that the wires companies can be flexible on this issue, the Board could explicitly recognize the increased level of risk in, and raise, the allowed rate of return for the Province's electricity distributors and transmitters.

To conclude, Hydro One believes that clean, renewable energy sources can provide benefits to the electricity system, as well as environmental and other social benefits to Ontario citizens and as such, these projects should be supported. However, the incremental costs for making these broader social benefits available should not be borne by the customers in their wires charges. When such costs are a barrier to entry for distributed generators, there are more appropriate funding options, such as the variety of initiatives noted in point i) above, which can help reduce this burden.

Table 1.0 below, lays out a suggested high-level rates structure for distributed generators which results from the principles and suggestions provided above.

# TABLE 1.0 SUGGESTED RATES TREATMENT OF DISTRIBUTED GENERATORS

If Eligible for RESOP or Similar Program (e.g., Capacity Up to 10 MW)

Merchant Generators

- Separate rate classification for projects >1 MW.
- No stand-by rates.
- Fixed monthly charge to cover on-going account management costs.
- Variable charge for delivery of power only when needed.
- Generic utility-level wires system benefits determined as a credit to off-set the variable portion of the rate.
- One-time connection charge.

Customers with Load Displacement Generation

- Separate rate classification for projects > 1 MW.
- Monthly LDG charge (or credit) -- standby rates to cover on-going costs of back-up and maintenance services, net of system benefits noted below; fixed/variable structure per EESC Recommendation #8.
- Generic utility-level wires system benefits determined as a credit to off-set the variable portion of the rate.
- One-time connection charge.

Non-RESOP (Capacity Greater than 10 MW)

- Separate rate classification.
- No stand-by rates.
- Fixed monthly charge to cover on-going account management costs.
- Variable charge for delivery of power only when needed.
- Project-specific wires system benefits
  calculated as a credit to off-set the variable
  portion of the rate.
- One-time connection charge.
- Separate rate classification.
- Monthly LDG charge (or credit) -stand-by rates to cover on-going costs of back-up and maintenance services, net of system benefits noted below; fixed/variable structure per EESC

fixed/variable structure per EESC Recommendation #8.

- **Project-specific wires system benefits** calculated as a credit to off-set the variable portion of the rate.
- One-time connection charge.

## COMMENTS ON BOARD STAFF'S DISCUSSION PAPER

Hydro One's detailed comments on the Board Staff's discussion paper are in the order of the issues and questions posed in that paper. Comments on the EESC Report recommendations then follow.

# Section 3.2. Stand-by Rates: Initial Proposals and Issues

# Principles and Considerations

Pages 6 and 7 of the Board Staff discussion paper note five considerations for designing and setting stand-by rates. Hydro One agrees with these and suggests a few additional principles on pages 2 and 3 of these comments.

## Board Staff Questions on Stand-by Rates

1. What might be a reasonable billing determinant for recovering demand-related costs? For example, the demand charge could be calculated on the basis of the annual contract demand, or alternatively be based on the maximum demand for back up service.

Response: Either billing determinant would be acceptable from Hydro One's perspective.

2. Should standby charges be further differentiated between backup, maintenance and supplemental services? As stated in the EESC Report, backup service is defined as electrical energy delivered by the electricity distributor during unscheduled outages of the customer's onsite generator, while maintenance service represents electrical energy delivered during a scheduled outage. Supplemental service is defined as electrical energy delivered by the electricity distributor when the output of the onsite generator is less than the customer's maximum demand.

Response: Hydro One does not see the need for further differentiating stand-by charges. With respect to back-up and maintenance services, from a distributor's perspective, the reason that a customer requires services for the delivery of electricity does not make a difference. The feeders and transformers supplied by the distributors are the same assets and have to be available to deliver the electricity, regardless of whether the service is required for a planned or forced outage. Hydro One believes, however, that supplemental service should *not* be included in stand-by rates, as it is already included as an on-going service in the customer's existing rates.

3. Are there other issues that should be considered by the Board?

*Response:* The principles noted on pages 2 and 3 of these comments address the issues which Hydro One wishes to bring to the Board's attention.

## Establishing the Benefits of DG

4. How should any distribution and transmission benefits provided by load displacement generation be identified and quantified?

Response: It is generally accepted that load displacement generators will reduce the amount of power flow on the distribution circuit as well as on the upstream transformer station and transmission circuit, by reducing the load at locations installed. Properly planned, located and operated, distributed generators can contribute some or all of the following:

- i) Reduce losses on distribution and transmission facilities.
- ii) Defer capital investments to reinforce or add future capacity on distribution and transmission systems.
- iii) Defer capital investments to improve voltage regulation (and/or to provide reactive power).
- iv) Extend the useful life of distribution and transmission equipment due to reduced loading levels.

Accurately quantifying benefits in the above areas for each load displacement project would require a complex study requiring many weeks, if not months, of time. The study would need to consider the composition of load and generation in the area, operational characteristics, load factors, loss factors, voltage levels and voltage control, peak and light loads, and equipment resistance, among other items. Assumptions on factors such as the average life of equipment for normal and reduced loading, economic parameters, cost of equipment, interest rates and discount rates, also must be made.

While it is possible to study wires system benefits, the answer will always be an estimate; it is not possible to be precise. Furthermore, the effort associated with undertaking such studies to include benefits in all four categories mentioned above for each case would be sufficiently cumbersome and time-consuming as to create significant delays to potential projects. If the decision is taken to assess the benefits on more selective basis, however, Hydro One would recommend assessments of the most likely benefits that may be readily quantifiable, namely:

- Distribution benefits related to i) reduced losses and ii) deferred capacity/reinforcement investments).
- Transmission benefits related to the same two items plus iii) deferred capital investments for voltage regulation improvements.

Assessment of these would provide the best results for the effort expended.

Secondly, Hydro One believes that a case-by-case approach should be utilized only with larger customers, as per the response to #5, below.

Page 9 of the Staff Discussion Paper poses two intermediate approaches to identifying the benefits of LDG:

• A case-by-case assessment for larger generators, using either marginal or incremental cost approaches.

Response: A further explanation of these approaches and their implications, would be helpful.

• The use of a reduced revenue to cost ratio as a proxy for determining potential benefits or credits applicable to smaller customers with LDG.

*Response:* Hydro One believes that the problem with this approach is that it seems to be completely arbitrary.

The EESC Report briefly notes on page 4, the possible use of distribution unit costs avoided due to CDM programs. We suggest that, as the current distribution avoided costs pertain to the Province as a whole, they will not be specific enough to reflect the locational differences which this type of assessment requires.

5. Should a different approach be adopted depending on the size of the customer?

Response: The smaller the size of the generator, the smaller its impact from distribution to transformer station to transmission system. Therefore, Hydro One agrees that different approaches based on customer size as well as on the type of generation (due to different capacity factors which directly impact the benefit) would be appropriate.

Transmission and distribution system benefits accruing from large generators should be assessed individually. However, Hydro One would recommend individual assessments of generators with a threshold generation capacity of over 10 MW, factoring in the type of generation. The reason for the higher threshold is that more detailed information would be available, enabling a better assessment of a more material project.

Although similar assessments for mid-size and smaller generators (those below 10 MW of capacity) would be ideal, it is not practical, given the numbers of projects anticipated. Accordingly, Hydro One recommends a collective benefit evaluation approach for an area where simple and established criteria allow transmission and distribution system benefits to be pro-rated based on the size and type of the generator, which would help avoid undue delays in the assessment process. There is much less information on these projects and the benefits are likely to be proportionately smaller.

Hydro One believes that the above suggestions could be helpful in the short term. However, for the longer term, a detailed, third-party (OPA- or OEB-directed and

funded) study which addresses the broader social DG benefits and costs by type of project, location and other relevant factors, should be undertaken. This would help to resolve the issues of contention, provide a common platform for assessment, enable better-informed decision-making and decrease the time and effort involved in getting projects underway.

6. Should any benefit provided to customers with load displacement generation be recovered from all customers? If so, on what basis should this be done?

*Response:* Hydro One believes that benefits accruing to the distribution system should be recovered from distribution system customers in the same proportion as the fixed and variable revenues are being collected. However, social and other benefits accruing beyond the wires systems should be funded from other sources, as discussed on pages 3 and 4 of these comments.

7. Are there other operational or implementation issues that should be considered by the Board?

Response: The relationship between a merchant generator and the distributor will be defined contractually, and will require the parties to respect the operating protocol established. Should there be a breakdown of the protocol or a malfunction of protection and control schemes at either the generator's or distributor's facility, then the distributor, the generator and possibly the transmitter (depending on the size of the load or cumulative impact of loads on transmission) may need to act to ensure the maintenance of transmission and distribution system reliability. Such actions would likely include the incorporation of a load shedding scheme triggered by underfrequency or facility overloading, complemented by special protection as necessary, when the generator goes into service.

This is a critical difference between LDG and merchant generation. Utilities will not have a direct relationship with the generator installed at a customer's premises. In fact, they may not necessarily know that LDG has been installed, a situation which could compromise the management of operational issues which may arise. Utilities will therefore, need the authority and tools to be able to identify customers with LDG.

The transactions associated with the very large number of projects anticipated are also expected to be considerable.

Costs associated with all of these measures and issues must be incorporated into the rates.

8. Is a separate classification warranted and, if so, should it apply to all customers with load displacement generation, or to a subset of these customers as suggested in the EESC Report?

Response: A separate rate classification should only be applied to customers with 1 MW or more of LDG, as noted in response to #10, below. Hydro One believes that separate rate classes need not be established for all the smaller customers with LDG; the proper LDG charge or credit can be added to the rate schedules for existing customer classes.

9. Are there other criteria that should be used to justify a separate rate classification for a subset of these customers?

*Response:* Simplicity, practicality and equitable distributor treatment for customers with LDG should be the criteria applied when considering the creation of a separate class.

10. What would be an appropriate threshold for a generator rate class?

*Response:* Hydro One believes that 1 MW is an appropriate threshold for considering a separate rate class for customers with load displacement generation. For customers that are merchant generators in embedded LDCs, the threshold should be the same.

# Section 4. Revenue Losses Due to Load Displacement Generation

## 4.2 Initial Proposals and Issues

11. Has net revenue loss due to customers with load displacement generation been material?

*Response:* Up to now, Hydro One has not experienced material net revenue loss from LDG on the distribution system, but this situation is expected to change in the near future with increased customer interest and Government programs.

12. How might net revenue loss be quantified?

Response: Lost revenue can be quantified based on the distributor's rate structure, that is, a volumetric charge could be applied to the estimate of load replaced by the customer. The challenge is to determine the load that has been displaced. While it could be assumed that LDG units operate at full capacity, distributors will not necessarily know that a customer has installed an LDG unit (contrary to the statement on page 11 of the Board Staff paper). Alternatively, a distributor may estimate the related loss by comparing historical to current volumes for a specific customer who introduces LDG. Unfortunately, there is no direct method of determining the load displacement.

13. How might the Board determine an appropriate method to compensate electricity distributors for such revenue loss? Consideration should be given to a consistent approach between revenue loss caused by customers with load displacement generation and revenue loss caused by other load customers due to factors such as

economic conditions. In evaluating each of the options presented above, consideration should also be given to the incentive regulate framework under which electricity distributors are currently operating.

*Response:* Board Staff list four options to compensate electricity distributors for such revenue loss:

- i) Exit fees,
- ii) Stand-by rates,
- iii) Contracted load guarantees and
- iv) Variance or deferral accounts for later disposition in rates.

Hydro One believes that the first two options will help maintain revenue neutrality for the wires utilities, but, if strictly designed on a user pay basis, they can be barriers to entry for new generators. Secondly, Hydro One believes that stand-by rates should be applied only to customers with LDG, as merchant generators do not pose the issue of revenue loss, but rather, recovery of related costs. Contractual requirements for load guarantees may also be seen as a barrier to generators and, on their own, will not cover utilities' revenue requirements. Postponed recovery of costs through deferral accounts with later disposition through either stand-by rates or other rates is a possibility, but this entails an eventual "reckoning, with interest" for the bill recipient. The uncertainty this poses for generators would likely be perceived as another barrier to entry.

This is an area in which socializing the revenue losses could be rationalized, based on the acceptance that the benefits of LDG to the electricity system accrue to the common good. Hydro One suggests a couple of alternatives to the above methods in its Summary to these comments, on page 3.

# Section 5. Recovery of Connection Costs

# 5.2 Initial Proposals and Issues

- 14. What alternatives to the status quo should be considered and what is the rationale for each of these options?
- 15. If connection costs are socialized, is there a risk of uneconomic DG projects going forward? If so, how can that risk be mitigated or avoided? Would this approach affect the incentive for distributors to design economic connections?

Response to Both Questions: Generators have highlighted that paying for connection costs is an issue for them in two ways:

 The fact that they are charged for connection: some generators believe these costs should be recovered from pooled customers through rates rather than directly from generators. • The fact that the connection costs are captured through a one-time, up-front charge at the time of connection.

Hydro One notes that generators connected to Hydro One's transmission system pay a one-time connection charge.

Hydro One shares the Board's concern (last paragraph of page 15 of the Board Staff paper) that "removing the obligation on generators to pay for all connection costs will result in uneconomic projects going forward." At the same time, Hydro One understands that economic evaluations can attribute value to environmental benefits. Hydro One is not in a position to prescribe the components of an economic test. However, Hydro One does believe that an appropriate authority (the OEB or the OPA) should determine the economic threshold which projects must pass to provide benefit to the people of Ontario. Further, Hydro One believes that investment in the wires required for DG should be part of the overall economic evaluation for that DG option and this evaluation should be done before a new procurement is undertaken.

With respect to charging load customers for any investment in transmission and distribution which benefits generators rather than those load customers, Hydro One advocates caution. At the least, recovering such investments from load customers must be based on a full and transparent evaluation of the benefits of the generation to those load customers.

In conclusion, Hydro One believes that overall, it is reasonable for distributed generators to pay the connection charge on an up-front basis.

## Section 6. Other Aspects

16. Are there other rate-related issues associated with DG that should be addressed, or that should be addressed more fully? Is the experience in other jurisdictions on those issues relevant to the Ontario situation?

*Response:* Hydro One believes that distributed generators or customers with LDG would be in the best position to answer this question.

17. Are there unidentified barriers or is separate treatment required for embedded generation projects or for projects falling below the threshold of a new rate class?

*Response:* Hydro One believes that distributed generators or customers with LDG would be in the best position to identify other specific barriers.

Rate treatment for generators located in an embedded distributor's territory could be a bit more complicated. Hydro One, for example, will have a direct relationship with the utility, not the generator. It, therefore, must recover its potential lost revenue from the utility, either by forecasting ahead of time or through deferred charges.

Hydro One's position on rate treatment for projects falling below the threshold of a new rate class is provided in the table on page 5 and in response to questions #8 through #10 on pages 8 and 9 of these comments.

18. What are the institutional or regulatory barriers to implementation of DG? How might such barriers best be addressed?

*Response:* Hydro One believes that distributed generators or customers with LDG would be in the best position to answer this question.

19. Are there DG-related issues, other than those relating to the rate or connection cost treatment of DG facilities that need to be addressed? Is the experience in other jurisdictions on those issues relevant to the Ontario situation?

*Response:* Hydro One believes that distributed generators or customers with LDG would be in the best position to answer this question.

## HYDRO ONE'S COMMENTS ON EESC REPORT RECOMMENDATIONS

System Interfaces

1. Recognize the obligation to support net metering for renewable and DG resources.

Response: Hydro One agrees.

Interconnection Standards

2. Continue to implement interconnection standards for the four generation classes as per the Distribution System Code (DSC).

Response: Hydro One agrees.

Stranded Costs

3. Stranding may be moot with proper cost allocations where DG customers are viewed as a load by the distributor.

*Response:* Potential stranding will always be an issue when load reduction occurs between rate-setting.

4. If proper cost allocation to DG customers is not achieved, a separate report on stranding is suggested.

*Response:* Please see the response to question #3.

# Standby Charges

- 5. Specific considerations for setting and designing standby rates include the following:
  - Rates should be designed to reflect the costs, net of any offsetting benefits;

Response: Hydro One agrees as long as the wires company recovers its full revenue requirement.

• Standby rates should reflect the various gradations of services (i.e., voltage levels) provided;

Response: Hydro One agrees, as long as the incremental cost to recover the difference is material.

Rates should not create artificial barriers to DG;

Response: Hydro One agrees.

• The rate structure should be simple and easy to understand by the DG consumer and to administer by the LDC;

Response: Hydro One agrees.

- Rate design should encourage the following:
  - Reduced redundancy of installed capacity;
  - · Operation of DG plant during on-peak hours; and
  - Utilization of excess grid capacity during off-peak hours.

Response: Promoting the operation of distribution facilities during on-peak hours and utilizing excess grid capacity during off-peak hours will provide benefits. However, a rate design that encourages this mode of operation requires distribution rates which are time-differentiated. Currently this is not the case in Ontario.

6. Create a separate class for DG customers with generation capacity above 500 kW and where a DG customer generates more than 10% of its total load. Exempt customers (e.g., generation less than 500 kW, or greater than 500 kW but make up less than 10% of the customer's total load) would remain on current rate schedules. Information on customers could be obtained from the interconnection applications and other customer information available. The 500 kW threshold allows for special treatment of the large DG customers, while limiting the administrative burden of identifying all DG customers.

Response: Hydro One agrees with establishing a separate rate class for DG customers with generation capacity over 1 MW. However, as noted earlier, wires companies will need the authority and tools to be able to identify customers with load displacement generation. Hydro One is including in the revisions to its Conditions of Service, a requirement for all LDG customers to identify themselves as such, but currently, there is no requirement for a customer with load displacement generation to inform their distributor that they own generation facilities behind their meter.

- 7. Calculate and adopt stand-by rates that properly reflect the costs of service for customers with DG. The stand-by rate should include:
  - Monthly contract demand rate based on billed historical demand and ratchet (\$/kW) to collect the costs of having the local wires system available when needed;
  - Monthly customer charge to collect administrative and service costs; and
  - The stand-by rate should be utility specific, although the methodology used to calculate the rate should be consistent across utilities.

Response: Stand-by rates are appropriate only for customers with LDG. In this context, Hydro One agrees with the above.

- 8. Develop a process for determining the additional benefits and credits of a specific DG unit. This process should be initiated during the development of the connection agreement between the LDC and the DG customer. The process would determine and credit the DG customer for:
  - Transmission and distribution savings due to the customer's DG unit;
  - · Avoided losses; and
  - Provided ancillary services.

Response: Hydro One believes there are both benefits and disbenefits of distributed generation for the wires companies. A relatively simple, generic process for assessing the benefits and costs of medium and small distributed generation projects (that is those with generation capacity less than 10 MW), should be developed by the Board with input from utilities, transmitters and customers with LDG, etc., for use in the short-term.