Stakeholder Consultation
2010/2011 Distribution Rate Application

May 25, 2009 Stakeholder Session
Meeting Notes

Toronto Marriott Hotel – Downtown Eaton Centre
525 Bay Street, Toronto
King Room, Second Floor

Prepared for:
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BACKGROUND

Hydro One Networks Inc. is in the process of preparing its 2010/11 Distribution Rate Application for submission to the Ontario Energy Board (OEB) during the summer of 2009 for rates effective January 1, 2010 and January 1, 2011.

Hydro One invited key stakeholders who have participated in previous Hydro One Networks rate proceedings to participate in a series of discussion sessions. An earlier session was held on April 15, 2009 to discuss Hydro One's response to the OEB directives on vegetation management benchmarking, and density and cost allocation. A report on that session is available on the Hydro One web site at: www.hydroonenetworks.com/en/regulatory/2010-11_distribution_rate_application.

The main objectives of the consultation program are to solicit stakeholder perspectives, ideas and concerns and to develop a shared understanding and prioritization of the key issues affecting the application, with an aim to resolving or reducing the scope of as many issues as possible prior to the OEB process. All consultation activities are carried out on a without prejudice basis.

This document reports on the discussion session that took place on May 25, 2009. A third session is scheduled for June 24, 2009.

1.1 Welcome and Introductions

Chris Haussmann of Haussmann Consulting Inc. (HCI) introduced himself as facilitator for the workshop. He then asked participants to introduce themselves. In attendance were representatives from the Association of Major Power Consumers of Ontario, Canadian Manufacturers and Exporters, Consumers Council of Canada, Enbridge Gas Distribution, Energy Probe, Enersource, Hydro Mississauga, Federation of Ontario Cottagers' Associations, Green Energy Coalition, Milton Hydro, Ontario Energy Board, Ontario Federation of Agriculture, Ontario Power Generation, Powerstream, Power Workers Union, Society of Energy Professionals, Toronto Hydro, Union Gas, Vulnerable Energy Consumers Coalition, and Waterloo North Hydro. Also present were Hydro One staff, John Todd, President of Elenchus Research, and the HCI facilitation team.

The full list of participants, together with the agenda, is provided in Attachment #1. Attachment #2 presents the more detailed questions and answers raised in the discussions that followed each of the presentations.

1.2 Agenda and Process Overview

Allan Cowan (Director, Major Applications, Hydro One Networks) then welcomed participants and provided an overview of the day's agenda, noting that it included updates on the Vegetation Management and Density/Cost Allocation Studies discussed at the April 15, 2009 stakeholder meeting. He thanked participants for their attendance and encouraged them to raise their concerns and questions and to present new ideas, noting the importance of their input in shaping how Hydro One approaches its 2010/2011 Distribution Rate Application.

PRESENTATIONS AND DISCUSSION

The following sections provide brief descriptions of the presentations made by Hydro One staff. Questions of clarification and discussion following each presentation are summarized in bullet form. Points in *italics* represent responses or comments from Hydro One. All meeting presentation slides are available on the Hydro One Regulatory Web site at:
http://www.hydroonenetworks.com/en/regulatory/

2.1 Distribution Rate Application Overview

Henry Andre (Manager, Major Applications) provided a brief overview on Hydro One's 2010/2011 Distribution Rate Application. He noted that actual program cost and Revenue Requirement numbers would not be available until the next stakeholder session planned for June 24, 2009, and that his presentation would focus on the key drivers of the Application.

Hydro One is planning to file its Application in early July for rates effective on January 1, 2010 and January 1, 2011. The timing of the Application and the desire to move to an implementation of rates on January 1st of the year is based on input and discussions with OEB staff. The earlier rate implementation date should facilitate the incorporation of the new Hydro One standard Transmission (ST) rates by other LDCs into their own rates that would usually take effect on May 1, 2010.

He then noted other key drivers, including:

- Hydro One's large on-going capital program
- Increases in some OM&A work programs (shorter vegetation clearing cycle, PCB legislation, Smart Meters/Smart Grid)
- International Financial Reporting Standards (IFRS) implementation, and
- *Green Energy and Green Economy Act* requirements.

Hydro One proposes to use the same general format and approach to the evidence as in previous applications (i.e., work-based approach to describe programs). The 2011 program costs will be shown on both a GAAP and IFRS basis; Hydro One will respond to the OEB's direction on vegetation benchmarking and density studies; and updated studies supporting the allocation of Shared Service costs to the Distribution and Transmission businesses will be provided using the OEB-approved methodology.

Henry explained that Hydro One proposes to deal with the Cost of Capital, by following the OEB's "Cost of Capital Report" (Dec. 20, 2006) direction, but that a 150 basis point risk premium increase to Return on Equity (RoE) on green energy projects will be requested (in a consistent manner for both Transmission and Distribution).

The treatment of Smart Meters will follow the OEB guidelines: costs to the end of 2007 have been cleared and added to the rate base; Hydro One will be requesting costs to Dec. 31, 2008 be cleared and assets added to the rate base as of December 31, 2009; and costs after this date will continue to be tracked in a variance account.

Hydro One plans to transition to the new IFRS as of January 1st, 2010 and this will affect the Filing.

Henry also provided an update on Hydro One's Vegetation Benchmarking Study, noting that Hydro One is working with CN Utility, that the April 15 stakeholder session had provided valuable input in defining the study's scope, and that any preliminary study data available will be included in pre-filed evidence, with final results and analysis to follow as an update to the Filing prior to the IR process.

Allan Cowan added in closing that there is a requirement for distribution companies to file a Green Energy Plan and that Hydro One intended to file its plan with its OEB application.

Discussion

Much of the ensuing discussion focused on the anticipated green energy projects, their financing and the proposed RoE premium. The following clarifications were provided:

- The Green Energy Plan will be based on objectives defined by the Government and the Ontario Power Authority. Hydro One will be required to expand the capacity of its transmission and distribution systems to take the output of new renewable generators, make enabling protection and control (P&C), telecom and voltage control investments, and connect the new generators to the grid. A large investment in new technologies, particularly in the transmission system, naturally incurs added risk. It is also conceivable that once built or partly built, these projects may not proceed. Hydro One has been advised that a 150 basis point premium on RoE is appropriate to reflect this added risk and to maintain its credit rating. This approach treats Distribution green energy projects in a manner similar to Transmission green energy projects.
- These green energy investments will be tracked separately to allow the impact on rate base and revenue requirement to be calculated. To a large extent, capital costs for connecting green projects are likely to become part of the pooled rate base. Green projects benefit the entire province; so much of the cost for these projects is likely to be paid for by all ratepayers in the province, not just Hydro One distribution ratepayers.
- For 2011, Hydro One will calculate the overhead capitalization rate using the current Rudden methodology. The overhead capitalization rate under IFRS will also be calculated. Under IFRS, the capitalization rate will decline as more costs are shifted to the current period.

2.2 Implications of the *Green Energy and Green Economy Act* on the Distribution Business (Renewable Energy, CDM and Smart Grid)

Mark Graham (Director, Investment Policy and Agreements) provided an overview of the impact of the *Green Energy and Green Economy Act (*the *Act*) on Hydro One's distribution business. He began by reviewing the key objectives of the *Act*, which include job creation, encouraging community power development, facilitating a Smart Grid and enhancing conservation. He noted that the *Act* will result in a large and rapid increase in renewable generation, much of which will be distant from major load centres, and that this will require major investments in both the transmission and distribution systems.

Mark discussed the Feed-In Tariff (FIT), the new standard approach to procuring renewable generation at standard prices. He also noted that the *Act* provides generators with a "right to connect", subject to certain technical and economic parameters and pointed out that this will apply to both transmission and distribution. Cost allocation rules have yet to be finalized by the OEB, but it is expected that some of the investments required to enable new renewable generators will be pooled.

Some of the key distribution system investments that will be required include:

- New feeders, line capacity and other facilities (for example, regulating and distribution stations)
- The system backbone (real-time protection and control, monitoring and telecom), and
- Administrative and system capabilities to manage customer relations and settlements, and perhaps to administer "microFIT" projects

Additionally, the *Act* requires distributors to file plans for enhancement of the distribution system to enable new renewable generation.

Hydro One will have to be responsive to the *Act's* objective to facilitate the development of a Smart Grid in Ontario. The filing will include investments in a telecom and P&C for Distributed Generation, and WiMax, which will provide enabling infrastructure for the Smart Grid. The filing will also include costs for a smart zone pilot project in the Owen Sound area in 2010 and other Smart Grid costs in future years.

Regarding Conservation and Demand Management (CDM), LDCs are not likely to have CDM targets in time for this filing, but Hydro One assumes CDM will be funded by a Global Adjustment rather than Hydro One ratepayers. Operators' licences may require conservation plans to be submitted to the OEB for approval, and conservation will continue to be reflected in load projections. Directives may be issued as to whether or not and what type of CDM hearings will be required.

Discussion

Discussion on this presentation centered largely on questions about the Smart Grid and how related investments would be handled:

- While most renewable generation projects are likely to be developed in Hydro One territory, these are seen to benefit the entire province and so the costs for investments in the distribution system which enable such generators should be pooled and recovered through a global adjustment.

- It is expected that most renewable connections will require a 27.6 kV or 44 kV voltages.

- If direction is not provided in time for its filing as to the level of investment required to accommodate renewable generation, Hydro One will file under the current rules using its best available assumptions, and will include a variance account to deal with changes resulting from new requirements or changes introduced by the OEB.

- The rate impact of renewable generation related expenditures in 2011 is not that large relative to the overall revenue requirement and the variance account referred to above will be used for any major fluctuations resulting from changing regulations. Given these factors, the resource cost of filing a rate application is significant enough to rule out a one-year rate filing.

- Telecom and related Smart Grid costs will be considered part of the Hydro One Networks system. Spin-off business opportunities are not being considered at this time.

- The smart zone pilot project will be designed primarily to see how the technology works together as a system to manage distributed generation, time-of-use data, and CDM applications such as load and appliance management. Based on these findings, Hydro One will be able to ascertain what level of "smartness" is required in the system, and develop the necessary plans going forward.

- CDM plans will likely appear in the Hydro One licence.

- Hydro One is assisting the OPA in the development of the economic test to be applied in the FIT for the transmission system. For the distribution system, Hydro One will implement any connection requirements and associated cost allocation directed by the OEB. The generator will have to cover all upgrade costs required to enable its connection that exceed the authorized pooled amount or wait until capacity is available.

2.3 Update on the Density and Cost Allocation Study (Principles of Defining and Allocating Cost to Density-Based Sub-Classes)

A consensus was reached at the April 15, 2009 stakeholder session regarding the OEB's directive with respect to a Hydro One study on density and cost allocation. Stakeholders recommended that Hydro One should proceed with a study to identify the underlying principles that relate density to cost, and the factors that need to be considered in determining those costs. Hydro One has engaged Elenchus Research Associates to carry out this work.

John Todd (President, Elenchus Research Associates) provided an extensive presentation on principles for defining and allocating cost to density-based sub classes. He began by providing examples of density based classes and approaches in several jurisdictions (and sectors) and identifying customer classification principles from standard ratemaking texts, concluding that literature and precedents provide little guidance as to what principles should be used in establishing density-based rates. He also concluded that the key issue to be addressed is whether urban and rural customers are "equals" or "unequals", and whether cost differences due to customer density (which can be viewed as being driven by economies of scale/intensity of use) should be reflected in rates.

The OEB has identified three rate design principles as part of its rate design review: full cost recovery, fairness and efficiency. With the exception of Hydro One, distributors generally apply "postage stamp" rates to all residential customers, rather than differentiating customers on the basis of distance,

density or location. The key arguments supporting density based rates relate to competitive issues, rate comparison issues and the fairness principle.

Assuming density based rates are appropriate, two options for defining density-based classes were considered: areas based on average density (Hydro One's historic approach) and classifying customers based on a more detailed or finer "granular" density. Redefining customer classes also brings with it some potential impacts:

- Significant effort and costs to implement changes
- SQIs and reliability factors may have to be changed, and
- Rural and Remote Rate Protection (RRRP) subsidy recipients and subsidy values may change

The cost allocation options and methodologies associated with the two options for defining density-based classes (average and granular density) were explained. Possible methodologies include relying on plant records (may not be feasible); regression analysis, sampling and engineering analysis.

It was noted that there are factors other than density that affect the cost of serving specific groups of customers, such as rock/soil conditions, overhead/underground lines, congestion in urban areas, travel times, potential for storm damage, and brushing requirements. If these factors are not considered in cost allocation, why consider density?

Elenchus' work to date has concluded that:

- Hydro One's current approach to defining density-based classes, allocating costs and setting rates is pragmatic rather than "principled".
- A more granular approach to identifying urban and rural customers would improve fairness, have little impact on efficiency, and might compromise rate stability and simplicity.
- Adopting a more rigorous cost-based approach to allocating density-based costs will be challenging.

Participants were invited to identify additional issues or principles that might be relevant to the OEB's consideration of Hydro One's approach to density and cost allocation. The question was also presented, if a different approach to density-based cost allocation were to result in an increase in the rural – urban rate differential, should or would such an increase result in an increase in the Rural and Remote Rate Provision?

Note: An error on Slide 12; Option #2 was corrected. It should read "Allocating cost" based on granular density, rather than "Classify customers" based on granular density.

Discussion

Discussion following the Elenchus presentation centered on the principles to be applied, data availability and collection, and current practice and policy.

With respect to principles, it was noted that:

- The fairness principle would suggest that any difference in cost of service should be reflected by a proportional difference in rates. However, remote customers pay a capital contribution which mitigates at least partially the added cost of serving them, and this needs to be taken into account as well.

- Another measure of service received is reliability, and perhaps service quality should be used to compare levels of service and rates should be adjusted according to that measure.

- Fairness is a political principle, not an economic one. The questions are, are we getting value for the subsidies in place, when should they expire if ever, and what are we subsidizing (distribution or transmission)?

- It is not clear from the research that a density-based customer classes approach is the right way to go. There are arguments for and against from an analytical perspective, but the decision also involves policy questions.

- If density is considered in rate design, why not also consider distance from the backbone? This is a policy question. To date, the OEB has generally stayed away from distance-based rates.

Concerning data availability and analysis:

- Based on data availability, the most detailed (or granular) analysis likely to be possible is at the distribution station level.

- To have a sound analytical basis for a granular density analysis, it may be appropriate to use an aerial photo (e.g. Google Earth) type database and identify natural breakpoints between higher and lower density populations. One would want to avoid any boundaries in the midst of clusters of homes. This would be irrespective of LDC boundaries and would have to be done on a provincial basis. Approaching density-based rates on a provincial level is a policy question that would affect many LDCs other than Hydro One.

- Applying hedonic analysis to different mixes of customer classes by transformer station may provide some relevant answers, but it would likely be quite costly to capture all the correlations.

- There is a cost driver (capital and maintenance) around asset age that the analysis should pick up. So when sampling typical urban and rural areas, one would not want to compare the cost of facilities in a new development in urban areas with old facilities in rural areas. One would want to look at comparables.

And regarding current practice and policy:

- Hydro One does periodically reclassify customers to reflect changes in the density configuration of the Hydro One system, for example when carrying out the rate harmonization process to integrate the 60,000 customers from acquired utilities.

- If the OEB generic rate design study were to take a different approach to defining customer classes, there may not need to be a residential and general service split. It would be based on something different such as the capacity of the connection or demand. But there could still be issues of urban versus rural cost allocation because of legislative issues around cross subsidies. However, the OEB generic rate design is on indefinite hold, so it is not helpful to Hydro One in this application.

- The RRRP is set at $127M by legislation and cannot be changed without an Act of the Legislature. This may affect the decision to proceed with density-based rate design changes (i.e., if the result is an increase in the urban vs. rural rate differential).

In conclusion, it was noted that at the end of this process the number of customers that move from an urban to a rural class or vice versa may be very small, or the changes in rates may be very small, and that it may not make sense to change the status quo. On the other hand, if there is a big difference in rates, and the policy response to that is to correct this differential by increasing the rural/remote subsidy, the end result may very well be the same, so again it may not make sense to change the status quo. It is possible that, whether there are large or small changes, it may not make sense to do things differently.

2.4 Rate Implementation (Distribution Cost Allocation and Rate Design)

Michael Roger (Manager, Distribution Pricing) began his presentation with a brief update of the process to harmonize the rates of the acquired and legacy customers based on the approved 12 customer classes. He noted that the OEB approved a four year phase-in plan, that 2010 will be the third year of the plan, and that the current rates will be harmonized over the remaining two years. He also reported that there will be no changes to the cost allocation methodology, that the same density-based weighting factors will be used, except that consideration will be given to using a density weighting factor of "1" for the seasonal customer classes. The revenue to cost ratios will be within OEB guidelines. The same rate design (as described in EB-2007-0681) will be used to recover the Revenue Requirement by customer class.

The target harmonization rates, based on the 2010 Revenue Requirement, will be adjusted upwards by the percentage increase in the 2011 Revenue Requirement over 2010. By 2011, all customers will be at the target rates based on the 12 customer classes. Mitigation of bill impacts will comply with OEB guidelines. If the 10% threshold is exceeded, additional mitigation will be considered as per EB-2007-0681. The OEB-approved Mitigation Variance account may also be continued.

Discussion

In discussion following Mike's presentation, the following was clarified:

- An extensive communications program targeting affected customers and municipalities accompanied the rate harmonization process. Very few complaints were received at the call centre (5%, 15% and 10% of the expected number of calls in February, March and April 2009 respectively).

- The 2010 filing will include a new cost allocation study using the same methodology as for 2008 but based on the 2010 Revenue Requirement. The revenue/cost ratios will remain very close to what they were in 2008 and within the guidelines.

CLOSING REMARKS/NEXT STEPS

Allan Cowan thanked stakeholders for their participation and input, noting that the next stakeholder meeting was scheduled for June 24 at which Hydro One would present the Revenue Requirement and associated rate impacts. Chris Haussmann reminded participants to complete and submit the Consultation Evaluation Form before the end of the week. The meeting was adjourned at 12:30 pm.

MEETING EVALUATION

Appendix 3 presents a copy of the questionnaire stakeholder participants were asked to complete to evaluate the meeting, and the consolidated returns from the eight forms that were received. The comments indicate that participants agree or strongly agree that:

- The information presented was clear (but one participant felt the presentation on rate implementation was not clear);
- Stakeholder participants had adequate opportunity to share their views with Hydro One;
- Hydro One was receptive to the issues and concerns raised and recommendations proposed;
- The consultation session met their expectations; and,
- The notes of the April 15 session were thorough and captured the essence of the discussion.

Additional comments received indicate that:

- The presentation on *The Green Energy and Green Economy Act* was informative;
- The presentation on Density and Cost Allocation was more challenging, but stakeholders appreciated the opportunity to speak directly with the consultant after the session;
- Presenters were well prepared and knowledgeable;
- The level of discussion at this session was appropriate;
- The April 15 meeting notes were very helpful as a tool for catching up on the dialogue;
- It would be helpful to provide stakeholders with content material and any guiding questions well in advance of the session.

APPENDIX 1
AGENDA AND LIST OF PARTICIPANTS

Agenda
May 25, 2009
Toronto Marriott – Downtown Eaton Centre
525 Bay Street, Toronto
King Room
2nd Level

8:30 a.m. Registration and Continental Breakfast served		
9:00 a.m.	Welcome	Allan Cowan, Director Major Applications, Hydro One Networks
9:05 a.m.	Introductions and Agenda	Chris Haussmann, Facilitator, Haussmann Consulting Inc.
9:10 a.m.	Distribution Rate Application Overview • Key Factors Driving Application • Treatment of Smart Meters • Cost of Capital • Update on Vegetation Mgt study • International Financial Reporting Standards	Henry Andre, Manager, Major Applications, Hydro One Networks
9:45 a.m.	Implications of *Green Energy and Green Economy Act* on Distribution • Renewable Generation • Smart Grid • Conservation & Demand Management	Mark Graham, Director, Investment Policy & Agreements, Hydro One Networks
10:30 a.m.	**BREAK**	
10:45 a.m.	Update on Density and Cost Allocation Study	John Todd, President, Elenchus
12:15 p.m.	Rate Implementation • Harmonization • Cost Allocation / Rate Design • Rate Mitigation	Mike Roger, Manager Distribution Pricing, Hydro One Networks
12:55 p.m.	Closing Remarks/Next Steps	Allan Cowan
1:00 p.m.	**LUNCH**	

LIST OF PARTICIPANTS

Name	Affiliation
Amos, Chris	Waterloo North Hydro Inc.
Bonadie, John	Enersource Hydro Mississauga
Cowan, Ted	Ontario Federation of Agriculture
DeRose, Vincent	Canadian Manufacturers and Exporters
Dubeski, Phil	Toronto Hydro
Faye, Peter	Energy Probe
Girvan, Julie	Consumers Council of Canada
Grice, Shelley	Association of Major Power Consumers of Ontario
Griffiths Savolaine, Sarah	Powerstream Inc.
Harper, Bill	Vulnerable Energy Consumers Coalition
Richard, Long	Society of Energy Professionals
Matai, George	Milton Hydro
Mather, Neil	Ontario Energy Board
McGee, John	Federation of Ontario Cottagers Association
McKenzie, Kim	Power Worker's Union
McMahon, Pat	Union Gas
Petrella, Tony	Ontario Power Generation Inc.
Poch, David	Green Energy Coalition
Suarez, Margarita	Enbridge Gas Distribution
Tyers, Barb	Milton Hydro
Andre, Henry	Hydro One
Bowen, Amy	Hydro One
Cancilla, Enza	Hydro One
Cowan, Allan	Hydro One
Dumka, Bohdan	Hydro One
Frank, Susan	Hydro One
Graham, Mark	Hydro One
Innis, Ian	Hydro One
Li, Clement	Hydro One
Lyberogiannis, Elias	Hydro One
Roger, Michael	Hydro One
Haussmann, Chris	Haussmann Consulting (Facilitator)
Mueller, Peter	Haussmann Consulting
Todd, John	Elenchus Research Associates

APPENDIX 2

FACILITATED DISCUSSIONS
QUESTIONS AND ANSWERS

Answers are presented in italics

Distribution Rate Application Overview – Discussion

- What type of projects and risk factors would impact your need to ask for a 150 basis point risk premium on green energy projects (Slide 5)?

  These projects are new and unknown territory and will involve new technologies and significant investments and therefore represent higher risk, which we believe requires a higher RoE.

- How did you arrive at 150 basis points? Could you give us some examples of particular green energy projects that represent higher risk?

  We anticipate a well defined list of green projects that will be identified by the government or the Ontario Power Authority, not Hydro One. This could require, for example, updates to existing Hydro One systems (for capacity reasons), telecom systems, new feeders, and new equipment to connect green energy projects to the Smart Grid. The nature of the some of these new technologies and the required scale of investment involves a degree of uncertainty and therefore risk. We would keep these investments separate and divide the rate base into two. We have chosen 150 basis points as an appropriate risk premium based on preliminary discussions with an external consultant.

- Will the cost of the assets that you have to add to connect green energy projects be reflected in rates to these generators or will it be part of the socialized rate base?

  It will be part of the pooled rate base.

- How does the risk of future green energy projects differ from those you already have on the grid? Is the risk that the new projects will not generate power and that you will have a line that sits idle or that some innovative technology might fail or not perform as expected?

  It is the nature of what we are building that is different, not who is connecting. Whether projects generate power or not makes no difference to us. The risk might be that we are asked to build something and that we are asked part way through the project not to build it after all. This has happened before.

- All of the risk flowing from the *Green Energy Act* falls on consumers. The only justification for the increase in RoE I can see is to protect your credit rating. Why should we have to pay more for risk that we are already bearing?

  The credit rating certainly is a factor. Transmission is a bigger driver for this than Distribution because the level of investment is very large and getting the money is a major factor. However, it seems inequitable to increase the RoE only for Transmission when these projects are of a very similar nature, so we propose the same treatment for both Distribution and Transmission.

- Will you be dealing with the issue of these socializing costs across the province in your

application

Yes.

- Will IFRS apply to everyone (for example, the gas industry), is it being applied by all regulators and is it inevitable?

  Yes to all three of your question. IFRS is in Canada now. It is worldwide and is expected to be fully implemented by 2014.

- I assume you will be filing an overhead capitalization study for 2010 based on the existing methodology and a new study for 2011 based on IFRS principles.

  We will do the study using the current Rudden methodology for 2011. We will also do a calculation of the overhead capitalization rate based on IFRS. We expect the overhead capitalization rate to decrease from the current 10% because the effect of IFRS is to shift costs from future periods to the current period.

- Do you have approval from the OEB to move to a January 1 rate implementation date? Are other distribution companies doing the same thing?

  The OEB has suggested we move to the new date, in part because other utilities' rates are dependent on ours. I believe Toronto Hydro also is considering moving to a January 1 rate implementation date.

Implications of the Green Energy and Green Economy Act on the Distribution Business – Discussion

- When you say that some of the investments required to connect generators to the distribution system will be pooled, do you mean across the province or just across Hydro One customers? (John McGee)

  We expect that most renewable generation will be developed in Hydro One territory and our position is that any investments we have to make in this regard that relate strictly to this renewable generation should be paid for by all customers in the province rather than just by Hydro One distribution customers. We think this is a provincial benefit and costs should be recovered from all customers by a global adjustment.

- Will you have to convert your 12.5 kV system to a higher distribution voltage to accommodate the new renewable generation?

  That will depend on the cost allocation rules expected from the OEB and what is seen as affordable under the pooled adjustments that will need to be made. Our expectation is that to

facilitate most of the renewable connections, we are talking primarily about 27.6 and 44 kV systems.

- Who is studying the level of investment required in the transmission and distribution systems to accommodate a specific level of renewable generation? Will there be any information on this before you file your submission? If not, have you considered some sort of deferral account to deal with the uncertainty?

  I assume it is up to the OEB to determine this. We have raised the issue and hope to have some direction before we file. If not, we will file based on the current rules and include costs based on the best available assumptions. It may also be prudent to include a variance account.

- There seems to be so much uncertainty, especially for 2011. Have you considered a one rather than two year application?

  Yes, we have thought about it and decided against it. It costs time and money to do applications and it is simply not very efficient for Hydro One (or the OEB) if we file annually. While significant, the dollars in 2011 related to renewable generation (and the likely rate impact) are relatively small when compared with our base costs. So we will do our best, hope that the OEB comes up with a mechanism to deal with costs related to renewables, and we will likely include a variance account. Also, we need to get going with some of the enabling work, especially on our telecom backbone, so that we are ready when actual projects need to be connected.

- Will your telecom investments provide spinoff products/services that can be sold to others?

  Perhaps, but that would not be a priority and would be longer term, since the work will take several years to complete.

- Will the telecom cost associated with the Smart Grid be incurred by Hydro One's telecom affiliate or by Hydro One Distribution?

  We expect that the telecom assets (and related costs) will be part of Hydro One Networks.

- Will your Smart Grid pilot project be testing new technology or simply how the various elements and existing technology work together?

  There may be some new technology but basically we are trying to tie things together and see how well the various elements of the system that we will put in place work with one another.

- Will you send all this data to Essa or will you be adding staff at transformer stations to do the monitoring?

  This is primarily systems and automation based. The monitoring will likely be centralized.

- With respect to the Smart Grid, will there be a business case for what you will be doing?

  The legislation requires us to "get on board" and to facilitate a Smart Grid. We also see a number of benefits in doing so. We need to determine how much "smartness" we need in the grid to accommodate renewable generation targets, but that may not be everything we need to do. The pilot approach will help us determine what else we need to or can do. Business cases will then need to be developed. (Mark Graham)

- The only reason for the Smart Grid is to accommodate distributed generation. Everyone seems happy with the grid we have. This will be costly and it will be mostly Hydro One that has to do it.

  The government has other reasons for implementing a Smart Grid, such as time of use rates, conservation and demand response. The Smart Meter interface will allow for other applications, such as load and appliance control. Other LDCs will likely face pressure to implement some of these applications. The pilot will help us determine the feasibility, costs and benefits of these applications. (Mark Graham)

- Will you share the results of your pilot with other LDCs and will they contribute to the cost?

  At this point I am not aware of any such arrangements. We see this as something we need to do. We have a different system from what most distributors have.

- Based on your understanding of the *Act*, do you anticipate any public review or scrutiny of your CDM plans as part of this filing?

  It will likely be part of our licence approval.

- There may not even be hearings.

- With respect to your load forecast, are you experiencing major declines in demand, as has been the case with Toronto Hydro and some other LDCs?

  Yes, in certain areas, where major plant closures have taken place, such as pulp and paper mills in Northern Ontario. Like everyone else, we have been affected to some degree by the economic downturn.

- What economic tests will be applied to the FIT and the right to connect, and who developed them?

  With respect to transmission, the OPA is developing the economic connection tests which will drive who gets a contract and when. We are working with the OPA regarding the transmission costs. Regarding distribution, we expect that the OEB will provide us with direction with respect to cost allocation. We anticipate we will implement a connection requirement if the costs are within the pooled umbrella. If the cost is over and above the pooled amount the generator will either have to make up the difference or wait until sufficient capacity is available.

Update on the Density and Cost Allocation Study – Discussion

- With respect to the fairness principle (Slide 7 - "unequals treated unequally"), presumably the extent of the unequal treatment should be geared to the difference in cost. The rate difference should not be higher than the cost difference.

  Agreed. If on a cost basis they are unequal, the fairness principle suggests that the rate difference should reflect the cost difference – no more, no less. Other principles of fairness might lead you to what we in fact have – cross subsidies that reduce the differential.

- The question is whether or not subsidies produce a net benefit to society, whether they should exist, and if so, how long they should be in place. This is not reflected in your principles and shouldn't be.

  The principles do include fairness.

- Subsidies are regulatory rather than economic in nature and have nothing to do with fairness. Fairness is a political rather than an economic principle. It's a cost/benefit issue. The largest subsidy that Hydro One distribution customers pay is a transmission subsidy. This is what we should be looking at. So I propose three principles: Are we getting something worthwhile for the subsidies in place? How long should subsidies be in place? What is the relative facility use between transmission and distribution?

- There is another way to handle low density other than through rates and that is through the Distribution System Code. A new customer that is distant from the grid has to make a significant capital contribution to get connected. This upfront contribution by a low density customer should be reflected in the rates.

- Has there been any attempt to catalogue the distribution line lengths and the number of customers served by each transformer station? This would allow us to differentiate between high and low density transformer stations.

  I don't think that data exists, but anything can be created at a cost. For my work, the first question is whether the cost is worth the result. One way to do cost allocation on a more granular basis might be by transformer – what facilities serve which customers and are they urban or rural, and then allocate costs accordingly.

- It seems that we are doing this study either because there are efficiencies to be found or because there is an unfairness that needs to be cured. What is driving this study?

  It is not about efficiency. It is a fairness issue. The OEB has asked Hydro One to look at this. They want something that is cost-based and proof that the class definitions are the right ones. Are there unequals within a class? Does the methodology by which customers are assigned to urban and rural classes treat equals equally? There are some disparities in this regard. Can something be done to treat these customers more fairly? If so, is it worth doing?

- Do customers ever get reclassified if their area becomes more densely populated?

  Yes. We did that for the 2008 rates. We looked at the urban areas and redefined approximately 16,000 legacy customers that now met the urban density criteria. We also had to do it because we had 88 acquired LDCs that did not have density criteria. About 60,000 of the acquired customers met the current urban criteria. Other legacy and acquired customers will eventually get reclassified due to harmonization.

- It may not be density but service quality that should be a fairness criterion. People may be paying the same rates for different service quality. You can differentiate rates by quality. You have the data on outages by transformer station.

- Have you considered going less rather than more granular – simply treat everyone as GS customers and do away with the urban/rural split?

  My presentation suggests that if you take a principles approach, you do not arrive at a clear conclusion that density based classes are the right approach. It also begs the question as to why density based classes should be used only by Hydro One. My report will make clear that from an analytical perspective, there are arguments for and against density based rates, but that there are also some pure policy questions around whether density based rates should be used.

- You said earlier that one way to do cost allocation on a more granular basis might be by transformer. Wouldn't you have to distinguish between pole transformers and transformer stations?

  I was responding to a question about transformers, but from a cost and practical perspective, I think the most granular we can get in looking at facilities is probably the distribution station level.

- There may be cost variations in delivering power to small granular areas because some "grains" may be further away from, for example, a distribution station. Would your methodology pick that up?

  The cost of connecting a "grain" to the backbone and whether this is taken into account is another policy question. The OEB has a generally negative attitude to distance based rates. Your question raises the issue of why density but not distance should be a factor in rates.

- Some Ontario LDCs only serve the high density areas in their territory and leave the rural low density customers to Hydro One because they don't want to drive up the rates for their existing high density customers.

- I don't accept that low density customers are necessarily more expensive to serve. The cost is higher to put the wires in, and in theory maintenance costs are higher, but it is not clear that they get the same level of maintenance as high density customers.

  Looking at the cost drivers at a high level, one would expect rural to be higher cost on average.

- The low density LDCs that were acquired by Hydro One 10 years ago were lower cost and lower service. There may still be significant "islands" like that within Hydro One. SQIs are system averages.

  Going forward, rate changes will not be done without an examination of costs. Service levels would be a key cost driver. Greater granularity might address some of your concerns.

- In Slide 12, Option #2, point 3 and 4, it seems to me that you have a chicken and egg problem. You are using "typical" urban and rural to define cost differences, but your definition of typical predefines what the classes are before going into the process. One of the things we talked about at the April 15 session was the need to get a better understanding of the principles around how costs actually vary with density. Having understood that, are there some natural break points in terms of cost variation that would give us some starting definitions of typical groupings? Is that part of what you envision in your engineering analysis to determine cost differentials?

  I agree with your comments. What we would want to do is look at the cost relationships and identify natural break points with as few customers as possible on the boundary. We could use a map concept or a scatter diagram. If you look at housing developments in the country, there is typically a clear visual border between the development and the countryside, a significant break point in density. You do not want break points which are in the middle of a cluster, resulting in a lot of arbitrariness as to how many people are on either side of the line. You want as few people as possible at the breakpoint.

  If we were to use this "Google Earth" type of approach, current LDC boundaries are somewhat irrelevant. We would be looking at a rate design for all of Ontario.

  The current boundaries would disappear. The question is whether this would make much difference to rates?

- Do we know what the impact would be on urban rates if we equalize urban and rural rates?

  I don't' know. But there would be two different answers, depending on whether we do it just for Hydro One or for all of Ontario.

- I pay just over 9 cents/kWh in the city and just over 11 cents/kWh at the farm. RRRP is about $15/month. Rural would probably come down half a cent and urban would go up by the same amount.

- I think rural would come down by 1.5 cents and urban would go up by the same amount.

- The other issue is the inappropriate allocation of line losses.

- You should look at costs for different customer mixes by transformer station using hedonic analysis of existing information.

  Finding the correlations between all the data is the challenge. I don't think that data exists, but anything can be created at a cost.

- Is the OEB addressing in a generic way the issues and ideas you have raised in your presentation as part of their rate design deliberations? If the OEB is considering generic rate design, the OEB may overturn what you are suggesting here.

  If the rate design were finished, it would probably obviate the need to look at these issues. If there is a different approach to defining customer classes as a result of rate design, there wouldn't necessarily need to be a residential and GS split. It would be based on something different such as the capacity of the connection or demand. But there could still be issues of urban versus rural because of legislative issues around cross subsidies. The rate design review is on hold indefinitely, so it is difficult for Hydro One to say they will wait for a new rate design regime.

  We may find at the end of my study and this process that the number of customers that move from urban to rural or vice versa is very small or that the changes in rates are very small. In this case, we may conclude that it makes no sense to change the status quo. On the other hand, if there is a big difference in rates, and the response to that is to correct this differential by increasing the RRRP, the bottom line may well be the same, so again it may not make sense to change the status quo. So it is possible that whether there are large or small changes, it may not make sense to do things differently.

- The RRRP has been fixed at $127 million since 1993 and can only be changed through legislation, not by the OEB.

  This may well be a factor in deciding whether we want to change the status quo.

- I think it should be a principle that that we can we deal with the issue of density/cost allocation through means other than rates, namely the capital contribution mechanism for low density customers connecting to the system. Perhaps the terms of reference for the study are too narrow for this.

  The terms of reference are not too narrow. If there is a differential between urban and rural that is of concern to the OEB, and if the customer contribution element under the Distribution System Code addresses this problem, then perhaps this is worth considering. We would have to deal with the issue of new versus existing customers, so it may get complicated. The question also arises, in the event that we change the status quo, as to whether it would be unfair to raise rates for those who made capital contributions in the past in the expectation that they would have lower rates.

  I believe the capital contributions apply only to the radial dedicated stuff and not to upgrades to the existing system, which are also a cost that these customers would need to incur.

- A fundamental principle should be that we need a clear method of analysis and the data to achieve this. If the data is not available or too costly to get, this should be stated in the findings. We don't want ambiguous results based on inadequate data. Let's find out if the data is there to do an adequate job and if not, what is needed to get the data. If the data is not readily available, this is also worth knowing. My suggestion is that you look at the data on a transformer basis and the customer mix served.

- On the equity issue, the government appears to be saying that expenditures on rural generation should be pooled across the province.

- Should we consider the age of the service. Rural areas tend to require more maintenance than new subdivisions because they have older assets and more outages.

  For Hydro One alone, this may not be significant. But if we were to make changes on a province wide basis (this would be a policy issue), this may be an important factor. There is a cost driver (capital and maintenance) around age that the analysis should pick up. So when we do sampling of typical urban and rural areas, we would not want to look at the cost in a new development in urban and old facilities in rural. We would want to look at comparables.

Rate Implementation – Discussion

- Have you had any feedback from customers who had rate increases as a result of harmonization?

  There has been minimal response and call centre activity has been much lower than expected (between 5% and 15% of what was expected). Only one complaint from a municipality was received. We undertook an extensive communications initiative at various points during the OEB approval and implementation process to explain the changes, including measures such as: ads in over 90 local newspapers, emails and phone calls to local officials and politicians, bill inserts and messages, and letters to customers with bill impacts greater than 10%.

- Will you re-run the cost allocation based on 2010 costs and forecast revenues to see whether the revenue cost ratios are still within OEB guidelines?

  Yes, we will be filing a new cost allocation study based on the 2010 Revenue Requirement.

- I assume you anticipate that the ratios will still be within the OEB guidelines and that you will continue to work toward the same average for each class and not make any adjustments in the costs between the classes.

  That's right. My aim is not to move everyone to a revenue-to-cost ratio of 1. I will redo the cost allocation and expect the revenue to cost ratios to be close to what was approved for 2008. As long as they are within the guidelines, I will keep them there.

- What is your understanding of the OEB's current position on customer classification that came out in their discussion paper and which a lot of people objected to?

  I believe it has been sidelined.

This was a staff paper and it was put on hold shortly after the government's green imitative was announced due to the OEB's workload. No timeframe to re-initiate the process is currently available.

The intent of the OEB staff paper did not run counter to what we are trying to do. We are trying to reduce the number of customer classes to a more manageable number from over 280 to 12 over a four year time frame. This will bring us more in line with other LDCs. If after this process the OEB decides that there should be different customer classes we will look at it.

- It sounds like nothing is imminent and nothing will interfere with the process you are going through right now.

APPENDIX 3

MEETING EVALUATION FORM

And

CONSOLIDATED RETURNS

2010/2011 Distribution Rate Application Stakeholder Consultation

Consultation Evaluation Form

This session was the second in a series of meetings initiated by Hydro One to conduct a dialogue with its stakeholders regarding the 2010 / 2011 Distribution Rate Application. Your feedback is important to us. Please take a few moments to fill out this evaluation form.

Name (optional):_____

Material presented in this session included the an overview of the 2010 / 2011 Distribution Rate Application, Implications of the Green Energy& Green Economy Act, Density & Cost Allocation, and Rate Implementation. Please rate each component by circling the appropriate number where:

1 = Strongly Agree, 2 = Agree, 3 = Disagree, 4 = Strongly Disagree, 5 = Not Applicable.

1. The information presented was clear:

Distribution Rate Application	1	2	3	4	5
Green Energy & Green Economy Act	1	2	3	4	5
Density & Cost Allocation	1	2	3	4	5
Rate Implementation:	1	2	3	4	5

Comments: _____

_____

2. I had adequate opportunity during this session to share my views with Hydro One on:

Distribution Rate Application	1	2	3	4	5
Green Energy & Green Economy Act	1	2	3	4	5
Density & Cost Allocation	1	2	3	4	5
Rate Implementation:	1	2	3	4	5

Comments: _____

_____

Please Turn Over…

Thank you for your comments.

1 = Strongly Agree, 2 = Agree, 3 = Disagree, 4 = Strongly Disagree, 5 = Not Applicable.

3. Hydro One responded to the issues and recommendations I raised about:

Distribution Rate Application	1	2	3	4	5
Green Energy & Green Economy Act	1	2	3	4	5
Density & Cost Allocation	1	2	3	4	5
Rate Implementation:	1	2	3	4	5

Comments: _____

_____

4. Overall, this consultation session met my expectations: 1 2 3 4 5

Comments: _____

5. The notes of the first meeting held April 15, 2009 were thorough and captured the essence of the discussions.

Vegetation Management:	1	2	3	4	5
Density & Cost Allocation	1	2	3	4	5

Comments: _____

Please provide us with any additional comments you may wish to make:

_____

_____

_____

Thank you!

Please submit your completed forms before you leave, OR, fax to the number below **NO LATER THAN May 29, 2009**. If you have any comments or questions, please contact:

Ms. Enza Cancilla, Manager, Public Affairs
Tel: 416-345-5892; Fax: 416-345-6984;
Email: enza.cancilla@HydroOne.com

Thank you for your comments.

2010/2011 Distribution Rate Application
Consultation Session # 2 Stakeholder Feedback

The data below represents the number of participants that circled the corresponding response. The total number of surveys returned was 8.

	Strongly Agree	Agree	Disagree	Strongly Disagree	Not Applicable
1. The information presented was clear:					
Distribution Rate Application	1	6			1
Green Energy & Green Economy Act	1	7			
Density & Cost Allocation Study	2	6			
Rate Implementation	3	4	1		

Comments:
The *Green Energy & Green Economy Act* presentation provided good explanation to inform the group. The Density & Cost Allocation Study presentation was perhaps geared more to the economists in the crowd.

2. I had adequate opportunity during this session to share my views with Hydro One on:					
Distribution Rate Application	3	3			2
Green Energy & Green Economy Act	4	3			1
Density & Cost Allocation Study	4	4			
Rate Implementation	4	3			1

Comments:
During the Density & Cost Allocation Study presentation the discussion seemed to vary from issues. However, individuals were also able to share their views with John Todd, after the presentation.

	Strongly Agree	Agree	Disagree	Strongly Disagree	Not Applicable
3. Hydro One was open to the issues and recommendations I raised about:					
Distribution Rate Application	2	3			3
Green Energy & Green Economy Act	3	3			2
Density & Cost Allocation Study	3	3			2
Rate Implementation	3	3			2

Comments:
Presenters were comfortable with issues raised by others and handled discussion well.

4. Overall, this consultation session met my expectations:	2	6			

Comments:
Good high level discussion that stayed on topic, right level of discussion at this point.

5. Overall, the notes of the first meeting held April 15, 2009 were thorough and captured the essence of the discussions:	1	3			4

Comments:
The April 15 session notes were excellent for catch up.

Additional Comments:
It is very important to get the material for the June session in the hands of the intervenors enough in advance to review.
Asking questions in advance could help the process.