CDM Study in Support of Hydro One Rate Applications

Stakeholder Consultation

Tuesday, March 22\textsuperscript{nd}, 2011
8:30 am – 9:30 am
Special Events Room, Ground Floor
483 Bay Street, North Tower, Toronto
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1.0 Participant References

**STAKEHOLDERS**
- Raegan Bond—Ontario Power Authority
- Indy Butany-DeSouza—Horizon Utilities
- Ted Cowan—Ontario Federation of Agriculture
- Marion Fraser—Canadian Energy Efficiency Alliance
- Shelly Grice—Association of Major Power Consumers in Ontario
- Bill Harper—Vulnerable Energy Consumers Coalition
- Bayu Kidane—Power Workers’ Union
- David MacIntosh—Energy Probe
- Neil Mather—Ontario Energy Board
- John McGee—Federation of Ontario Cottagers
- Laurie McLorg—Veridian Connections Inc.
- Dev Pasumaty—Electricity Distributors Association
- Dana Silk—Enviro Centre
- Peter Thompson—Canadian Manufacturers and Exporters
- Elena Yampolsky—PowerStream Inc.
- Marcie Zajdeman—Brookfield Asset Management
- Steve Zebrowski—Veridian Connections Inc.

**Hydro One**
- Henry Andre—Hydro One
- Stan But—Hydro One
- Enza Cancilla—Hydro One
- Susan Frank—Hydro One
- Raymond Gee—Hydro One
- Ian Innis—Hydro One
- Clement Li—Hydro One
- Ian Malpass—Hydro One
- Alexandra Stadnyk—Hydro One
2.0 Welcome by Hydro One

Ian Malpass welcomed the attendees and advised the purpose of the session was to provide stakeholders with an update on Conservation Demand Management (CDM) and the impact of CDM on the load forecast used in the establishment of transmission and distribution rates.

Ian Malpass asked participants to ask questions and make comments throughout the presentation. He also asked participants to identify themselves when asking questions and indicated that minutes will identify the individual asking questions or making comments.

Ian Malpass and Enza Cancilla reviewed housekeeping matters - room and facilities logistics, along with fire, safety and evacuation procedures and meeting etiquette outlined. After a brief review of the Agenda, the participants were asked to introduce themselves and identify the party they represented. The first presenter, Stan But, was introduced.

3.0 CDM Forecasting Initiative Presentation, Stan But, Manager—Economics and Load Forecasting, Hydro One

See attached PowerPoint presentation in appendix A

Stan But reviewed key messages from February 10, 2011 stakeholder session:

- As recommended by stakeholders, a 3rd party study on CDM impacts is not required
- Hydro One will review what CDM categories other utilities in North America are using in their load forecasting process
- Hydro One will work with the OPA to better define and forecast CDM impacts
- Intervenors are interested in more details of CDM impacts on charge determinants in Hydro One’s Transmission rate application and CDM impacts on customer rate classes in Hydro One’s Distribution rate application

Stan But discussed action plans based on the above key messages:

1. Determine the appropriate CDM categories for use in load forecasting by Hydro One
   - Hydro One will review the CDM categories used by other utilities (based on publicly available regulatory filings)
   - This review will include California, New York, British Columbia and more. Hydro One is part of the Edison Electric Institute (“EEI”) and North American Electric Reliability Corporation (“NERC”) Load Forecasting group and will plan to survey EEI and NERC forecasting group members
Hydro One will work with the OPA to better understand the CDM categories they plan to use in the 2011 IPSP

Hydro One will undertake a survey on CDM categories, including estimation methodology

Timelines of these action items were presented

2. Prepare bottom-up CDM forecast using available information consistent with the new OPA IPSP to be filed in 2011

- Hydro One met with the OPA to discuss OEB requirements and intervenor expectations. Hydro One will continue to meet and work with the OPA in the next 2 months to sort out details

- Hydro One will review historic CDM achieved to date. CDM impact up to 2010 should be available when Hydro One submits its next Distribution Cost of Service rate submission

- Hydro One will take into consideration OPA, LDC and other CDM categories (e.g. Codes & Standards, Federal & Provincial CDM initiatives) to develop forecast

- Hydro One will ensure consistency with the new IPSP to be filed in 2011

- Hydro One will examine CDM impacts by category and by sector (residential, commercial, industrial)

- Hydro One will align the CDM forecast with the OPA on monthly energy and peak and hourly profile of CDM impacts

- Timelines of these action items were presented

3. Prepare evidence of CDM impacts on rate classes in future rate applications

- Hydro One will provide a breakdown of CDM impacts by category and by sector

- In Hydro One’s next Transmission rate application - it will document how Hydro One uses the above information (first bullet) to estimate the charge determinant forecast. The three transmission charge determinants are: i) Network charge, ii) Transformation connection charge and iii) Line connection charge

- In Hydro One’s next Distribution rate application - it will document how Hydro One uses the above information (first bullet) to estimate customer rate class forecast

- Timelines of these action items were presented

This concluded the formal CDM presentation.
4.0 CDM Forecasting Initiative Presentation - Discussion

Following Hydro One’s formal presentation, the floor was opened to a free-flowing question and answer format.

1. Time of Use Impact on Peak Demand

Question from John McGee: Given the uncertainty of the Time of Use (“TOU”) rates, how does Hydro One plan to forecast the impact of TOU rates on peak demand?

Comment from Stan But: The ratio between on-peak and off-peak rate is currently set at about 2. Going forward, Hydro One will use the latest and best available information to perform TOU rate impact analysis.

Comment from Susan Frank: Susan agreed there will be uncertainty but Hydro One will use best available information to forecast.

Question from Dana Silk: How do you forecast TOU impact?

Comment from Stan But: In the past, Hydro One had undertaken a TOU pilot project and estimated TOU impact. Hydro One plans to make use of this information. In addition, Hydro One also plans to get information from the OPA regarding TOU impact (which will be part of the assumption in the OPA’s upcoming Integrated Power System Plan (“IPSP”).

Comment from Raegan Bond: The OPA is currently in the process of revising its estimate on TOU impact for the next IPSP.

Comment from Ted Cowan: TOU rates may have a different impact on low income and high income customers. Additional information (such as income level by postal code) could help Hydro One analyse TOU impact on customers with different income levels.

Comment from Stan But: Agreed with Ted Cowan’s point but stated that Hydro One does not have any reliable information regarding customer’s income level and therefore will not be able to perform analysis.

Comment from Dana Silk: Agreed that LDC’s do not have this kind of data.

2. CDM Impact Categories

Comment from Bill Harper: Bill suggested that Hydro One should add a middle column, “Monthly Impact” to the flow chart on page 12 of the presentation – Proposed data collection framework for Tx. This additional column (Monthly Impact) should be between the column - “By Category” and the column – “By Charge Determinant”.

Comment from Stan But: Agreed.
Comment from Ted Cowan: *Ted suggested Hydro One to add two sub-classes to the flow chart on page 11 of the presentation – Proposed data collection framework for Dx. Under the column “By Rate Class”, two additional sub-classes should be added - i) Farm customers, ii) Customers with Rural Rate Assistance (“RRA”).*

Comment from Stan But: Both farm customers and customers with RRA could be identified in Hydro One’s customer information system and therefore potentially we could address Ted’s suggestion.

3. Board-Approved CDM Programs

Question from Bayu Kidane: *Does an LDC need OEB’s approval before deploying and implementing Board-Approved CDM Programs?* Bayu expressed his concern given that Hydro One had recently withdrawn their Board-Approved CDM program applications.

Comment from Susan Frank: *Yes. Hydro One and other LDC’s do need OEB’s approval for Board-Approved CDM Programs. Hydro One’s current plan is to reapply for Board-Approved CDM programs later in the year.*

4. General Comments and Conclusion

Question from Ian Malpass: We would like to hear from stakeholders if they think that what Hydro One is proposing is a good approach.

Comment from Bill Harper: *Agreed that what Hydro One is proposing is a good approach.*

Comment from Marion Fraser: *Also agreed that this is a good approach although there are some uncertainties right now.*

Comment from Dana Silk: *The category “Natural CDM” should be expanded to include additional components, such as i) impact of TOU rates, ii) impact of projected electricity rate by sector and by rate class.*

Comment from Ian Malpass: Hydro One will ensure that CDM categories are well defined.

Comment from Marion Fraser: *Interrogatory questions from Green Energy Coalition (“GEC”) and corresponding responses from the OPA in the current OPA 2011 Revenue Requirement Submission to the OEB (EB-2010-0279) may contain useful information and suggested Hydro One to look up. Also, the OPA may have information regarding low Income customers but not sure if they will share that with LDCs due to confidentiality issue.*

Comment from Bill Harper: *Don’t think they will share with LDCs.*

Question from Peter Thompson: *When does Hydro One plan to file its next Distribution Cost of Service rate application?*

Comment from Susan Frank: *We are in the process of determining the appropriate timing of filing.*
Comment from Ted Cowan: *Weather normalization usually ranges from 2 to 6% and CDM impact is within this range. We need to be careful that impacts from CDM and weather do not get mixed up or overlap.*

Comment from Stan But: *All Hydro One forecasts are weather normalized. Hydro One does not believe this is an issue since our weather correction methodology is proven.*

Comment from Ted Cowan: *Would Hydro One’s weather correction take into account the variation of drying load (demand could be quite high) due to a wet/dry season?*

Comment from Stan But: *Hydro One does not believe this is an issue. Our weather correction methodology will take this into consideration.*

### 5.0 CDM Forecasting Initiative — Conclusion and Next Steps

1) Stakeholders provided valuable suggestions and comments. Hydro One will take all stakeholder input into consideration.

2) In general all Stakeholders were happy with the approach and timeline proposed by Hydro One.
Appendix A

CDM Forecasting Initiative

Presentation on March 22, 2011
Key messages from February 10, 2011 stakeholder session

• As recommended by stakeholders, a 3rd party study on CDM impacts is not required
• Hydro One will review what CDM categories other utilities in North America are using in their load forecasting process
• Hydro One will work with the OPA to better define and forecast CDM impacts
• Intervenors are interested in more details of CDM impacts on charge determinants in our TX rate application and CDM impacts on customer rate classes in our DX rate application
Action plans

1. Determine the appropriate CDM categories for use in load forecasting by Hydro One

2. Prepare detailed bottom-up CDM forecast using available information consistent with the new OPA IPSP to be filed in 2011

3. Prepare detailed evidence of CDM impacts on rate classes in future rate applications
Action Plan #1: Determine CDM categories for use by Hydro One

- Hydro One will review the CDM categories used by other utilities
- This review will include California, New York, British Columbia
- Hydro One will work with the OPA to better understand the CDM categories they plan to use in the 2011 IPSP
- Hydro One will undertake a survey on CDM categories, including estimation methodology
**Action Plan #1: Schedule**

<table>
<thead>
<tr>
<th>Task</th>
<th>Milestone</th>
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<tbody>
<tr>
<td>2nd stakeholder session</td>
<td>22-Mar-11</td>
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<tr>
<td>Review rate application evidence on CDM from selected utilities</td>
<td>15-Apr-11</td>
</tr>
<tr>
<td>Finalize CDM survey questionnaire</td>
<td>15-Apr-11</td>
</tr>
<tr>
<td>Tabulate CDM survey results</td>
<td>6-May-11</td>
</tr>
<tr>
<td>Document CDM survey results</td>
<td>31-May-11</td>
</tr>
<tr>
<td>Assess alignment with OPA's IPSP</td>
<td>June 2011</td>
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</tbody>
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Action plan #2: Prepare a bottom-up CDM forecast

• Hydro One met with the OPA to discuss OEB requirements and intervenor expectations
• Hydro One will review historic CDM achieved to date
• Hydro One will take into consideration OPA, LDC and other CDM categories to develop forecast
Action plan #2: Prepare a bottom-up CDM forecast

• Hydro One will ensure consistency with the new IPSP to be filed in 2011
• Hydro One will examine detailed CDM impacts by category and by sector (residential, commercial, industrial)
• Hydro One will align the CDM forecast with the OPA on monthly energy and peak and hourly profile of CDM impacts
<table>
<thead>
<tr>
<th>Task</th>
<th>Milestone</th>
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<tbody>
<tr>
<td>Meeting with OPA to discuss OEB requirements and intervenor expectations</td>
<td>11-Mar-11</td>
</tr>
<tr>
<td>Assess CDM impacts by category</td>
<td>April - June 2011</td>
</tr>
<tr>
<td>Assess all CDM impacts</td>
<td>30-Jun-11</td>
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</tbody>
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Action plan # 3: Provide detailed evidence of CDM impacts in future rate applications

TX rate application

- Hydro One will provide detailed breakdown of CDM impacts by category and by sector
- Hydro One will document how we use the above information to estimate the charge determinant forecast
Action plan # 3: Provide detailed evidence of CDM impacts in future rate applications

DX rate application

• Hydro One will provide detailed breakdown of CDM impacts by category and by sector

• Hydro One will document how we use the above information to estimate customer rate class forecast
Proposed data collection framework for DX

By category
- OPA contracted programs
- Board-approved LDC programs
- Codes and standards
- Federal, provincial and other initiatives
- Customer conservation actions (including response to TOU prices)

By sector
- Residential
- Commercial
- Industrial

By rate class
- R1, R2, UR, Seasonal
- GSe, GSd, UGe, UGd, ST
Proposed data collection framework for TX

By category

- OPA contracted programs
- Board-approved LDC programs
- Codes and standards
- Federal, provincial and other initiatives
- Customer conservation actions (including response to TOU prices)

By charge determinant

- Network connection
- Transformation connection
- Line connection
### Action Plan 3: Schedule

<table>
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<th>Task</th>
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<tbody>
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<td>Preliminary CDM impacts by customer rate class</td>
<td>31-Jul-11</td>
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<tr>
<td>Finalize CDM impacts by customer rate class</td>
<td>31-Aug-11</td>
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