Ontario Energy Board
P.O. Box 2319
27th. Floor
2300 Yonge Street
Toronto ON M4P 1E4
Telephone: 416- 481-1967
Facsimile: 416- 440-7656
Toll free: 1-888-632-6273

Commission de l'énergie de l'Ontario
C.P. 2319
27e étage
2300, rue Yonge
Toronto ON M4P 1E4
Téléphone: 416- 481-1967
Télécopieur: 416- 440-7656
Numéro sans frais: 1-888-632-6273

Ontario

BY E-MAIL

June 11, 2014

Ms. Erin Henderson
Regulatory Coordinator -- Regulatory Affairs
Hydro One Networks Inc.
483 Bay Street
Toronto ON M5G 2P5

Dear Ms. Henderson:

Re: Hydro One Networks Inc.
2015 - 2019 Distribution Custom Incentive Rate Setting Application
Board File Number EB-2013-0416
Board Staff Interrogatories

Please find attached, Board staff Interrogatories for this proceeding.

Yours truly,

Original signed by

Harold Thiessen
Ontario Energy Board Staff
Case Manager, EB-2013-0416

EB-2013-0416 Hydro One Distribution
5 Year Custom Rates Application
BOARD STAFF INTERROGATORIES
June 11, 2014

Interrogatories listed by Issue Number

1.0 CUSTOM APPLICATION

1.1 To what extent does the application reflect the objectives and approaches described in the RRFE Report?

1.2 Has Hydro One Distribution responded appropriately to all relevant Board directions from previous proceedings, including commitments from prior settlement agreements?

1.3 What actions should the Board require Hydro One Distribution take at or near the end of the 5-year rate term (e.g. rebasing, plan assessment, measurement of customer satisfaction)?

1.3-Staff-1
Ref: Exhibit A (End of Term Variances)

Preamble:
On page 20 of the RRFE Report, the Board states that once rates have been approved under Custom IR, the Board will monitor capital spending against the approved plan by requiring distributors to report annually on actual amounts spent. If actual spending is significantly different from the level reflected in a distributor's plan, the Board will investigate the matter and could, if necessary, terminate the distributor's rate-setting method. A distributor on the Custom IR method will have its rate base adjusted prospectively to reflect actual spend at the end of the term, when it commences a new rate-setting cycle. This is consistent with the Board's existing policies in relation to incremental capital under 3rd Generation IR.

How does Hydro One propose to address any differences between actual spending against approved planned spending at the end of the term of the plan (i.e., how will variances be addressed)?

1.4 Is the proposed rate-smoothing mechanism appropriate? Given Hydro One's rate smoothing proposal, should the application include any other ratepayer protection measures such as an earnings sharing mechanism?

1.4-Staff-2
Ref: 1. Exhibit A-20-1/Appendix E/p. 46
2. Exhibit E1/Tab 1/Schedule 1/p. 1

Preamble:
It is Board staff's understanding that the 3.6%, 3.0%, and 2.9% distribution rate increases for years 2017, 2018, and 2019, respectively represent the level of distribution rate increases needed to support "steady state" operations of Hydro One.

Revenue requirement sought in 2016, 2017, 2018, and 2019 (in $ millions) are 1,469.70, 1,524.9, 1,570.3, and 1,620.6, which translates to year-over-year revenue requirement growth of 3.76%, 2.98%, and 3.20% in 2017, 2018, and 2019, respectively.

a) Is staff's understanding accurate?

b) What is the relationship between the distribution rate increases listed in Exhibit A-20-1 (noted above) and the values listed in lines 20-25 on page 6 of Exhibit A/Tab 3/Schedule 1 (i.e., -1.4 % in 2015, 3.8% in 2016, 2.3% in 2017, 1.2% in 2018 and 2.6% in 2019)?

c) What steps did Hydro One take to understand customers' views of the proposed rate smoothing, and how did it incorporate customer feedback into its proposal?

1.4-Staff-3
Ref: 1. EB-2010-0379 Report of the Board, December 4, 2013
2. Exhibit A

Preamble:
Consistent with the policy determinations set out in its EB-2010-0379 Report of the Board on Rate Setting Parameters and Benchmarking under the Renewed Regulatory Framework for Ontario's Electricity Distributors that was issued on November 21, 2013 and corrected on December 4, 2013, the Board calculated the value of the inflation factor for incentive rate setting under 4th Generation IR (also referred to as price Cap IR) and the Annual Index for rates effective in 2014 to be 1.7%. A detailed calculation is provided in Appendix C to that Report. A summary of the annual growth of this inflation factor since 2003 is also provided in Appendix B to that report.

a) Does Hydro One expect that it will continue to seek a comparable level of revenue requirement and rate increases (i.e., increases greater than inflation) after 2019? If so, for how many years and what circumstances – including those unique to Hydro One, if any - support on-going annual increases that are greater than inflation?

b) One of Hydro One's reasons for selecting a five-year custom rate setting method was to spread the impact of the increase in 2015 rate base over a five year period. If a shorter term was approved (ie, 2 years), would Hydro One still suggest a smoothing mechanism to mitigate the rate impact?

2.0 OUTCOMES AND INCENTIVES

2.1 Does Hydro One Distribution's Custom Application adequately consider customer feedback and preferences? Have customer feedback and preferences been adequately reflected in the OM&A and capital spending plans?

2.1-Staff-4
Ref: Exhibit A/Tab 19/Schedule 1 (Alignment of Outcomes and Customer Expectations)
How do Hydro One's selected outcomes for the next five years (i.e., those it will especially focus on and invest heavily in) align with Hydro One's customers' preferences? Please provide a summary of the customer preferences addressed by each selected outcome.

2.1-Staff-5
Ref: Exhibit G1/Tab 4/Schedule 1 p 2
Distribution costs for Urban General Service <50kW (UGe) customers are expected to grow 45% in 2015 and will nearly double by the end of the term. Similarly, general service demand-billed customers will experience increases in distribution costs between 9% and 15% in each of the 5 years of the plan, leading to a 75% increase in distribution costs for these customers over the term of the plan. What specific activities did Hydro One undertake to understand the priorities and preferences of these customer classes, and how were those views factored into Hydro One's plans? If no changes were made, how was that decision communicated to customers and how was it received?

2.1-Staff-6
Ref: Exhibit A/Tab5/Schedule 1/p. 9
At this reference, Hydro One indicates that combining all of the customer survey research results and the other customer engagement activity input Hydro One has determined that the customers currently want Hydro One, in priority order, to maintain or reduce the total bill and assist in managing the customer's bill.

As customers seem generally satisfied with the service of Hydro One in all terms except bills and increasing bills, (Table 2) why is there not more of a focus on reducing costs, increasing efficiency and minimizing rate increases over the term of the 5 year plan?

2.1-Staff-7
Ref: Exhibit A/Tab5/Schedule 1
On page 13 of this exhibit, Hydro One states that it recognizes that a principal driver of customer dissatisfaction is the size of the bill and rate increases.

Considering that customers have shown a primary concern with the size of bills:

a) Did Hydro One consider a planning scenario that would show no increase in distribution rates over the 2015 to 2019 period?
b) Please provide an investment and operating cost scenario that would achieve a zero increase in distribution rates over the 2015 to 2019 period.
c) Please outline the programs and initiatives that would be curtailed under this zero increase scenario.
d) Please outline the anticipated consequences to service levels, provide detail on reliability outlooks and describe expected changes in customer satisfaction of implementing a zero increase scenario and the measures to mitigate risks in each of these areas.

2.1-Staff-8
Ref: 1. Exhibit A/Tab4/Schedule 4/p.13
2. Technical Conference #2, TR p. 127
Regarding Customer Experience, at this evidence reference, and later discussed in the Technical Conference, Hydro One indicates that while it will spend $21 million over 5 years, compared to $6 million over the previous 5 year period, “to continue to shape the Company’s vision for the ideal customer experience allowing Hydro One to more effectively respond to evolving customer needs and expectations.”

Why has Hydro One chosen to increase customer experience spending to such a degree (to shape a vision of ideal customer experience) rather than addressing customer concerns with high bills by: lowering spending, reducing bills and increasing efficiency in operations?

2.2 Does Hydro One Distribution’s Custom Application promote and incent acceptable outcomes for existing and future customers (including, for example, cost control, system reliability, service quality, bill impacts)?

2.2-Staff-9
Ref: Exhibit PD1 (Presentation/Issues Day Transcript)

Per Exhibit PD1 slide 4, Hydro One's intent is to maintain bill impacts at or below inflation. Distribution is just one part of the bill; a 2% bill impact due to distribution costs implies a 6-7% distribution line impact for typical small volume customers.

Why should Hydro One's cost impact be evaluated from the significantly diluted perspective of the total bill rather than considering only distribution elements? What is the utility of general price inflation as a reference point given this dilution, and given the other elements of the bill that can also face inflationary and non-inflationary pressures?

2.2-Staff-10
Ref: Exhibit A/Tab 19/Schedule 1/p. 4 (Sharing of Benefits)

Preamble:
Hydro One states that the amounts in Table 2 have been taken into consideration as part of the business planning process and have been built into its OM&A and capital forecasts.

Which amounts (cumulative or annual) have been factored into Hydro One's OM&A and capital forecasts? How have these amounts been included in the calculation?

2.2-Staff-11
Ref: 1. RRFE Report, October 18, 2012
2. Exhibit A

Preamble:
At page 12 of the RRFE Report, the Board states: "To ensure that the benefits from greater efficiency are appropriately shared throughout the rate-setting term between the distributor/shareholder and the distributor's customers, the expected benefits will be taken in to account in establishing the rate adjustment mechanisms applicable to each rate method through the X-factor."

a) In the absence of an X-factor, what process is Hydro One proposing to ensure that benefits are appropriately shared through the rate term between Hydro One and its customers?

b) How will Hydro One share any additional productivity and/or total cost efficiency gains it achieves over the term of the plan with its customers?

2.2-Staff-12
Ref: 1. RRFE Report, October 18, 2012
2. Exhibit A (Communication of Benefits to Customers)
How will Hydro One demonstrate to its customers that its efficiency enhancing and total cost-minimizing strategies ultimately yield higher value and/or lower rates for customers?

2.2-Staff-13
Ref: Exhibit A-18-1/Appendix A (Exemption Application)

a) What compensation, if any, has/will Hydro One Offer customers affected by Hydro One's failure to keep appointments with customers?

b) If the Board were to require Hydro One to compensate customers affected by Hydro One's failure to keep appointments, what form of remedy might be acceptable to Hydro One?

2.3 Does the Custom Application adequately incorporate and reflect the four outcomes identified in the RRFE Report: customer focus, operational effectiveness, public policy responsiveness and financial performance?

2.3-Staff-14
Ref: Exhibit A/Tab4/Schedule 4 (Monetization of Benefits)

Preamble:
Hydro One proposes eight areas of focus for assessing its performance on specific areas of spend included in the five-year plan.

Has Hydro One put a value on the anticipated benefits that will accrue to customers in relation to the eight areas of focus and factored them into net-present-value analyses? If yes, how have these analyses been used to derive the total costs underpinning rates over the term of the plan? If not, why has no net present value analysis been undertaken?

2.3-Staff-15
Ref: Exhibit A/Tab12/Schedule1/Attachment 3 (Financial Statements)
Please file the 2013 financial statements for Hydro One Networks Inc.

2.3-Staff-16
Ref: Exhibit A/Tab13/Hydro One Inc. (Audited Financial Statements)
Please file the 2013 MD&A and the audited financial statements for Hydro One Inc.

2.4 Is the monitoring and reporting of performance proposed by Hydro One Distribution adequate to demonstrate whether the planned outcomes are achieved?

2.4-Staff-17
Ref: Technical Conference Transcript #1, April 10, 2014/p. 121 (Summary of Performance Commitments)

Preamble:
At the April 10, 2014 Technical Conference, staff handed out a draft chart that lists the eight areas of focus that Hydro One proposes in its application for assessing its performance on specific areas of spend included in the five-year plan. Using information filed in the application, staff had filled it in to the extent possible.

Board staff has updated the attached chart to reflect Hydro One's updated filing. **(Attachment 2.4-Staff-17.pdf)**.

To summarize for the Board Hydro One's specific performance commitments over the next 5 years associated with the forecasted total costs requested in the application, please complete the table in file **Attachment to 2.4 Staff-17**.pdf for each of Hydro One's eight focus areas.

2.4-Staff-18
Ref: Exhibit A/Tab 4/Schedule 4 (Consequences if Targets Missed)

a) What are the effects on Hydro One and its customers, if any, of the identified targets in each of the four outcomes identified in the RRFE Report and the eight focus areas not being achieved?

b) Is Hydro One proposing any penalties or rewards for under or over-performance? Please provide reasons.

2.4-Staff-19
Ref: 1. Exhibit A/Tab4/Schedule 1 (Summary of Custom Application Framework)
2. **Exhibit A*/Tab18/Schedule 1 (Service Quality Indicators)***
3. **Exhibit D2/Tab 2/Schedules 1, 2 & 3**

Preamble:
At reference (1), Hydro One notes that the outcome measures will be tracked annually and the results of this tracking will be reported to the Board. At Reference (2) Hydro One highlights the difference between the OEB performance scorecard and its proposed Outcome Measures. Hydro One states that "emphasizing results

rather than activities will better respond to customer preferences, enhance distributor productivity and promote innovation."

At reference (2), Hydro One has included its forecast for Customer Service Indicators and Service reliability Indicators in accordance with Chapter 15 of the EDR handbook.

Questions:

a) Please confirm that Hydro One also intends to report on planned activities (e.g. proactive replacement of distribution transformers) not just the eight outcomes as mentioned at reference (1).

b) Based on the information provided at reference (3), please tabulate all areas of capital and OM&A growth in the investment plan starting with the driver/need (e.g. poor reliability, billing complaints, etc…) for the investment. Please indicate the anticipated directional or absolute result and expected timing of result.

Please use the suggested format below as guidance:

Driver	Expenditure	Activities	Results & Timing	Corresponding Projects and/or Programs in Exhibit D2
e.g. Poor Reliability	Capital Expenditure Operational Expenditure	Increase Maintenance Perform system modifications and additions Install real-time monitoring assets	Improved reliability by month/year X Improvements in customer satisfaction	

c) If enhanced efficiencies are forecast, over the DSP horizon or beyond, as a result of the activities undertaken above (i.e. question "a") please highlight them.

d) Other than the bi-annual surveys, please indicate whether any other activities will be undertaken during the DSP horizon that might aid in revealing customer preferences for the 2015-2019 period.

e) Please explain how the traditional network performance indicators at reference (3) have informed the proposed plan. If applicable, please highlight specific activities and expenditures.

2.4-Staff-20

Ref: Exhibit A/Tab 4/Schedule 4; p. 5 (Outcome Metrics)
Exhibit A/Tab 17/Schedule 4; pp. 3-4 (Business Values)

At these references Hydro One describes its Outcome Metrics and Business Values. How do the identified 'outcome metrics' associated with each 'Sustaining OM&A' and 'Sustaining Capital' expenditure category relate to the KPI(s) for the BV objective(s) corresponding to each of these categories?

2.4-Staff-21

Ref: 1. Exhibit A/Tab 5/Schedule 1/pp. 12 - 13 (What the Customer Responses Indicate)
2. Exhibit A/Tab 4/Schedule 4/p. 6 (Vegetation Management)

Hydro One indicates that vegetation management expenditures related to line clearing are expected to be approximately $540 million in the 5-year forecast period as compared to $338 million in the preceding 5 year period.

a) Please identify the years corresponding to the "5-year forecast" and "preceding 5 year period" referred to over which, respectively, $540 million will be spent and $338 million was spent on vegetation management.

b) Using the resulting 5 year forecast and preceding periods, please calculate the change in spending on vegetation management in dollars and per cent, as well the target reduction in vegetation caused interruptions in terms of the number of interruptions and per cent reduction. In the context of item #4 on the list of "what customers currently want" and in consideration of items #1 and #3 on that list, how would Hydro One "demonstrate value" to customers by achieving the target indicated with the expenditure levels proposed?

2.4-Staff-22

Ref: 1. Exhibit A/Tab 4/Schedule 4/pp. 6 - 8 (Pole Replacement)
2. Exhibit D2/Tab2/Schedule 3/S-10, p. 2

If the number (or risk) of customer outages due to pole failure is the driver, how does the 'target number of pole replacements per year' metric show whether and to what degree this number (or risk) has been positively affected by the indicated $207 million (64%) increase in pole replacement expenditure over the 5 year plan period compared to the previous period?

Hydro One states that "Poles that fail can cause customer outages." Hydro One also indicates (at page 6) that vegetation related customer outages" are the target performance metric in relation to vegetation management spending. Does Hydro One track interruptions caused by pole failure? If not, why not? If so, why aren't interruptions caused by pole failure the proposed performance metric?

The average cost per replaced pole does not appear to be changing over time. Please confirm if this is the case. What unit cost reduction/efficiency, if any, is Hydro One making in this focus area?

2.4-Staff-23

Ref: 1. Exhibit A/Tab 4/Schedule 4/p. 7 (Pole Replacement)
2. Exhibit A/Tab 17/Schedule 4/p. 5 (Investment Prioritization Process)

At the first reference, Hydro One indicates that it "…*expects to spend approximately $530 million on pole replacements during the course of the 5 year plan. Approximately $323 million was spent on pole replacements during the previous 5 year period*."

What is the incremental "level of risk mitigated" (reference 2) corresponding to the incremental $207 million investment proposed for pole replacement?

2.4-Staff-24

Ref: 1. Exhibit A/Tab 4/Schedule 4/pp. 9 - 10 (Substation Refurbishments)
2. Exhibit D2/Tab 2/Schedule 3/Ref: #S-01; #S-04; #S-05; #S-07

a) According to the information provided in Reference 1, Hydro One has 1,004 distribution and regulating station facilities. Of these, Board staff counts 198 substations on the list provided in Ref. #S-07. Staff also notes planned expenditure proposals for individual components of substations (other Ref #s). Does the data provided in Exhibit A on 'substation caused interruptions' include interruptions at substations not included in the 'Substation Refurbishments' category? If so, how is the proposed metric an appropriate measure of the Hydro One's performance specifically in relation to the proposed $203 million substation refurbishment expenditure?

b) Ref. #S-07 describes "Alternative 2: Individual Component Replacements" as being "not ideal" because replacing individual components does not allow "efficiencies associated with the integrated replacement of a number of components at once." Does this mean that Alternative 2 is a higher cost method of achieving the performance metric targets compared to the recommend alternative?

c) Ref. #S-07 indicates that Hydro One is concerned about, among other things, "rotting high and low voltage wood structures" and "fence and grounding systems" and that refurbishment will address "aged transformers and structures,

defective equipment, site or property issues, customer issues, safety concerns, environmental compliance, and operational issues."

What is the per cent share of total capital expenditures in this category devoted to the repair/replacement of substation components that in the normal course would not be expected to contribute to 'substation caused interruptions'? How does the proposed metric capture Hydro One's performance in relation to this portion of the expenditure?

d) Spending on substations is increasing nearly five-fold relative to the previous 5-year period, yet there is no improvement in the expected number of interruptions over the life of the plan relative to the average level of interruptions between 2009 and 2013 (which shows a declining trend). Please explain the value proposition to customers of this spending allocation relative to alternatives, and why Hydro One chose this level.

2.4-Staff-25
Ref: Exhibit A/Tab 4/Schedule 4; p. 11 (Distribution Line Equipment Refurbishments)
Please explain how the target 'distribution line caused interruptions' are appropriate in view of the fact that on average, the number of annual interruptions targeted over the 2015 – 2019 forecast period is substantially equal to or marginally higher than the number over the 2010 – 2014 period. Please also confirm if the number for 2016 in Table 5 'Distribution Line Equipment Caused Interruptions' (8,300) is correct, and explain why if so.

2.4-Staff-26
Ref: Exhibit A/Tab 4/Schedule 4; pp. 8-9 (PCB Line Equipment)
a) What steps has Hydro One taken to establish if the costs of its PCB remediation are in line with those of other distributors with equipment of a similar profile?
b) What is the expected cost per replaced pole top transformer? How is the cost per transformer expected to change over time?
c) What unit cost reduction/efficiency is Hydro One making in this focus area?

2.4-Staff-27
Ref: 1. Exhibit A/Tab 4/Schedule 4; pp. 5-11 (Outcome Metrics)
Ref: 2. Exhibit A/Tab 6/Schedule 1; pp. 20-21
a) Please supplement the statistics on reliability in Ref 2. with information on the average number of affected customers and average duration of outages

for each cause of interruption (pole, substation, vegetation, line equipment) identified as focus areas.

b) Please rank the proposed spending levels in each focus area in terms of "expected to be most effective" to "likely least effective" in reducing the number of customer interruptions and the total duration of interruptions.

c) Please explain Hydro One's planned allocation of spending in each area from the perspective of mitigation of interruptions.
   i) In what way is its proposed allocation of spending among areas efficient and optimal?
   ii) Would different allocations among the areas more optimally reduce outages, the number of customer interruptions, or the amount of unsupplied energy?

d) Please provide estimates of the average number of interruptions that would be expected if spending over the plan were
   i) equal to past planning levels,
   ii) 50% of past planning levels
   iii) 50% of planned levels and
   iv) 150% of planned levels.

e) Please discuss Hydro One's chosen planned spending levels in the context of this information and in the context of customer value, rate impacts and reliability. In what way are Hydro One's proposed spending levels optimal?

f) What measures, if any, are proposed to address the 19% of interruptions for which causes are either unknown or not due to causes already listed?

2.5 Are Hydro One Distributions' proposed off-ramps, annual adjustments and annual adjustments outside the normal course of business appropriate?

2.5-Staff-28
Ref: 1. RRFE Report, October 18, 2012
2. Exhibit A (Performance against Plan Variances)

Preamble:
On page 20 of the RRFE Report, the Board states that once rates have been approved under Custom IR, the Board will monitor capital spending against the approved plan by requiring distributors to report annually on actual amounts spent. If actual spending is significantly different from the level reflected in a distributor's plan, the Board will investigate the matter and could, if necessary, terminate the distributor's rate-setting method.

a) How does Hydro One propose to address actual spending against approved planned spending over the term of the plan? What is Hydro One's proposal as to how the Board should address any variances during the term of the plan?

b) How does Hydro One propose to address actual in-service capital against planned in-service capital over the term of the plan?

2.5-Staff-29
Ref: 1. RRFE Report, October 18, 2012
2. Exhibit A/Tab3/Schedule 1/p. 10
3. Exhibit A-20-1/Appendix E/p. 46

Preamble:
As noted previously, on page 20 of the RRFE Report, the Board states that a distributor on the Custom IR method will have its rate base adjusted prospectively to reflect actual spend at the end of the term, when it commences a new rate-setting cycle. This is consistent with the Board's existing policies in relation to incremental capital under 3rd Generation IR.

On page 10 of Exhibit A/Tab 3/Schedule 1, Hydro One identifies rate base growth due to capital additions made during the IRM period as one of the main contributions to the increase in revenue requirement in 2015.

It is staff's understanding that Hydro One's forecasted total costs underpinning the rate change trajectory illustrated in the chart on page 46 of Exhibit A-20-1/Appendix E is designed to prevent a step increase in total costs and associated rates in 2020 due rate base growth over the 2014 to 2019 period. Is staff's understanding accurate?

2.5-Staff-30
Ref: 1. RRFE Report, October 18, 2012
2. Exhibit A/Tab4/Schedule 3 (Treatment of Unforeseen Events & Performance Monitoring)

Preamble:
On page 13 of the RRFE Report, the Board states that the Board's policies in relation to the treatment of unforeseen events, as set out in its July 14, 2008 EB-2007-0673 Report of the Board on 3rd Generation Incentive Regulation for Ontario's Electricity Distributors, will continue under all three menu options.

On page 19 of the RRFE Report, the Board states that the adjudication of an application under the Custom IR method will require the expenditure of significant resources by both the Board and the applicant. The Board therefore expects that a distributor that applies under this method will be committed to that method for the duration of the approved term and will not seek early termination. As noted on page 13 of the RRFE Report, a regulatory review may be initiated if the distributor performs outside of the ±300 basis points earnings dead band or if its performance erodes to unacceptable levels.

Please compare Hydro One's proposed adjustments outside of normal course of business to the Board's policies in its July 14, 2008 EB-2007-0673 Report of the Board on 3rd Generation Incentive Regulation for Ontario's Electricity Distributors in relation to the treatment of unforeseen events and explain any differences. What circumstances – including those unique to Hydro One, if any - support Hydro One's proposed approach where it differs from the Board's policies?

2.6 Are Hydro One's forecasts (revenue, costs, inflation and productivity) reasonable? Should Hydro One be expected to provide benchmarking evidence as an indicator of reasonableness?

2.6-Staff-31
Ref: Exhibit A/Tab3 (Methodologies Used to Prepare Application)

Preamble:
Hydro One has employed several methodologies (e.g., Lead Lag, Cost Allocation, Capitalization rates, etc) to prepare this application that have been accepted by the Board in previous Hydro One two year cost of service applications.

What rationale has Hydro One relied on for its confidence that the methodologies used in previous rate applications continue to be appropriate "as is" for a 5-year Custom cost of service application?

2.6-Staff-32
Ref: Exhibit A/Tab4/Schedule 4/p. 2
The footnote at this reference indicates that Hydro One consulted "…with Concentric Energy Advisors to gain the benefit of the firm's experience in the use of productivity and related performance measures in Canada and the U.S.".

Please provide the reports and recommendations that Hydro One received from the work performed by Concentric and indicate how this work informed the current application.

2.6-Staff-33
Ref: 1. RRFE Report, October 18, 2012
2. Exhibit A (Empirical Evidence)

Preamble:
On pages 19 and 20 of the RRFE Report, the Board states that the allowed rate of change in the rate over the term will be determined by the Board informed by empirical evidence including: the distributor's forecasts; the Board's inflation and productivity analyses; and benchmarking to assess the reasonableness of the distributor forecasts.

a) Please describe all external benchmarking (i.e. comparisons to utilities outside the Hydro One group) and internal benchmarking (i.e., regression analysis on Hydro One's historical performance and spending) that Hydro One undertook to estimate its costs for activities proposed in the application.

b) Please describe all external benchmarking (i.e. comparisons to utilities outside the Hydro One group) and internal benchmarking (e.g., regression analysis on Hydro One's historical performance and spending) that Hydro One undertook to estimate the productivity gains it will achieve during the rate term.

c) Please explain the basis for any company selected as a comparator.

d) Absent this benchmarking evidence to support Hydro One's forecasts, on what can the Board rely to determine whether Hydro One's forecasts are reasonable?

2.6-Staff-34
Ref: Exhibit A/Tab6/Schedule 1/p. 4 & Technical Conference #2, TR pp. 133-134
At Table 1 on this page, Hydro One indicates that it has a five year vision of achieving 'top-quartile unit costs against comparable utilities'. In response to an Energy Probe question in the Technical Conference, Hydro One indicated that it had only three comparable utilities: BC Hydro, Manitoba Hydro and New Brunswick Power.

a) What unit cost measures does Hydro One benchmark?
b) Please explain the basis for selecting BC Hydro, Manitoba Hydro and New Brunswick Power as comparable utilities.
c) Why are there no additional comparable utilities?
d) How does Hydro One currently compare to these utilities with respect to company characteristics and the benchmarked unit costs?
e) Please file any studies or reports that show Hydro One's performance in comparisons to others.

2.6-Staff-35
Ref: Exhibit A/Tab16/Schedule 1/pp. 2-3
On page 2 on this exhibit, Hydro One shows the Distribution Cost Escalation for both Construction and Operations & Maintenance (by Global Insight) which is used as a planning tool to predict expenditure level changes for distribution materials and services. Historical and Future years are shown in Table 1. CPI is shown in Table 2 on page 3.

a) Please provide evidence showing the accuracy of the Global Insight forecast compared to actual results over the past 5 years for both Table 1 categories and the CPI forecast found in Table 2.

b) The Global Insight forecast used by Hydro One, which in past applications provided a 2 year forecast is now being used for a 5 year application. Has there been any forecast methodology changes to reflect a longer forecast period for this application? Has Hydro One or GI made adjustments for the potential greater margin of error?

c) The Board's policy approach to setting the inflation factor for incentive rate setting is set out in its EB-2010-0379 Report of the Board on Rate Setting Parameters and Benchmarking under the Renewed Regulatory Framework for Ontario's Electricity Distributors that was issued on November 21, 2013 and corrected on December 4, 2013. A summary of the annual growth of the inflation factor since 2003 is provided in Appendix B to that report. The Board has not provided a forecast for the inflation factor; however, please compare Hydro One's approach to estimating inflation over the 2014 to 2019 period with the Board's approach and explain any differences. What circumstances – including those unique to Hydro One, if any - support Hydro One's proposed approach where it differs from the Board's approach to estimating inflation for the purposes of incentive regulation rate setting?

2.6-Staff-36
Ref: Exhibit A/Tab16/Schedule 1/p. 1
Hydro One indicates that the Construction and Operations & Maintenance forecast uses a basket of goods comprised of various types of equipment and labour, such as: Operation; Supervision and Engineering; Load Dispatching; Station Expenses; Lines; Meters; Customer Installations; Maintenance; Structures; Station Equipment; Overhead Lines; Underground Lines; Line Transformers; and Miscellaneous.

a) How does this specific basket of items used in the Global Insight forecast compare to Hydro One costs?

b) What are the weights for each element in the forecast and how closely do Hydro One's costs match these weightings?

2.6-Staff-37
Ref: Exhibit A/Tab16/Schedule 1/p. 5
Hydro One indicates that planned salary increases for Society and PWU staff are consistent with ratified collective agreement over the length of the agreement. Years following the effective collective agreement are assumed to be 2% net annual increase.

a) What percentage of Hydro One's total wage/salary bill is paid to members represented by the Society/PWU?

b) How long are these collective agreements in place? When do they expire?

c) On what basis does Hydro One predict the 2% increase for the years after the current agreements have expired?

2.7 Is Hydro One's proposed annual reporting and stakeholder engagement process appropriate?

2.8 Should the application provide appropriate incentives for line loss reduction?

3.0 PROGRAM AND PROJECT EXPENDITURES

3.1 Are the levels of planned operation, maintenance and administration expenditures for 2015-2019 appropriate, and is the rationale for the planning choices appropriate and adequately explained?

3.1-Staff-38
Ref: ExhibitC1/Tab2/Schedule 1
a) Please provide a table that presents OM&A per customer, OM&A per km of line and OM&A per regular employee and OM&A per total employees, from 2010 to 2019.
b) In addition, please provide a table that presents OM&A as a percentage of total costs (i.e., OM&A plus Capital) from 2010 to 2019. Please use the capital costs used to derive Hydro One's TFP growth trend in Board Staff IR #60.

3.1-Staff-39
Ref: ExhibitC1/Tab2/Schedule 2/p. 34
Line Clearing and Brush Control appear to be the primary components of the increase in Vegetation Management expenses over the 2015 – 2019 time frame. In particular there is a spike in spending forecast in 2016.

What are the reasons that this significant increase in spending is planned to take place in 2016 rather 2015, (the first year of Hydro One's plan)?

3.1-Staff-40
Ref: ExhibitC1/Tab2/Schedule 2 & Technical Conference #2 TR pp. 110-112
In the Second Technical Conference, while responding to questions on the Vegetation Management cycle, Hydro One indicated that it was not able to provide a definitive reason for the backlog in vegetation management.

a) Please provide the reasons for the backlog in vegetation management leading up to the test year.

b) In its EB-2009-0096 distribution rate proceeding, Hydro One proposed a 7 year cycle for the two test years, 2010 and 2011. Did Hydro One not accomplish the proposed 7 year cycle at that time? If not, why not? Please provide Hydro One's reasoning for choosing an 8 year cycle as optimal for vegetation management on its system. What is the cycle currently in place?

c) Please provide the most recent vegetation management study conducted by Hydro One and summarize the findings used to inform the decision to move to the intended 8 year cycle.

d) Is Hydro One able to provide comparisons of vegetation management accomplishments in $/km of cleared line with other distributors? Which distributor is showing the best practice and for what reasons? Which of those practices have been/are being adopted by Hydro One?

e) Aside from use of more feller bunchers, what other productivity improvements/cost efficiency measures is Hydro One planning in vegetation management?

f) Please provide the OM&A cost per km for vegetation management each year from 2010 to the 2019 forecast year, broken down by the 'line clearing' and 'brush control' categories. Please explain any trends that emerge.

3.1-Staff-41
Ref: ExhibitC1/Tab2/Schedule 2 & Technical Conference #2 TR p. 115
In the Second Technical Conference, Hydro One indicated that increased Station Maintenance would not result in a reduction of trouble calls or demand work due to the demographic profile of the systems.

a) Please provide the evidence on which this statement is based and also provide an estimate of when the demographic profile of the system will change at current spending levels.
b) Can Hydro One provide an estimate of the spending level that would provide reduced costs on trouble calls and demand work within the 2015 to 2019 time frame?

3.1-Staff-42
Ref: ExhibitC1/Tab2/Schedule 2/p. 16
On page 16 of this exhibit, under Service Disconnects and Reconnects, Hydro One has indicated that requests have been increasing over the past several years and that the proposed spending for the test years is based on a forecast of 13,300 disconnect and reconnect requests per year.

a) Why is the number of service disconnects and reconnects increasing?

b) What does the forecast of 13,300 per year represent? Please provide the number of service disconnects and reconnects from 2010 and forecast from 2015 to 2019.

c) Is the increase a concern for Hydro One?

3.1-Staff-43
Ref: ExhibitC1/Tab2/Schedule 2/p. 16
On page 16 of this exhibit, under Customer Inquiries, Hydro One indicates that the proposed spending forecast is based on the historic volume of approximately 8,000 inquiries per year.

What does the forecast of 8,000 per year represent? Please provide the number of customer enquiries from 2010 and the forecast from 2015 to 2019. With investments and spending in the customer service area, is Hydro One expecting a decrease in customer enquiries over the course of this plan? If not, why not?

3.1-Staff-44
Ref: ExhibitC1/Tab2/Schedule 2/p. 19 & Technical Conference #2 TR pp. 117 - 118

In the evidence, Hydro One indicates that Line patrols are performed on one sixth of rural feeders each year and one third of urban feeders each year. In the technical conference, Hydro One indicated that it is following the Distribution System Code in terms of line patrol frequency and indicated that this was not an optimal frequency for Hydro One.

a) Please indicate the optimal line patrol frequency for the Hydro One Distribution system, the rationale for this position and quantify the efficiency gains/cost savings possible if this frequency were adopted.

b) What proportion of Hydro One's feeders is patrolled as a by-product of dispatch and other work? What is the incremental cost of meeting DSC requirements relative to the schedule of truck rolls, etc, that would otherwise take place?

c) Has Hydro One considered requesting an exemption from this requirement in the DSC?

3.1-Staff-45
Ref: ExhibitC1/Tab2/Schedule 2/p. 27
Hydro One indicates that it will replace 18,000 meters each year. What were historical levels? Please provide the number of meters replaced from 2010 to 2014 and the forecast from 2015 to 2019. What is the relationship between the smart meters replaced in the past few years and current/future replacements?

3.1-Staff-46
Ref: ExhibitC1/Tab2/Schedule 4/p. 7
The Table on page 7 indicates a steady increase in costs over the course of the plan for Operations. There does not appear to be an indication of cost efficiency improvements (i.e., reduced or moderated costs). Do Smart Grid investments not work to increase cost efficiencies? If not, why? If so, when will such cost efficiencies be evident/achieved?

3.2 Is the level of planned capital expenditures appropriate for the period 2015-2019 and is the rationale for the planning and pacing choices appropriate and adequately explained?

3.2-Staff-47
Ref: 1. Exhibit A/Tab7/Schedule 1/Appendix A (OPA Letter of Comment)
2. Exhibit A/Tab17/Schedule 8 (Regional Planning Process)

3. Exhibit A/Tab4/Schedule 3 (Adjustments Outside the Normal Course of Business)

Preamble:
The cited references show the extent of Regional Planning and OPA involvement in Hydro One's plan. Reference 3 in particular, indicates that:

> "Hydro One Transmission and the OPA expect it will take four to five years to complete all the Regional Plans that could impact Hydro One's distribution business. If any of the Regional Plans created the need for a project in the 2015 – 2019 period that was outside the plan and met the materiality threshold, an adjustment to revenue requirement would be sought to fund the project."

Reference (2) shows that regional planning for Group 1 regions is underway. In the May 30, 2014 update, Hydro One indicates that:

> "On January 22, 2014, Hydro One filed a Section 92 application for the Supply to Essex County Transmission Reinforcement Project with the Board. As part of this project a new transmission station, Leamington TS, is proposed to address the electricity supply capacity needs for the local area. Hydro One Distribution will be required to make a capital contribution to Hydro One Transmission for the new transmission facilities as stipulated in the Transmission System Code. Further details on this project are provided in Exhibit D2/Tab 2/Schedule3, Ref # D-12."

Questions:

a) Please confirm that the OPA's letter of comment only dealt with regional planning respecting renewable generation projects. Otherwise please clarify.

b) Please clarify whether projects arising from Regional Plans will be subject to the threshold in Chapter 2 of the Filing Requirements equal to $1M or Hydro One's alternative materiality threshold of 0.5% of revenue requirement.

c) Other than the Supply to Essex County Transmission Reinforcement Project, are there any other regional plan projects (IRRP or RIP) likely to be in the pipeline in the 2015-2019 period? If so, please describe.

d) At the time of filing, expenditures arising out of regional planning are largely unknown, where in the evidence are plans or contingencies for projects arising out of the regional planning during the DSP horizon?

e) An applicant for custom IR is expected to be able to manage its business within the rates set (RRFE, p. 19) and that variance from the plan is expected. Under what circumstances would the identification of a regional planning project trigger a rate adjustment? And on what grounds should one

be triggered, given that this is a risk that custom IR applicants are largely expected to bear, and given the expectation that Hydro One's specific circumstances should generally mean it is well equipped to manage such risks?

3.2-Staff-48
Ref: Exhibit A/Tab17/Schedule 8 & Technical Conference #2, TR pp. 109-110
In the Second Technical Conference, Hydro One indicated that it did not have any updates to the status of Regional Planning efforts in the Burlington to Nanticoke area and in the Greater Ottawa zone. While the evidence update included additional planning information in the Leamington area, the other two cited areas were not updated. Please provide a regional planning update for both of the cited areas.

3.2-Staff-49
Ref: 1. OEB RRFE Report, October 18, 2012
2. Exhibit A/Tab 17/Schedule 2/ Asset Management Planning Process
3. Exhibit A/Tab 17/Schedule 3/ Investment Plan Development
4. Exhibit A/Tab 17/Schedule 4/ Investment Prioritization Process
5. Exhibit A/Tab 17/Schedule 5/ Project/Program Approval and Control
6. Exhibit A/Tab 17/Schedule 7/ Asset Risk Assessment

Preamble:
The RRFE emphasizes that planning is at the foundation of rate-setting. In addressing the methods to support proposed investments, at page 36, the RRFE highlights that "filings must enable the Board to assess whether and how a distributor has sought to control costs in relation to its proposed investments through the appropriate optimization, prioritization and pacing of investment expenditures." At page 55, the RRFE envisages that good planning may ultimately lead to reduced costs for customers: "under the renewed regulatory framework a distributor will be expected to continuously improve its understanding of the needs and expectations of its customers and its delivery of services, which in turn can lead to reduced costs for customers."

At references 2 and 3, Hydro One describes its investment prioritization process and at reference 4, it also refers to its Asset Investment Planning (AIP) tool.

Questions:

a) As an overview, please provide in terms of percentage, the share/impact of each of the following factors in Hydro One's long-term strategy both for distribution and non-distribution assets: asset condition, obsolescence, system growth, municipal initiatives, and regional planning (IRRP and RIP).

b) Will the proposed plan lead to reduced monetary costs or have other non-monetary benefits for customers? If yes, please indicate what they are.

c) Is the AIP tool the Asset Analytics? If not, please indicate what the AIP is.

d) Does the Investment Plan Proposal contain an economic evaluation component indicating what the most cost effective actions are for the various areas of planning? If so, where is this reflected in the evidence?

3.2-Staff-50

Ref: 1. Exhibit A/Tab 17/Schedule 3/Investment Plan Development
2. Exhibit A/Tab 17/Schedule 7/ Asset Risk Assessment
3. Exhibit D1/Tab 2/Schedule 1/ Distribution Assets Investment Overview

Preamble:

At reference (1), Hydro One states in part:

"The Asset Analytic solution provides a common understanding of asset risk and comparability between assets of the same type along with standardized reports and dashboards. Asset Analytics also provides:

1. A cascading information view of asset risk/priorities based on demographics, condition, economics, utilization, performance and criticality/customer;
2. Geo-spatial presentation to help identify potential bundling opportunities;
3. Integrated data to support asset decision-making and the ability to format, filter and present data;
4. Documented, consistent and reliable processes that support the understanding of asset needs; and
5. A method of institutionalizing knowledge within the system to maximize value and facilitate knowledge transfer."

Reference (2) outlines six risk categories: condition risk; demographic risk; criticality risk; performance risk; utilization risk; and economic risk.

Reference (3) provides an asset risk analysis summary and states in part that:

"The Asset Risk Assessment provides a standardized approach to assessing the risk associated with distribution assets. This approach assists in the planning and prioritization of both the OM&A and Capital work required to maintain the safety and reliability of the distribution system. By understanding the risks associated with an asset and the ongoing operating costs, the most cost effective determination of when to replace or refurbish an asset can be made."

Keeping with a risk analysis perspective, staff assumes that the Asset Analytics not only aids in risk assessment, but also provides several solutions/alternatives for risk control, and corresponding options for funding.

Questions:

a) Is staff's assumption correct?

b) Please confirm that the Asset Risk Assessment is performed by the Asset Analytics.
c) Please confirm that the output of the Asset Analytics in the form of an assets condition review is an essential piece in optimizing investments.

d) What standardized reports of the Asset Analytics are translated into a plan?

e) Some of the variables in the composite risk index appear interdependent. How is this addressed in the planning process? Is the explanatory value of the assessment affected?

f) In light of the importance of the asset risk assessment in determining and driving investments and current planning, please provide Hydro One's risk mitigation and funding strategy for material initiatives. In particular, with respect to the company's risk mitigation and funding strategy, please describe the balancing of risk/reward between Hydro One and its customers.

g) Are any of the risks transferred to a third party, for example in the case of critical assets where an event could cause loss of operations and income?

h) Please explain how the RRFE outcomes and RRFE suggested performance metrics are embedded in the risk model and process.

i) Please file Hydro One's prioritization strategy for both non-discretionary and discretionary projects.

j) Under issue 2.4, staff asked some higher level questions related to Hydro One's planning process. In addition, please discuss scenarios that would affect Hydro One's prioritization and asset optimization strategy, for instance a more resource constrained environment, or a varying load growth environment (higher/lower than forecast). Please specify conditions under which the current DSP would be modified and which current projects would be deferred and/or abandoned? Please define qualitatively and quantitatively the impact of such investment deferrals along outcome lines.

3.2-Staff-51

Ref: 1. OEB Distribution Filing Requirements, Chapter 5, 5.4.5.1 Justifying Capital Expenditures/ p. 19
2. Exhibit A/Tab 6/Schedule 1/Summary of Distribution Business
3. Exhibit D1/Tab 2/Schedule 1/Investment Overview
4. Exhibit C1/Tab 2/Schedule 1/ Summary of OM7A Expenses

Preamble:

Chapter 5 at reference (1) states, in part:

> To support the overall quantum of investments included in a DS Plan by category, a distributor should include information on:
>
> - comparative expenditures by category over the historical period;
> - the forecast impact of system investment on system O&M costs, including on the direction and timing of expected impacts;
> - the 'drivers' of investments by category (referencing information provided in response to sections 5.3 and 5.4), including historical trend and expected evolution of each driver over the forecast period (e.g. information on the distributor's asset-related performance and performance targets relevant for each category, referencing information provided in section 5.2.3);

Questions:

To provide an expenditure picture that allows a comparative analysis, please include capital and OM&A in the **same schedule** for each asset category/sub-category (where applicable). Please distinguish, where applicable, between planned and reactive OM&A.

Please provide trends over time for all relevant capital expenditures, capital vs. OM&A (planned vs. unplanned) and capital vs. depreciation for the 10 year-period; and provide explanations of trends and outliers.

3.2-Staff-52

Ref: 1. OEB Distribution Filing Requirements, Chapter 5, 5.4.5.1 Justifying Capital Expenditures/ p. 19
2. Exhibit D1 (Capital Exhibits)
3. Exhibit C1 (OM&A Exhibits)
4. Exhibit D2/Tab 2/Schedules 1, 2 & 3

Preamble:

Chapter 5 at reference (1) says in part that:

> "Filings must enable the Board to assess whether and how a distributor's DS Plan delivers value to customers, including by controlling costs in relation to its proposed investments

> through appropriate optimization, prioritization and pacing of capital-related expenditures."

Appendices C1 and D2 contain detailed information related to planned investments for the DSP period of 2015-2019. However, there are areas that relate to the fundamentals outlined in the RRFE Report and the *Filing Requirements* that can benefit from additional information.

Questions:

a) For material projects, please distinguish between discretionary and non-discretionary projects, and provide the following project elements to establish whether the most cost-effective actions have been adopted, whether pacing of the investments is appropriate, and establish the value and rate impacts of these activities on ratepayers:

- In the project overview section, please provide:
  - The overall priority of the project; Benefits to be incurred from maintaining/upgrading or replacing the asset(s), such as lower operating costs. Where applicable, please include a discussion on value for the business and/or customers;
- In the project cost section, please provide:
  - An overview of the economics of the project (eg. assumptions, NPV calculation) and a discussion of alternatives in that context (eg. discuss in monetary terms alternatives for the TS capital contributions); and
  - Where applicable please reference or submit additional documentation, such as independent studies that support a recommended option;
- The impact of the project on rates;
- Any investment pacing considerations related to the project;

b) For programs (eg. Vegetation Management), please provide the following program elements to establish whether the most cost-effective actions have been adopted, and the value and rate impacts of these activities on ratepayers:

- In the overview of the program, please highlight:
  - The expenditure cycle;
  - Benefits to be incurred from planned expenditures on program, such as lower operating costs, increased reliability. Where applicable, please include a discussion on value for the business and/or customers;
- In the program cost section, please include an overview of the economics of the program and a discussion of alternatives (e.g. discuss in monetary terms the alternatives presented at exhibit D2 for the Pole Replacement program);
- The impact of the program on rates;
- Any investment pacing considerations related to the program and the cycle adopted; and

- Any benchmarking (historical/internal; industry peers/external; general/best practices)

c) For the smart grid pilot projects, to determine the value of these initiatives, please provide:
- The OM&A cost of the pilots;
- Please discuss the value of the pilots since the time of their roll-out;
- Please discuss any significant findings and recommendations on scaling-up during the DSP period; and
- If applicable, please discuss plans to share findings with peers in the industry.

3.2-Staff-53

Ref: 1. Exhibit A/Tab6/Schedule 1 (Summary of Distribution Business)
***2. Filing Requirements for Electricity Distribution Rate Applications* July 17, 2013, (the "Filing Requirements")/Chapter 2/ 2.5.2.2 Required Information/ p.19**
3. Exhibit A/Tab 9/Schedule 1/Compliance with OEB Filing Requirements for Electricity Distributors
4. Exhibit TC 2.1/ p. 7/ Asset Analytics Software
5. Exhibit A/Tab 7/Schedule 1/ (Distribution System Plan)
6. Exhibit D2/Tab 2/Schedule 3/Investment Summary Programs /Projects in Excess of $1M
7. Chapter 5, Consolidated Distribution System Plan Filing Requirements, p. 7

Preamble:

At Reference (1) Hydro One's evidence indicates that its distribution system consists primarily of the following five asset categories: Sub transmission feeders, distribution stations, primary distribution feeders, pole top/pad mounted transformers and secondary distribution feeders. Hydro One also states, that:

> "Individual investments are developed taking into account various factors such as asset risk assessment, historical performance data, asset criticality, availability of spare equipment and material, asset demographics, load growth and future capacity requirements using the process described in Exhibit A, Tab 17, Schedule 3. "

Reference (2) the "Filing Requirements" state in part:

> "As part of this exhibit, distributors must file a consolidated DS Plan in accordance with Chapter 5 for matters pertaining to asset management, renewable energy generation, smart grid and regional planning. The consolidated DS Plan should be filed as a stand-alone document."

At Reference (3), Hydro One states in part:

> "It is critical that Hydro One address its rapidly aging infrastructure and introduce the new technology needed to support customer choice and distribution generation. New

> system analytics tools and rigorous planning have given Hydro One confidence in its investment schedule. Hydro One has customized this Application to fit its specific circumstances."

Reference (4) relates to the Asset Analytics software which Hydro One addressed during the Technical Conference on April 23, 2014. Hydro One ran a demonstration and briefly commented on the underlying assumptions and variables of the model and illustrated the model's explanatory power. Hydro One also discussed the "composite risk score/index". Staff understands that the factors used to evaluate asset risk are: condition, demographics, criticality, performance, utilization and economics. How these factors are taken into account in a multivariate analysis for each asset category and how a composite risk index is obtained as highlighted during the technical conference is still unclear to Board staff. In addition, how this multivariate analysis leads to a multi-outcome investment plan is unclear. Accordingly, further explanation is needed.

At reference (5), Hydro One indicates that it has chosen to continue to use the terminology of "Sustaining", "Development", "Operations", "Customer Services" and "Common Corporate Costs" to accurately reflect the company's internal system of investment planning and to apply consistent definitions to historical expenditures and forecast expenditures. Hydro One acknowledges that this categorization does not precisely align with the categorization of investments set out in Chapter 5 of the Filing Requirements.

At reference (5), Hydro One states:

> "An important change in Hydro One Distribution's asset management process since its last rebasing application (EB-2009-0096) is the adoption of its "Asset Risk Assessment" methodology in its decision-making process. Previously, Hydro One Distribution relied upon an "Asset Condition Assessment and Analysis" methodology, which is described in its last application. Building upon that approach, Hydro One Distribution has since enhanced the quality of its asset data and process to systematically evaluate the risk associated with distribution assets in order to improve decision-making and prioritize investments. The end result is its "Asset Risk Assessment" process."

At reference (6), for certain future investments, Hydro one has provided the corresponding Chapter 5 investment categorization. Staff notes that the categorization outlined in Chapter 5 of the Filing Requirements will help comparative reviews and benchmarking of utilities in the long-run.

At reference (7), "All distributors are required to file a DS Plan as specified here when filing a cost of service application for the rebasing of their rates under the 4th Generation IR or a Custom IR application."

Questions:

a) In accordance with section 5.1.3 of Chapter 5 of the Board's filing requirements and Reference 2, please submit a stand-alone Distribution System Plan (DSP). For the purposes of the DSP, as was done at reference (6), please submit a schedule of investments that uses the Chapter 5 categories.

b) Alternatively, if available, please file the company's Asset Management Plan.

c) Please indicate whether the output of the Asset Analytics software corresponds to Hydro One's asset condition assessment review. Please explain in what manner the "new" Asset Risk Assessment differs from the "old" Asset Condition Assessment and Analysis.

d) If different from reference (1), please outline all the asset categories/sub-categories that are delineated in the Asset Analytics model.

e) Please reconcile the statement at reference (1) in which asset risk appears to be just one factor, with the fact that elsewhere in the pre-filed evidence and Technical Conference 2, asset risk is put forward as a composite index.

f) Please submit a copy of Hydro One's comprehensive asset condition assessment review by asset category, possibly subcategory (i.e. sub-transmission feeders, distribution stations, primary distribution feeders, pole top/pad mounted transformers and secondary distribution feeders) . The review should include:

   i. A comprehensive picture of the asset population health/risk distribution by asset category/subcategory, (please provide reasonable groupings, eg. asset risk scale very likely, likely, medium, unlikely remote or asset health scale very poor, poor, fair, good, very good);
   ii. The methodology for the development of a composite health/risk index, index formula and weights; and
   iii. For each asset category, findings and recommendations.

g) To determine whether the input methodology is appropriate, please indicate whether Hydro One has or will conduct an independent third party assurance review of the asset condition assessment review.

3.2-Staff-54

Ref: Exhibit D1/Tab3/Schedule 1/p. 3 (Capital Expenditures)

Please complete the following table to analyze directly capitalized costs from indirectly capitalized costs.

		($ Millions)						
		2013	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
Directly Capitalized								
Sustaining								
Development								
Operations								
Customer Service								
Corporate Common Costs								
Sub-total - Directly Capitalized								
Indirectly Capitalized from:								
Overhead	C1-5-2-pg3			85.9	81.4	80.2	82.5	85.3
Depreciation	C2-4-1-pg2	15.9	12.7	13.2	13.7	14.0	14.4	14.8
Interest - AFUDC	D1-4-1-pg2	17.4	18.0	16.6	19.6	22.9	21.9	16.2
Pension	C1-3-3-pgs2-3			45.0	44.0	44.0	45.0	46.0
OPEBs								
Other								
Sub-total - Indirectly Capitalized								
Total Capital Expenditures	D1-3-1-pg3	649.0	624.5	648.9	654.7	639.4	655.1	669.1

3.2-Staff-55

Ref: 1. RRFE Report, October 18, 2012
2. Exhibit A/Tab 17/Schedule 3/p. 6 (Investment Plan Development Process)
3. Exhibit A/Tab 17/Schedule 4/pp. 3-12 (Investment Prioritization Process)

Preamble:

In the Board's RRFE Report; on page 27, the Board states that it needs "*evidence that a distributor's planning and prioritization process is sufficiently rigorous to support and justify its proposed capital budget."* At page 2 of Chapter 5 of the Board's Filing Requirements for Electricity Transmission and Distribution Applications, the Board states that, *"Filings must enable the Board to assess whether and how a distributor has sought deliver value to customers. One of the primary goals of DS Plans and by extension, hallmarks of good planning, is pacing and prioritizing capital investments in a manner that considers rate impacts. To facilitate the achievement of this goal, these filing requirements focus on the*

qualitative and quantitative information distributors can use to support their investment proposals that will best enable the Board to assess how a distributor has sought to control the costs and related rate impacts of proposed investments."

a) Please describe how pacing investments to consider rate impacts is taken into account in the Investment Planning methodology described in these schedules. Why is the consideration of rate impacts neither a business Value ("BV") nor a Key Performance Indicator ("KPI")?

b) Please identify and explain examples from this application of sustainment projects/programs for which a vulnerable investment level has been chosen to be pursued, and specify whether this level was selected before or after consideration of "short-term constraints" in the form of "customer rate impacts" (A17/4/p.5). Please do the same for any program for which an intermediate investment level was chosen and explain the reasons for the choice.

c) If there were no sustainment projects identified in answer to (b), under what circumstances would a "Vulnerable" or "Intermediate" funding level be proposed?

d) Section 2.2 of Schedule 4 states that customer rate impacts are considered as a "short term constraint" when establishing investment alternatives. Please explain how this is performed, and what metrics or guidelines are used at this stage. Please confirm whether this is prior to or following the BV/KPI evaluation, or both. Please contrast this exercise with senior management's review of the IPP (s2.4), which takes into consideration "the associated impacts on customer rates" of the selected investment levels. What guidelines, principles or metrics does the senior management team use when considering rate impacts in the IPP?

e) To assist in the assessment of how Hydro One has sought to control costs through its investment plan development and prioritization process in relation to Sustainment investments, please provide - for each of the funding levels considered for each Sustainment investment category, quantitative information on cost and expected risk mitigation level achieved.

3.2-Staff-56
Ref: Exhibit D1/Tab3/Schedule 2
It appears, as shown in the Capital Expenditures exhibits, that there is a significant ramp up in spending in many areas, such as transformers, station refurbishment, and line and pole replacements.

Why were total capital expenditures in past years not made to a level that this ramp up in spending was required in the 2015 to 2019 period?

3.2-Staff-57
Ref: Exhibit D1/Tab3/Schedule 2/p.8
Hydro One indicates that it intends to increase specific stations capital spending by 5% annually to 2019, about 50% over historical levels. This increased spending is needed in order to replace the existing transformer fleet with regard to demographics. Why were past capital expenditures not made to a level that this ramp up in spending was required?

3.2-Staff-58
Ref: Exhibit D1/Tab3/Schedule 2/p.20
Hydro One shows that it will increase specific spending on station refurbishment by 7% annually, doubling capital spending by 2019 and also indicating that "…this represents a significant increase over historical spending levels. Hydro One Distribution has currently been refurbishing less than 1% of its distribution stations annually."

Why were past capital expenditures not made to a level that this ramp up in spending was required?

3.3 Has Hydro One proposed sufficient, sustainable productivity improvements for the 2015-2019 period, and have those proposals been adequately supported, for example, by benchmarking?

3.3-Staff-59
Ref: Exhibit A/Tab 19/Schedule 1/p. 2 (Cost Efficiencies)

Preamble:
Hydro One indicates that the savings identified in Table 2 on page 4 of Exhibit A/Tab19/Schedule 1 have been incorporated in the work programs and activities previously filed and that it continues to realize material cost reductions and avoidances throughout the test years all of which are direct benefit to Hydro One customers.

a) Please provide the relevant EB numbers (and associated specific references in each EB) in which work programs and activities set out in this exhibit were previously filed. Were the total annual savings listed in Table 2 tested in the previous Board proceedings?

b) How will actual performance against the amounts in Table 2 be tracked and reported on annually? What consequences, if any, are associated with the savings being achieved or not achieved?

c) Please confirm that the amounts in Table 2 are cumulative savings accrued since 2010. Please provide a version of the table showing the actual savings achieved in years 2010 to 2013, and the projected savings to be achieved in years 2014 to 2019.

d) Please provide an OM&A and Capital breakdown of the amounts in Table 2 for each year in the table.

3.3-Staff-60
Ref: 1. RRFE Report, October 18, 2012
2. Exhibit A/Tab 19 (Productivity Growth)

Preamble:
On page 20 of the RRFE Report, the Board states that expected inflation and productivity gains will be built into the rate adjustment over the term.

The Board calibrates the productivity factor used in its Price Cap IR and Annual Index rate setting methods using a measure of industry total factor productivity ("TFP") growth. An individual distributor's TFP growth can also be calculated. A TFP index is the ratio of an output quantity index to an input quantity index. The growth trend in a TFP trend index is the difference between the trends in the component output quantity and input quantity indexes. TFP is explained further in Section 2.2 of an EB-2010-0379 report prepared by, Dr. Lawrence Kaufmann and his team at Pacific Economics Group Research, LLC, entitled "Empirical Research in Support of Incentive Rate-Setting: Final Report to the Ontario Energy Board."[1]

Using PEG's Excel file that is posted on the Board's web site and which contains all the data used in PEG's productivity and benchmarking research in support of incentive rate setting in Ontario (i.e., the results of PEG's index-based input price and productivity computations, and related workpapers), Board staff isolated the output quantity, input quantity and productivity indexes for Hydro One Networks, Inc. Staff made no changes to the data or to the calculations in the worksheets. To be able to isolate Hydro One's data in the TFP calculations, staff used the existing "Observation Used in TFP Work" flag column in each of the following sheets: 2. BM Database, 3. TFP Database, and 5. Capital Calculations for TFP. Staff set the value in these columns to "1" for Hydro One and to "0" for all other distributors. The resultant productivity trends for Hydro One, based on PEG's worksheet are provided in **Attachment to 3.3-Staff-60.pdf.**

[1] Pacific Economics Group Research, LLC. Empirical Research in Support Of Incentive Rate Setting in Ontario. November, 2013. (http://www.ontarioenergyboard.ca/OEB/_Documents/EB-2010-0379/EB-2010-0379_Final_PEG_Report_20131111.pdf)

Using Hydro One's forecasts in this application and the PEG documentation and worksheets that are posted on the Board's web site (links entitled "Part I – Documentation for Working Papers" and "Part II - TFP and BM database calculation" are provided below) or Hydro One's comparable analyses please provide Hydro One's forecasted total factor productivity trends for the period 2013 through to 2019.

Nov 21-13
 	
Updated Dec 20-13 and Jan 24-14
	The Board has released a report prepared by Board staff's expert consultant, Dr. Lawrence Kaufmann and his team at Pacific Economics Group Research, LLC, entitled "*Empirical Research in Support of Incentive Rate-Setting: Final Report to the Ontario Energy Board*."
	
	• Cover Letter
	• Final PEG Report (as corrected on Dec 19, 2013 and Jan 24, 2014)
	  ○ Tables in Final PEG Report (.xlsx, 3 MB) (as corrected on Dec 19, 2013 and Jan 24, 2014)
	• PEG's Working Papers
	  ○ Part I – Documentation for Working Papers
	  ○ Part II - TFP and BM database calculation (.xlsx, 8 MB) (as corrected on Dec 19, 2013 and Jan 24, 2014)
	• Price Cap IR Benchmarking Algorithm (.xlsx, 2 MB) (as corrected on Dec 19, 2013 and Jan 24, 2014)

3.3-Staff-61
Ref: Exhibit D1/Tab3/Schedule 2/p.19
Hydro One indicates that it will utilise a new prefabricated integrated modular station that is more cost effective.

a) How much more cost effective is this method compared to earlier methods of station refurbishment? What are the efficiency gains with this method?
b) Please file any information Hydro One used to determine that the prefabricated modular station is more efficient than previous practices.
c) Did Hydro One benchmark its costs against other distributors to ensure best practices were being followed?
d) Please file a capital cost per station table from 2010 to 2019.

3.4 Is the company's effort to reduce line losses appropriate?

4.0 COMMON COSTS AND PROCESSES SHARED BY HYDRO ONE NETWORKS' TRANSMISSION AND DISTRIBUTION BUSINESSES

4.1 Are the business planning processes, assumptions and policies used by Hydro One Networks to develop and allocate its distribution and transmission revenue requirements appropriate?

4.2 Is the proposed level of 2015-2019 common corporate costs spending appropriate with an adequate demonstration of efficiencies over the 5-year period?

4.2-Staff-62
Ref: Exhibit C1/Tab 2/Schedule 6 & Technical Conference #2 TR pp. 120-122
In Technical Conference #2, Hydro One indicated that a 'benefits realization plan' was developed for the Cornerstone IT project. Please provide the report or reports that show the costs of the Cornerstone project, the benefits realized from the Cornerstone project and how Cornerstone is contributing to realizing efficiencies over the course of this application time period, 2015 – 2019.

4.2-Staff-63
Ref: Exhibit C1/Tab 2/Schedule 7 & Technical Conference #2 TR pp. 123-122
In Technical Conference #2, Hydro One discussed the Inergi outsourcing contract and indicated that a fees benchmarking study was performed.

a) Please provide a copy of this study.
b) Please provide an analysis of the findings and how these findings have informed Hydro One's plans for the future of this contract and the services covered under the contract.
c) Please provide an overview of how the new contract will increase the cost effectiveness and efficiencies of how these services are provided to Hydro One customers.

4.3 Are the methodologies used to allocate common corporate costs to the distribution and transmission businesses and to determine the overhead capitalization rate for 2015-2019 appropriate?

4.3-Staff-64
Ref: Exhibit C1/Tab3/Schedule3/p. 1 (Pensions & Post-Employment or Post-Retirement Benefits (OPEBs))
Hydro One recovers pensions on a cash basis (payments made) and OPEBs based on accrual accounting.

Please explain why Hydro One does not use pension accrual accounting to determine expense for recovery in revenue requirement. The allocation between

distribution and transmission could be made following the same allocation methodology as cash payments.

4.3-Staff-65
Ref: Exhibit C1/Tab3/Schedule3/pp. 2-3
Please provide the pension costs broken down between OM&A and capital for the historical periods 2010-2013, and the bridge year 2014, similar to the tables for the test years.

4.3-Staff-66
Ref: Exhibit C1/Tab3/Schedule 3/pp. 3-4
The evidence indicates that Hydro One Inc. makes pension contributions of $159 million of which about $99 million represents annual current service costs. The remaining portion of approximately $60 million related to the going-concern deficit will be paid over 15 years. The going-concern deficit was $498 million in 2012. Multiplying 15 years by $60 million will result in $900 million being paid over 15 years related to a deficit of only $498 million.

a) Is Hydro One Inc. proposing to make other special payments to the pension plan?

b) Why would Hydro One Inc. pay so much more than the deficit calculated in the last funding valuation?

4.3-Staff-67
Ref: Exhibit C1/Tab3/Schedule 3
Staff downloaded the 2013 audited financial statements from Hydro One Inc.'s web-site. From the 2013 financial statements, the unfunded pension deficit at year-end 2012 on an accrual basis was $1.515 billion. At year-end 2013 the unfunded pension deficit had decreased to $845 million.

a) Hydro One Distribution forecasts pension costs for its 2015-2019 test years. Given the significant decline in the unfunded deficit in 2013, does Hydro One Inc. believe it will still have to make special payments of $60 million for 15 years?

b) Why does is Hydro One Distribution's forecast test year pension expense reasonable given the decline in the pension plan deficit in 2013 and the market's performance thus far in 2014?

c) Please explain why the test year forecast pension expense should not be updated.

4.3-Staff-68
Ref: Exhibit C1/Tab3/Schedule 3
What is the ratio for employee and employer contributions to the pension plan?

4.3-Staff-69
Ref: Exhibit C1/Tab3/Schedule 3/p. 1
What does Hydro One mean by "full recovery of Distribution pension costs included in OM&A"?

4.3-Staff-70
Ref: Exhibit C1/Tab3/Schedule 3/p. 3

a) Please file the funding valuation dated December 31, 2011 that was filed with the Financial Services Commission of Ontario (FSCO).

b) Please file the actuarial valuations prepared for year-end pension and OPEB accounting for the years December 31, 2009 through December 31, 2013.

c) Please provide analysis and tables that show the split between distribution and transmission for both pensions and OPEBs.

4.3-Staff-71
Ref: Exhibit C1/Tab3/Schedule 3/p. 4

a) What does Hydro One mean by the following sentence?
"The staff reductions reflected in the current service cost supports the requirements of the work program."

b) Has Hydro One included the forecast staff reductions during the period 2015-2019 in its forecast of pension and OPEB costs? Please provide the evidence references.

If the information does not appear in the current evidence, please provide tables and analysis that show the relationship of the staff reductions with the forecast pension and OPEB costs for the period 2015-2019.

4.3-Staff-72
Ref: Exhibit C1/Tab3/Schedule 3/p. 5

a) Please provide the strategic plan asset mix for 2014. Please explain how this differs from asset mixes over the last five years.

b) What was the actual return on pension plan assets for 2013?

c) What was the pension fund's benchmark performance for 2013?

d) What is the benchmark performance set for 2014?

e) What is the actual return on pension plan assets for the period January 1 to May 31, 2014?

f) Staff has provided a schedule below that shows the expected returns on plan assets taken from Hydro One Inc.'s audited financial statements from 2000 through 2013. The expected returns are higher than the 5.63% (now updated to 6.56%) shown at C1/T3/S3/page 5.

2000	2001	2002	2003	2004	2005	2006
7.75%	7.50%	7.25%	7.25%	7.00%	7.00%	6.75%

2007	2008	2009	2010	2011	2012	2013
6.75%	7.00%	7.25%	6.50%	6.25%	6.25%	6.25%

Please explain why the pension plan appears to have underperformed compared to what Hydro One expected each year from 2000 through 2013 as stated in its audited financial statements.

4.3-Staff-73
Ref: Exhibit C1/Tab3 (Compensation, Wages, Benefits & Post-Employment or Post-Retirement Benefits (OPEBs))

a) Has Hydro One Inc. used the recoveries from ratepayers for OPEBs for general corporate purposes since 1999? Please explain what the money was used for.

b) Hydro One Inc.'s 2013 audited financial statements in Note 15 shows an unfunded deficit for OPEBs of $1.531 billion calculated on an accounting accrual basis. Hydro One Inc. through the distribution and transmission businesses has been recovering OPEB costs from ratepayers since 1999.

i. Is it Hydro One's position that ratepayers are responsible for the OPEB deficit of $1.531 billion?

ii. What would the regulatory deficit be at the end of 2013 if the amounts already collected from ratepayers (in capital and in OM&A) for OPEBs since inception in 1999 were shown as plan assets? Please show the

sum of the recoveries from 1999 through 2013 without interest improvement.

iii. What would be the impact on the test year OPEB forecast if the amounts recovered from ratepayers since 1999 existed in the table in the audited financial statements?

c) Has Hydro One considered creating an irrevocable trust for OPEBs? If not, please explain why this would not be prudent.

d) Staff has attached a FERC policy document on this subject – FERC 61. This document discusses the advantages and disadvantages of creating an irrevocable trust for OPEBs. Please comment on the applicability of the recommendations for Hydro One's circumstances.

e) Please describe what steps would be necessary to create an irrevocable trust for OPEBs.

f) Please provide an estimate of the costs to set up the trust and an estimate of the annual operating costs for such a trust fund.

g) Please provide an analysis of OPEBs similar to that for pensions found on Exhibit C1-T3-S3-pages 2-3 which shows amounts in OM&A and amounts capitalized. Please provide the OPEB amounts determined on the accrual accounting basis. Please include the historical years 2010-2013, and bridge year 2014, OPEB numbers as a comparison to the test years 2015-2019.

h) Please file the actuarial valuation prepared for year-end OPEB accounting as at December 31, 2013.

4.4 Is the compensation strategy for 2015-2019 appropriate and does it result in reasonable compensation costs?

4.4-Staff-74
Ref: Exhibit C1/Tab 3/Schedule 1/p. 2
The Annual Retirements table on page 2 indicates that retirements increase significantly in 2013, with a final year end number of 253.

a) Why does this number increase so significantly in 2013?
b) Why does the 2014forecast not reflect the significant 2013 increase?

4.4-Staff-75
Ref: Exhibit C1/Tab 3/Schedule 1/p. 6 & Exhibit C1-3-2, Attachment 2
Please provide an update of Table 3, including a separate line for Temporary Staff, Casual Staff and Overall Total Staff as found at C1-3-2, Attachment 2 and complete the chart to 2019.

4.4-Staff-76
Ref: Exhibit C1/Tab 3/Schedule 2/p. 3 & Exhibit C1-3-2, Attachment 1
Hydro One indicates that the Mercer Study results for the PWU reflect the increased use of the Hiring Hall.

How is the effect of using additional Hiring Hall staff reflected in the methodology of the Mercer salary survey?

5.0 DEFERRAL AND VARIANCE ACCOUNTS

5.1 Are the proposed amounts, disposition, discontinuance and continuance of Hydro One Distribution's existing deferral and variance accounts, as set out in the Custom Application, appropriate?

5.1-Staff-77
Ref: 1. Exhibit F1/Tab1/Schedule1/pp. 7-8 Pension Cost Differential Account
2. Exhibit F2/Tab1/Schedule3/pp. 1-5 Continuity Schedule Regulatory Accounts

a) Please provide the calculations that support the summary level transactions recorded in the deferral account each year from 2009 through 2013.

b) Please provide a table that shows the amounts included in rates in each year, the actual annual amounts that were recorded in the general ledger, and the difference.

c) Please provide a total column.

d) Please explain how the actual amounts were determined for OM&A and for the amounts capitalized in each year.

5.1-Staff-78
Ref: 1. Exhibit F1/Tab1/Schedule1/pp. 19-20 (DSC Exemption Deferral Account)
2. Exhibit F2/Tab1/Schedule3/pp. 1-5 (Continuity Schedule Regulatory Accounts)
Please provide the split between OM&A and capital for the $6.7 million requested for disposition.

5.1-Staff-79
Ref: 1. Exhibit F1/Tab1/Schedule1/p. 23 (Accounts, no disposition)
2. Exhibit F2/Tab1/Schedule3/pp. 1-5 (Continuity Schedule Regulatory Accounts)

Account "DG Other – Provincial Pool" has a credit balance of $48.8 million. Account "Express Feeders – Provincial Pool" has a credit balance of $3.7 million. Together these two accounts represent a total refund of $52.5 million. Hydro One has requested the Board to discontinue the funding adder.

Does Hydro One expect these credit balances to grow more negative during the period 2015-2019 or to decline? What balances does Hydro One forecast for 2019 in these two accounts?

5.2 Is it appropriate to include in rate base, effective January 1, 2015, the following in-service assets which are presently recorded as regulatory assets:

a) smart meter assets as of December 31, 2013, the costs for which are recorded in variance accounts 1555 and 1556;

b) smart grid assets as of December 31, 2013, the costs for which are recorded in account 1536; and

c) assets to facilitate distributed generation as of December 31, 2013, the costs for which are recorded in account 1533.

5.2-Staff-80
Ref: Exhibit F1/Tab1/Schedule1/p. 12
Hydro One has explained that it has been granted an exemption to apply TOU pricing to approximately 122,000 RPP customers, and that it is reporting to the Board on the status of these customers.

a) With the exception of these hard-to-reach customers, has Hydro One completed its installation of smart meters for all other eligible customers?

b) If so, when was Hydro One's smart meter installation program completed?

5.2-Staff-81
Ref: Chapter 2: Filing Requirements for Electricity Distribution Rate Applications, s. 2.5.1.4
The Board's Distribution Filing Requirements state that, if not already addressed in a previous Board decision, distributors must file as part of their 2014 application a

proposed treatment for the recovery of stranded meters that is in conformity with the approach taken by the Board.

Please provide a proposed treatment for the recovery of stranded meter costs in conformity with the approach taken by the Board, as described in section 2.5.1.4 of the Distribution Filing Requirements.

5.2-Staff-82
Ref: 1. Exhibit F1/Tab1/Schedule3/Attachment 1
2. Exhibit F1/Tab1/Schedule3/Attachment 2
3. Exhibit F1/Tab1/Schedule 2
4. Exhibit F1-1-3/Attachment 1/p. 6 Appendix 2-Q
Board staff notes that Hydro One is requesting final disposition of smart meter costs as of December 31, 2014 and that Hydro One is requesting that the smart meter regulatory accounts for the 2015-2019 rate setting period be discontinued. Board staff notes that Hydro One has not included any 2014 smart meter costs in its model, although it has shown the collection of revenues. It also does not show 2014 installed meter information in Appendix 2-Q.

How does Hydro One propose to recover the costs incurred for smart meters in 2014?

5.2-Staff-83
Ref: Exhibit F1-1-3/Attachment 1/p. 6 Appendix 2-Q
Board staff notes that Hydro One has included installed smart meters for the period 2009 to 2013 in the column labelled “Other” in Appendix 2-Q. Note 1 in Appendix 2-Q requires that the distributor provide details of the “Other” meters installed.

Please provide details of “Other” meters per Note 1 in Appendix 2-Q.

5.2-Staff-84
Ref: Exhibit G1-5-2, Attachment 1
Board staff notes that Hydro One proposes to recover the balance in its smart meter deferral accounts from all metered customers on the basis of the number of customers in each rate class.

a) Please specify the customer classes that have received smart meters.
b) Please provide the average cost per meter for each class of customer for which smart meters have been installed.
c) Please provide the rationale for recovering the total costs from all metered customers, based on the number of customers in each class, regardless of the cost of the meters installed for that class.

d) Please provide the rationale for applying the smart meter rate rider to any class that has not received smart meters.

5.2-Staff-85
Ref: Exhibit F1-1-1
Ref: Exhibit F1-1-3, Attachment 2
Board staff notes that the Variance Account balances as shown in the Revenue Requirement calculations at Exhibit F1-1-3 Attachment 2, page 3 of 13 appear to be inconsistent with the balances shown at Table 9 and Table 10 of Exhibit F1-1-1.

Please confirm the balances requested for disposition and make any necessary corrections.

5.2-Staff-86
Ref: Exhibit F1-1-1
Ref: Exhibit F1-1-3, Attachment 2
Hydro One has provided its Smart Meter Model, which it says "meets the intent" of the OEB Smart Meter Model ("the Board's Model"), which has formed the basis for Board Decisions approving smart meter costs for all other utilities to date. Board staff notes that Hydro One's model contains certain inconsistencies with the Board's Model. These include, but are not necessarily limited to:

- The cost detail provided is not broken down into the categories of "minimum functionality" and "beyond minimum functionality";
- No costs are included for 2014;
- Interest rates on regulatory assets appear to be inconsistent with the approved rates contained in the Board's Model;
- Depreciation expense for 2010 as contained in the "inputs" section for 2010 is inconsistent with the amount contained in the calculation of the Variance Account balance at page 3 of 13;
- Hydro One's model does not contain any amounts for Depreciation expense or CCA in the inputs section for "Hardware, although there appear to be hardware capital expenses as shown in the revenue requirement calculations on page 3 of 13;
- Hydro One's model does not calculate class-specific rate riders in the method contained in the Board's model.

Please complete the Board approved model (including calculation of class-specific rate riders) as attached to these interrogatories **(Attachment 5.2-Staff-86)**.

6.0 REVENUE REQUIREMENT

6.1 Is the rate base component of the revenue requirement for 2015 as set out in the Custom Application appropriate?

6.1-Staff-87
Ref: Exhibit D1-1-2/Attachment 1/p. 4

Hydro One summarizes the results of projects approved under its Incremental Capital Module case (2013 IRM application EB-2012-0136). Under Enterprise Applications Hydro One indicates spending of $42.6 million, an increase $13.7 million over approved spending of $28.9 million, an increase of 47%.

Hydro One does not provide an explanation for this cost overrun. Please provide details of why the project cost was so far in excess of the amounts approved under the ICM.

6.2 Is the capital structure and cost of capital component of the revenue requirement for 2015 as set out in the Custom Application appropriate?

6.3 Is the depreciation component of the revenue requirement for 2015 as set out in the Custom Application appropriate?

6.4 Is the taxes / PILs component of the revenue requirement for 2015 as set out in the Custom Application appropriate?

6.4-Staff-88
Ref: Exhibit C2/Tab5/Schedule1/Attachment 1 (Calculation of Utility Income Taxes)

a) The regulatory net income before tax amounts for test years 2015-2019 do not agree with the earnings before tax in exhibit A/T12/S2 for the same periods. Please provide a reconciliation of the differences and explain which net income before tax numbers are correct.

b) Removal costs are shown in the tax calculations and in depreciation expense [C2/T4/S1/page2] but the dollar amounts are significantly different.

Removal Costs ($ millions)	**2015**	**2016**	**2017**	**2018**	**2019**
In Depreciation	54.5	57.0	60.4	63.3	65.8
In PILs calculations	6.0	6.0	6.0	6.0	6.0

i) Please explain what costs are included in asset removal costs in depreciation.

ii) Please explain what costs are included in asset removal costs in the PILs calculations.

c) Other post-employment benefits payments are shown below.

OPEBs ($ millions)	2015	2016	2017	2018	2019
In PILs calculations	31.1	33.7	35.6	37.4	39.7

i) Are the OPEB payment amounts those costs related to OM&A or are these OPEBs contained in both OM&A and capital additions?

ii) Please provide a table that shows the OM&A and capital components for each year 2015-2019 similar to the tables in C1/T3/S3/pages2-3.

d) Capitalized overhead costs in the PILs calculations are shown below. Please note that capitalized pension costs are identified separately in the PILs calculations and in the pension analysis in C1/T3/S3/pages2-3.

Capitalized overhead ($ millions)	2015	2016	2017	2018	2019
In PILs calculations	21.8	20.7	20.4	20.9	21.7

Capitalized overhead costs in C1/T5/S2/page3 for 2015-2019 are shown below.

Overhead Cost Category ($ millions)	Test Years				
	2015	2016	2017	2018	2019
Capitalized Administrative & General Costs	69.5	65.4	64.4	67.1	69.7
Capitalized Operating Costs	16.4	16.0	15.9	15.3	15.6
Total	85.9	81.4	80.2	82.5	85.3

i) Please provide an analysis and tables that show the split between transmission and distribution capitalized overheads.

ii) If the amounts for distribution from this analysis in part (i) above are different than the amounts used in the PILs calculations, please provide analysis and commentary to explain why they should be different.

6.4-Staff-89
Ref: Exhibit C2/Tab5/Schedule1/pp. 1-2 Attachment 2 (Calculation of Capital Cost Allowance ("CCA"))
In-service capital additions for 2015-2019 in rate base [D1/T1/S1/page6/Table5] are different than net capital additions in the tables where CCA has been calculated for 2015-2019.

Please provide a reconciliation and commentary to explain the difference between in-service capital additions in rate base and net capital additions for CCA purposes.

6.5 Is the OM&A component of the revenue requirement for 2015 as set out in the Custom Application appropriate?

6.6 Is the load forecast a reasonable reflection of the energy and demand requirements of the applicant? Is the forecast of other rates and charges appropriate? Is the forecast of other revenues appropriate?

6.6-Staff-90
Ref: Exhibit A/Tab16/Schedule2/p. 3
In its May 30, 2014 update Hydro One updated a number of areas in the Tab 16, Economic Indicators/Load Forecast Exhibit. Please provide a summary of the significant changes made in the update and the impact of these changes on the application.

6.6-Staff-91
Ref: Exhibit A/Tab16/Schedule 2/p. 17
Regarding the forecast methodology and the forecasts of other key inputs to the overall forecast, such as: Provincial GDP (noted as a key driver), Population, Housing , Commercial Output Industrial Production & CDM, has Hydro One amended the forecast methodologies to reflect the longer forecast horizon from 2 years to 5 years?

6.6-Staff-92
Ref: Exhibit A/Tab 16/Schedule 2/p. 23
At Table 6, where a summary of the forecast is provided, in 2017, in the forecast without the influence of CDM, Hydro One has the load growing an abnormal amount of 476 GWh (increase of 1.2%, much higher than other years). What is the principle reason for this increase?

6.6-Staff-93
Ref: Exhibit A/Tab 16/Schedule 2/p. 23
Also at Table 6, the CDM impact is up significantly in 2014 (up 14%) and 2015 (up 15%) and reduction in the increase in 2016 (up only 9.6%) and backup to larger growth in 2017 and 2018 (up 16.5% and 15% respectively) followed by a drop in 2019. What is the reason for these fluctuations in growth of CDM and what specific programs or events are driving these changes in the CDM forecast?

7.0 COST ALLOCATION AND RATE DESIGN

7.1 Are the rate classes and their definitions proposed by Hydro One appropriate?

7.2 Is the proposed definition of "seasonal" customer class appropriate? Particularly, is residency an appropriate criterion in defining a class? Has this criterion been applied consistently?

7.2-Staff-94
Ref: Exhibit G1/Tab2/Schedule1 & Technical Conference No. 3 TR p. 37
In the third technical conference on April 30, 2014, Hydro One, in response to a question from the BLC, indicated that it could provide an analysis of the impacts of eliminating the Seasonal Class. Please provide such an analysis with a description of such a scenario, with pros and cons, and the relevant bill impacts for the affected customers.

7.3 Is the reclassification of customers to reflect findings of the company's review of existing customer rate classifications appropriate?

7.3-Staff-95
Ref: Exhibit G1/Tab2/Schedule 1
On page 2 of this exhibit, Hydro one states that: "In a few situations, a (-10%) deadband was applied to the density zone definition where a majority of customers within a proposed density zone boundary would be negatively impacted as a result of moving to a lower-density rate class."

Please explain this statement in more detail. Why did Hydro One feel this was necessary? How Hydro One apply this methodology? Was it solely bill size (or change) considerations? How was this deadband determined and justified?

7.4 Is moving revenue-to-cost ratios for all rate classes to within 98% to 102% over the 2015-2019 period appropriate?

7.4-Staff-96
Ref: Exhibit G1/Tab3/Schedule 1/p. 4
At this reference, Hydro One indicates that it,

"…believes there is merit to VECC's argument for including directly allocated O&M costs when developing the O&M allocator, but does not believe it appropriate to include directly allocated A&G costs for the purpose of allocating other A&G costs. In the current application, Hydro One has modified the O&M allocator to include both non-directly and directly allocated O&M costs, which will then be used to allocate the balance of A&G costs that are not directly allocated."

Why does Hydro One not believe it appropriate to include directly allocated A&G (Administration & General) costs for the purpose of allocating other A&G costs?

7.4-Staff-97
Ref: Exhibit G1/Tab3/Schedule 1/ p. 12
Under Billing and Collecting, Hydro One indicates that
"Customer density is assumed to have no impact on the billing and collection cost to which these factors apply."

What is the rationale for this statement? Why would Hydro One assume that customer density has no impact on the billing and collection costs?

7.5 Is the addition of a new "Unmetered Scattered Load" rate class appropriate?

7.6 Are Hydro One's proposed charges for street lighting appropriate?

7.7 Is an increase to the fixed charges revenue appropriate?

7.8 Are the proposed charges for miscellaneous services over the 2015-2019 period reasonable?

7.9 Are the adjustments to reflect the Board-directed line loss study appropriate?

7.10 Are the proposed rate mitigation plans appropriate for some customers moving between rate classes in accordance with the results of the rate class review?

--- end ---