Response to Consumers Council of Canada Interrogatory Question #1

Reference: **(Ex. A/T2/S1/p.8)**

Question #1:

The evidence states that Hydro Ottawa's decision to adopt a Custom IR rate-setting model is justified in light of the significantly large multi-year capital investments needed. Please explain why Hydro Ottawa could not address those needs through the Board's Price Cap IR approach with an Advanced Capital Module.

Response:

Hydro Ottawa's funding requirements as proposed in its 2016-2020 Custom IR application do not meet the criteria for an Advanced Capital Module because much of its capital funding requirements as set out in its Distribution System Plan (Exhibit B-1-2) comprise of "business as usual" activities that require the replacement or refurbishment of assets over the five year period. This is distinct from the discrete projects that are eligible under the ACM policy.

According to the OEB's Report of the Board, *New Policy Options for the Funding of Capital Investments: The Advanced Capital Module*: "[T]here must be a clear distinction between a cost of service application under the Price Cap IR option (with ACM proposals beyond the test year), and the Custom IR method. The use of an ACM is most appropriate for a distributor that:

- Does not have multiple discrete projects for each of the four IR years for which it requires incremental capital funding;

- Is not seeking funding for a series of projects that are more related to recurring capital programs for replacements or refurbishments (i.e.,"business as usual" type projects); or,
- Is not proposing to use the entire eligible incremental capital envelope available for a particular year."

It is clear from the Board's own pronouncements and criteria that the circumstances giving rise to a distributor's need to avail itself to the ACM mechanism is different and distinct from the circumstances under which a distributor would file a Custom IR.

Response to Consumers Council of Canada Interrogatory Question #3

Reference: (Ex. A/T2/S1/p. 9)

Question #3:

Please provide all the materials presented to Hydro Ottawa's Board of Directors and senior management when seeking approval for the 5-year rate plan.

Response:

The Board of Directors of Hydro Ottawa Limited (HOL) received oral updates on the rate application on a quarterly basis beginning with the HOL Board meeting of May 22, 2014. In addition, three formal presentations were provided as follows:

- At the HOL Board of Directors meeting on August 28, 2014;(appended as Att-CCC-Q3-A)
- At the Joint HOL and Hydro Ottawa Holding Inc. (HOHI) Board of Directors Strategy Session on September 18, 2014; (appended as Att-CCC-Q3-B) and
- At the Joint HOL and HOHI Board of Directors meeting on November 27, 2014 (appended as Att-CCC-Q3-C)

Response to Consumers Council of Canada Interrogatory Question #2

Reference: (Ex. A/T2/S1/p. 9)

Question #2:

The evidence states that Hydro Ottawa's financial planning and budgeting approach included a number of interrelated steps, which started with the development of a detailed forecast of capital and operations, maintenance and administrative expenditures for the years 2016-2020. Please provide those detailed budgets.

Response:

Detailed budgets for 2016-2020 were prepared on Capital expenditures and have been provided in the application. For the 2015 and 2016 OM&A budgets, these were prepared in detail and provided in the application. However, for the years 2017-2020 on OM&A, no detailed budgets were prepared; a formulaic approach was done instead as noted in Exhibit D-1-2.

HYDRO OTTAWA LIMITED REPORT
HYDRO OTTAWA LIMITÉE RAPPORT

August 28, 2014

TO/DEST. Chair and Members of the Board of Directors

Agenda Item 9 – 2016 COST OF SERVICE RATE APPLICATION

RECOMMENDATION

The Board members receive the report attached at Annex "A" for information and discussion.

SUMMARY

This report is provided for information and discussion.

Submitted to the Board of Directors by:

Geoff Simpson
Chief Financial Officer

Approved for submission to the Board by:

Bryce Conrad
President and Chief Executive Officer

2016 Rate Case
Board of Directors
August 28, 2014

Agenda

- Background
- Rate Case Options
  - 4th Generation IRM or Custom IR Model
    - 5 year Capital Plans
    - Overall business plans
- Timeline

Background

- Hydro Ottawa Limited filed its last Cost of Service ("COS") rate application for rates effective January 1, 2012
- For 2013, 2014 and 2015, Hydro Ottawa filed a Incentive Rate Mechanism ("IRM") filing each year with the Ontario Energy Board ("OEB")
- In late 2012, after a 2 year process, the OEB established a new policy for its regulatory process called the Renewed Regulatory Framework for Electricity ("RRFE") distributors

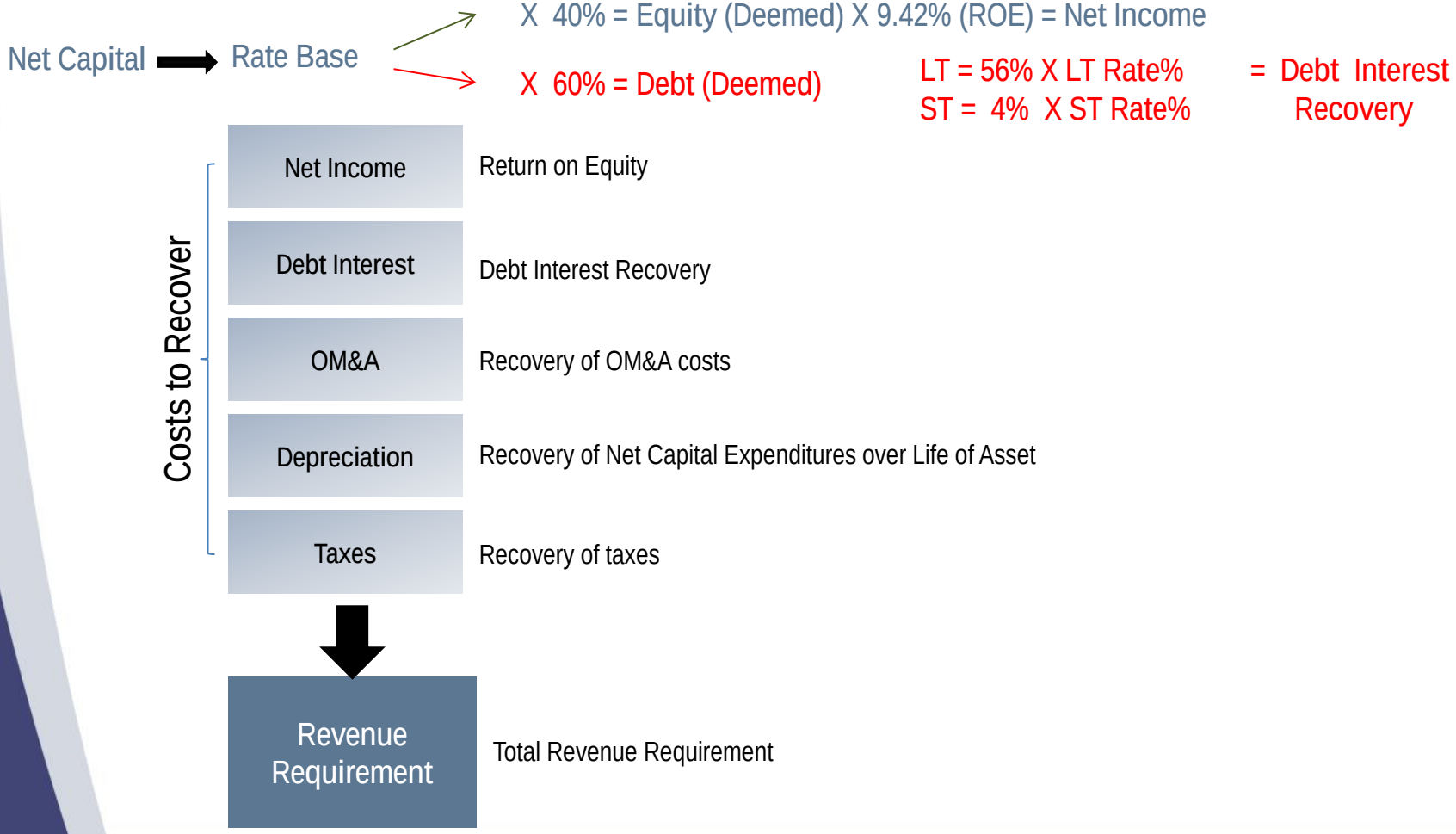
Cost of Service Application

(Required for 4th Generation Incentive Regulation Mechanism or Custom Incentive Regulation)

- LDCs file an application every five years for new rates based upon a detailed Cost of Service review
- The review looks at the detailed forecasted costs for every department, project and process for the upcoming year
  - Written and oral evidence is submitted to justify all its operating, maintenance, administration and capital costs
  - Stakeholders and OEB staff ask written questions on all the costs
    - In 2011, Hydro Ottawa submitted approximately 2,000 pages of evidence and answered almost 800 written questions as part of the review process for new rates for 2012
- Capital expenditures become “rate base” when they go into service
  - LDCs are allowed to recover from customers a return on equity (“ROE”) (for 40% of rate base) and the interest cost of debt (for 60% of rate base).
- The LDC is allowed to recover its appropriate costs for operating the utility plus a return on rate base

Cost of Service Application

Revenue Requirement Buildup Model



Incentive Rate Mechanism Application

- The IRM application is a formula based rate adjustment
- The OEB formula is {Inflation – productivity – stretch factor = percentage rate increase}
- Under the revised OEB formula, it (the formula) yields electricity distribution rate increases of approximately 1.0% to 1.5% annually

2016 Rate Case Options

- Option 1 -- 4th Generation IRM application (1 year COS application and 4 years of IRM)
  - Designed for utilities which have consistent levels of capital needs at very similar levels to the company's depreciation expense
- Option 2 – Custom Incentive Regulation model
  - Designed for utilities which have large and varying capital needs over the 5 year period.
- Option 1 and Option 2 require
  - 5 year detailed capital plans
    - Details required for each year
    - More detailed than any previous filings
  - Overall business plans
    - Application must address all key business plans for the 2016 – 2020 timeframe
  - Application must balance the needs of customers, the rate impact on customers and needs of the business
  - OEB wants the application to provide evidence of "value to customer"
  - OEB wants demonstration and evidence of productivity projects being completed by companies

2016 Rate Case Options

- Final determination of type of application
  - Will be based upon final budgets for 2016 – 2020
  - Rate impacts on customers for 2016 – 2020
  - Ability to address business needs of Hydro Ottawa Limited
  - Influenced by applications and OEB decisions on other utilities
    - Toronto Hydro
    - Hydro One
    - Horizon Utilities
    - Enbridge Gas Distribution

Time Lines

- 2015 and 2016 Business Plan and Budget directions memo – February 2014
- First calculation of high level bill impacts – end of June 2014
- Distribution System Plan complete – July 2014
- Draft of Key Business Strategies – end of August 2014
- Presentation to Joint Boards Strategy Session – September 18, 2014
- Final Budget numbers – end of September 2014
- Customer/Stakeholder engagement – Fall 2014
- Review by Executive/Final Edits and Printing - October 2014 – 1st Quarter 2015
- Filing of application – 1st Quarter 2015

2014 Board Strategy Regulatory Session September 18, 2014

Agenda

- Background
- 2016 Rate Case Options
  - 4th Generation IRM or Custom IR Model
- Elements of 2016 Rate Application
  - Framework of Custom IR
  - Annual Formulaic Adjustment
  - Real Estate Strategy
  - Estimated Rate Impacts
- Strategies
- Customer/Stakeholder Engagement
- Timelines

Background

- Hydro Ottawa had its last Cost of Service ("COS") rate application approved for 2012
- For 2013, 2014 and 2015, Hydro Ottawa filed an Incentive Rate Mechanism ("IRM") filing each year with the Ontario Energy Board ("OEB")
- In late 2012, after a 2 year process, the OEB established a new policy for its regulatory process called the Renewed Regulatory Framework for Electricity ("RRFE") distributors

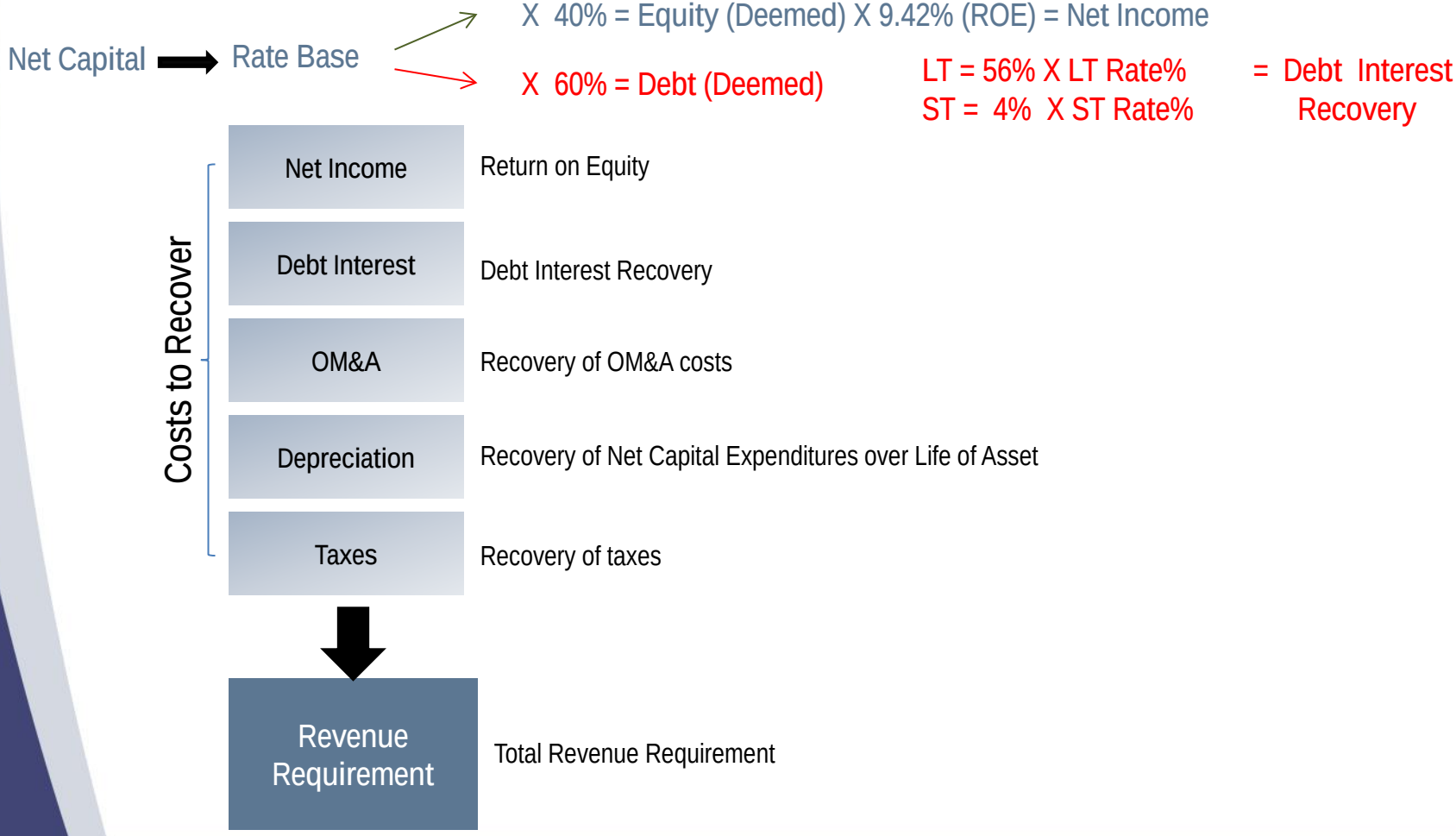
Cost of Service Application

(Required for 4th Generation Incentive Regulation Mechanism or Custom Incentive Regulation)

- LDCs file an application every five years for new rates based upon a detailed Cost of Service review
- The review looks at the detailed forecasted costs for every department, project and process for the upcoming year
  - Written and oral evidence is submitted to justify all its operating, maintenance, administration and capital costs
  - Stakeholders and OEB staff ask written questions on all the costs
    - In 2011, Hydro Ottawa submitted approximately 2,000 pages of evidence and answered almost 800 written questions as part of the review process for new rates for 2012
- Capital expenditures become “rate base” when they go into service
  - LDCs are allowed to recover from customers a return on equity (“ROE”) (for 40% of rate base) and the interest cost of debt (for 60% of rate base).
- The LDC is allowed to recover its appropriate costs for operating the utility plus a return on rate base

Cost of Service Application

Revenue Requirement Buildup Model



Incentive Rate Mechanism Application

- The IRM application is a formula based rate adjustment
- The OEB formula is {Inflation – productivity – stretch factor = percentage rate increase}
- Under the revised OEB formula, the formula yields rate increases of approximately 1.0% to 1.5% annually
- Effectively the formula allows for recovering of most OM&A costs however funding for capital expenditures above depreciation expense remains unfunded until next COS application

2016 Rate Case Options

- Option 1 -- 4th Generation IRM application (1 year COS application and 4 years of IRM)
  - Designed for utilities which have consistent levels of capital needs at very similar levels to the company's depreciation expense
- Option 2 – Custom Incentive Regulation model
  - Designed for utilities which have large and varying capital needs over the 5 year period.
- Option 1 and Option 2 require
  - 5 year detailed capital plans
    - Details required for each year
    - More detailed than any previous filings
    - Independent third party assessment strongly recommended
  - Overall business plans
    - Application must address all key business plans for the 2016 – 2020 timeframe
  - Application must balance the needs of customers, the rate impact on customers and needs of the business
  - OEB wants the application to provide evidence of "value to customer"
  - OEB wants demonstration and evidence of productivity projects being completed by companies

2016 Rate Case Options

- 4th Generation IR model or Custom IR
  - 4th Generation IR
    - very similar to 3rd Generation IR which limits the annual rate increase,
    - does not allow for customized rate solutions
    - does not provide timely revenues to finance large capital expenditures
  - Custom IR
    - Can develop unique solution for rate increase in 2016 through 2020
    - Can eliminate large customer increase in 2021 and more predictable annual rate increases
    - Provide HOL with more timely revenues to finance large capital expenditure
    - More appropriately address business needs of HOL

2016 Rate Case Options

- Influenced by applications and OEB decisions on other utilities
  - Enbridge Gas Distribution – Custom IR
  - Hydro One – Custom IR
  - Horizon Utilities – Custom IR
  - Toronto Hydro – Custom IR

2016 Rate Case Options

OEB comments in Enbridge Decision on Custom IR applications

- "the Board indicated that a distributor applying for Custom IR would need to file robust evidence and external benchmarking to support the reasonableness of it forecasts, especially given the recognized incentive to over-forecast, the uncertainties with long-term forecasting, and the level of rate increase projected (higher that under traditional IR)"
- "The Board will make further modifications to the [Enbridge] plan to enhance customer benefits during the Custom IR plan and reduce the risks to customers."

2016 Rate Case Options

- Decision – Apply for 2016 Custom IR Model
  - Model must balance risks to ratepayers versus risks to shareholder
    - Typically intervenors and OEB looking for certainty for ratepayers versus certainty for shareholder
  - Model will best meet business needs of Hydro Ottawa and its customers
  - Model will encourage Hydro Ottawa to be an efficient utility

Elements of 2016 Rate Application

- Framework for Custom IR
  - Recommend a hybrid model
    - Detailed Cost of Service request for OM&A for 2016 and formula for 2017 - 2020
    - Detailed Cost of Service request for capital for 2016 through 2020
    - Total rate increase each year combination of COS for capital and formula for OM&A
  - Proponents of this type of model
    - Enbridge Gas 2003- 2005 – Approved by OEB
    - Toronto Hydro 2015 application

Elements of 2016 Rate Application

- Formulaic Approach for OM&A
  - Inflation factor --- 2017 – 2020, CPI forecast by Conference Board of Canada
  - Productivity Factor --- 2017 – 2020, average of experts from Renewed Regulatory Framework Review
  - Stretch Factor ---- 2017 – 2020, no stretch factor recommended
  - Annual Adjustment Factor 2017 -2020

Elements of 2016 Rate Application

- Real Estate Strategy
  - Seek entire real estate strategy budget to be included in rate base
    - Any difference from budget will be included in rate base in 2021
  - Apply Y factor to real estate for timing of inclusion in rate base
  - Seek rate rider to account for real estate once “used or useful”

Estimated Rate Impacts

	2016	2017	2018	2019	2020
Estimated Distribution Rate Impacts	~12% - 15%*	4-5%	4-5%	4-5%	4-5%
Estimated Total Bill Impacts	~ 3%	~1%	~1%	~1%	~1%

- Of this percentage increase, approximately 7 – 10% is required for payment of capital expenditures in 2012 through 2015 and other cost increases

Estimated Rate Impacts

Distribution Rate Impacts					
	2015	2016	2017	2018	2019
Toronto Hydro	11.15%	9.98%	4.87%	11.68%	3.39%
Horizon	10.14%	2.75%	1.79%	1.20%	2.60%
Hydro One	(10.0%)	2.24%	1.87%	1.43%	2.54%

	2014 Monthly Distribution cost
Hydro Ottawa	$27.38
Horizon	$27.62
Toronto Hydro	$32.98
Hydro One	$38.37

Key Strategies in Progress

- Real Estate
- Fleet
- Work Force Planning
- Environmental Strategy
- Health & Safety
- Customer Service
- Distribution System Plan
- Productivity
- IM/IT
- CC&B

Customer/Stakeholder Engagement

- OEB Renewed Regulatory Framework (Oct , 2012)
  - "distributor plans must therefore demonstrate consideration of all relevant factors, ……. and that planning has been informed by appropriate consultation with customers, municipalities and neighbouring utilities and transmitters where appropriate"
- Hydro Ottawa assessing current customer/stakeholder information
  - Annual surveys, "Personna" research, Transactional surveys, City councillor input, Social media input
  - Will determine methods to engage customer groups on Asset Management Plan
- Toronto Hydro and Horizon used online website workbook, customer telephone surveys and focus groups for different customers groups to provide feedback on their Asset Management Plan

Time Lines

- 2015 and 2016 Business Plan and Budget directions memo – Feb 2014
- First calculation of high level bill impacts – end of June 2014
- Distribution System Plan complete – July 2014
- Final Budget numbers – September 2014
- Draft of Key Business Strategies – end of October 2014
- Customer/Stakeholder engagement – Fall 2014
- Review by Executive/Final Edits and Printing - October 2014 – 1st Quarter 2015
- Filing of application – 1st Quarter 2015

HYDRO OTTAWA HOLDING INC.
HYDRO OTTAWA LIMITED

SOCIÉTÉ DE PORTEFEUILLE D'HYDRO OTTAWA INC.
HYDRO OTTAWA LIMITÉE

REPORT

RAPPORT

November 27, 2014

TO: Chair and Members of the Board
Hydro Ottawa Holding Inc.
Hydro Ottawa Limited

Agenda Item 9 **2016 COST OF SERVICE RATE APPLICATION UPDATE**

RECOMMENDATION

That the Board of Directors receive this report for information.

SUMMARY

Please find attached at "Annex A" the presentation entitled "2016 Cost of Service Rate Application Update" dated November 27, 2014.

Submitted to the Board of Directors by:

Geoff Simpson
Chief Financial Officer

Approved for submission to the Board of Directors by:

Bryce Conrad
President and Chief Executive Officer

2016 Cost of Service Rate Application Update

JOINT BOARD OF DIRECTORS MEETING
NOVEMBER 27, 2014

Agenda

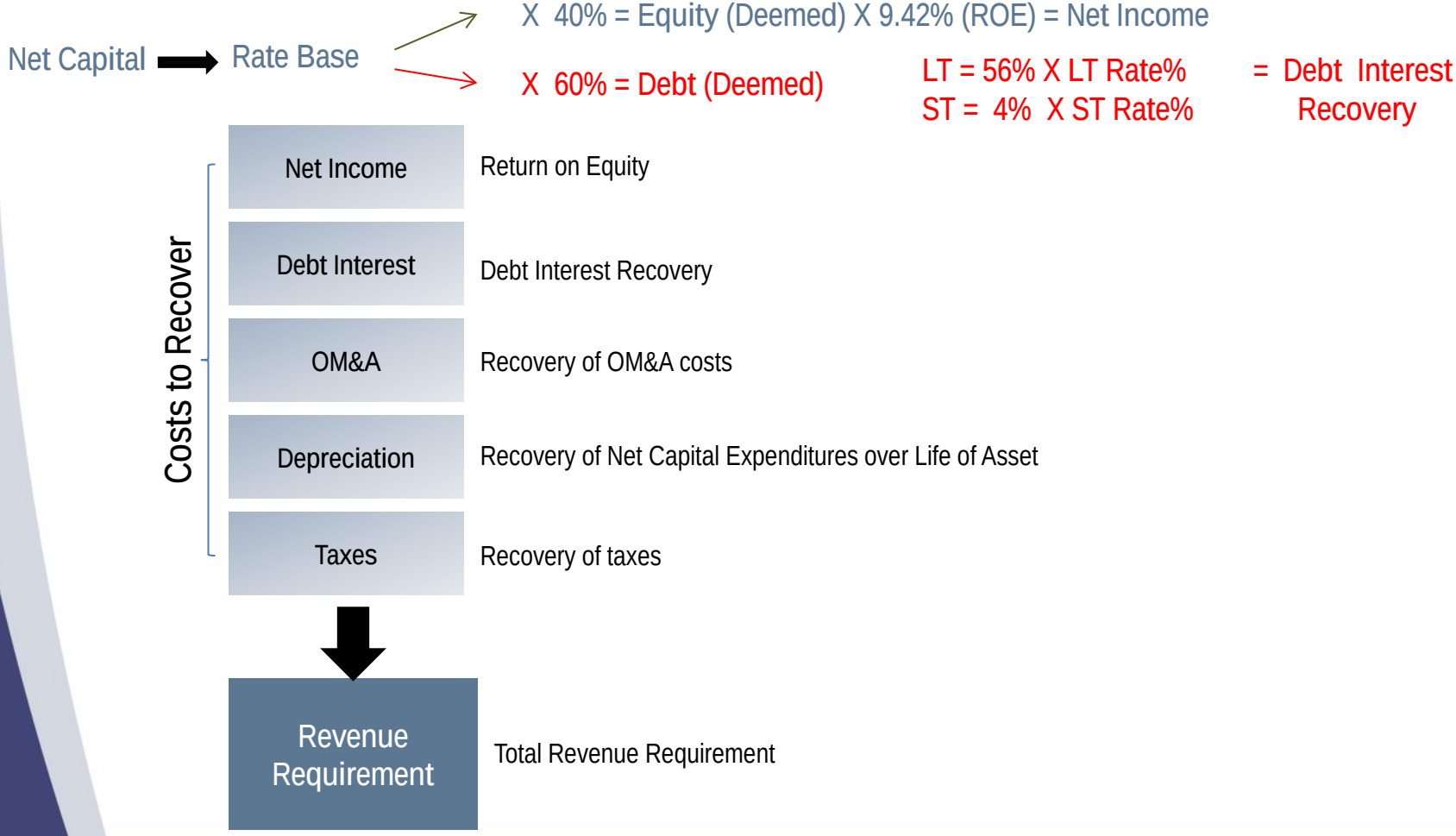
- Background
- Update on Evidence Preparation
  - Evidence/Strategies
  - Rate Calculation
  - Stakeholder Consultation
- Timelines
- Update on Other Applications
  - Horizon Utilities
  - Hydro One Networks
  - Toronto Hydro

Background

- Hydro Ottawa is preparing a Custom IR application for 2016 - 2020
- Key features
  - Cost of Service for 2016 for Capital and OM&A
  - Cost of Service for 2017 – 2020 for Capital
  - Formula adjustment for OM&A for 2017 -2020
  - Establish individual rates for each year of 2016- 2018 without any further adjustment
  - Establish individual rates for 2019 and 2020 based on updated annual adjustments in 2018 (i.e. interest rates, load forecast, return on equity, etc)
- Target filing date is 1st Quarter 2015

Cost of Service Application

Revenue Requirement Buildup Model



Evidence Preparation

- Evidence/Strategies
  - Writing and review continues
  - Dec 12, 2014 – Target date for completion of evidence
  - Finalization and review to be competed in Dec 2014 and Jan 2015
  - Currently on track

Evidence Preparation

- Rate Calculation
  - For each year 2016 through 2020
    - Completed detailed financial analysis and reconciliation
    - Completing detailed review of cost allocation model
    - Completing detailed review of load forecast
    - Completing review of draft schedule of rates and adjusting as required
  - Once rates are calculated for each year, determination of “smoothing options” will be completed

Evidence Preparation

- Stakeholder Consultation
  - Engaging Innovative Research as consultant
    - Innovative Research has provided same service to Toronto Hydro and Horizon and PowerStream has contracted with them
    - Develop communication package to customers – Nov/Dec 2014
    - Online customer feedback sought in Dec 2014/Jan 2015
    - Focus and phone surveys of different customer groups to be completed in Jan/Feb 2015
    - Final Report to be completed in Feb/Mar 2015

Time Lines

- Evidence preparation
  - Nov and Dec 2014
- Evidence Review and Finalization
  - Dec 2014 - Feb 2015
- Detailed rate calculations
  - Nov - Dec 2014
- Stakeholder consultation preparation
  - Nov – Dec 2014
- Stakeholder consultation with customers
  - Late Dec 2014 – Feb 2015
- Stakeholder consultation final report
  - Feb – March 2015
- Filing of application – 1st Quarter 2015

Horizon Utilities

- Rate effective Jan 1, 2015
- Reached agreement with intervenors on 5 year deal (2015 – 2019)
- Capital expenditures (avg $46.1 M) treated like Cost of Service and OMA has formula (1.47% per annum)
- Requested annual residential rate increases range from 9.67% to 1.32% with an average increase of 4.1% per annum

Hydro One Networks

- Rate effective Jan 1, 2015
- Hydro One unable to reach agreement with intervenors
- Proceeded to full hearing
- Completed hearing process in late October
- Expect decision in late December 2014/January 2015
- Seeking average annual residential rate increase of 7% and average capital expenditures of $657.8M per annum

Toronto Hydro

- Rates effective May 1, 2015
- Currently in middle of rate application process
- Seeking average annual residential rate increase of 9.28% and average capital expenditures of $493 M per annum

Response to Consumers Council of Canada Interrogatory Question #4

Reference: (Ex. A/T2/S1/p. 9)

Question #4:

The evidence indicates that the initial capital forecasts included funding requests that were greater than the final forecasts, as there was an opinion that higher funding levels were required from an asset needs perspective. That level was measured against a number of other key factors including rate impacts, resources and financial capability. Please describe the process used to pare down the initial forecasts. Please explain how Hydro Ottawa specifically took rate impacts into consideration when developing the final forecasts. How does Hydro Ottawa determine what level of rate increase might be acceptable (or not acceptable) to its customers?

Response:

Please see Interrogatory Response to Energy Probe Question #1 part a.

Response to Consumers Council of Canada Interrogatory Question #5

Reference: (Ex. A/T2/S1/p. 11)

Question #5:

Please provide a copy of the budget memo provided to division leaders as part of the 2016 budgeting process (dated February 2014) and any other correspondence related to the budgeting process. Please set out the timeline regarding the 2016 budgeting process. When were the proposed budgets included in the Application finalized?

Response:

A copy of the budget memo can be found in Exhibit D-1-2. The 2016 budget was completed during the same timelines as the 2015 Budget; effectively the process is a year long process. The budget memo was distributed in February 2014 and the Board of Directors approved the budget in November 2014.

For other correspondence on the budget process please see attachment Att-CCC-Q5-A which contains the budget guidelines as presented to the Board of Directors in August 2014.

2015 Business Plan and Budget Guidelines

HOL Board of Directors Meeting
August 28, 2014

HydroOttawa

2015 Planning Considerations

- 2015 is the fourth year of the current *2012-2016 Strategic Plan and Financial Outlook*
  - Previous outlook had identified 2015 as most difficult year
  - Cumulative cost escalation outpaces revenue growth under the IRM model
- Cost controls and focus continue on productivity measures must be continued, without sacrificing programs and priority initiatives
- Link to concurrent 2016 Distribution Rate Application process
  - 2016 Financial Plan will be developed through the 2016 Rate Application process
- Current Conservation and Demand Management (CDM) contract with Ontario Power Authority (OPA) expires in 2014. New contract to 2020 is in planning phase
  - Potential for 2015 recognition of current program financial incentives
- International Financial Reporting Standards conversion date confirmed as January 1, 2015

2015 Business Plan & Budget Guidelines

- The 2015 Hydro Ottawa Limited business plan and supporting budget will contribute to achieving the commitment to the Shareholder in the *2012–2016 Strategic Direction and Financial Outlook*

- All spending must align to and help achieve enterprise business plan priorities and approved performance targets for the four key areas of focus:

  - *Customer Value*
  - *Financial Strength*
  - *Organizational Effectiveness*
  - *Corporate Citizenship*

2015 Business Plan & Budget Guidelines (cont.)

Revenue

- Hydro Ottawa Limited electricity distribution rates and revenue will be guided by the 4th Generation Incentive Rate Mechanism (4GIRM)

Expenses

- Compensation estimates will be based on the renewed 2013 collective agreement and required premiums for OMERS, benefits, and statutory employment contributions
- All new headcount requests must be offset by identification of a corresponding headcount reduction, supported by the Strategic Workforce Plans and approved by Executive Management Team prior to inclusion in the budget
- Spending on non-compensation OM&A will be adjusted for an inflationary factor not to exceed 2.13% and contract pricing will be updated with the latest agreements
- Strategic priorities and revenue generating programs will be funded in accordance with Executive Management Team approval

2015 Budget Guidelines (continued)

Strategic Priorities

- All new, or expansion of existing funding for key strategic priorities must be approved by the Executive Management Team prior to inclusion in the 2015 Budget

- Hydro Ottawa Limited operating and capital budget spending will include mandated *Grid Transformation Action Plan,* and *Conservation Demand Management (CDM)* compliance requirements

Capital Program

- Capital investment will provide for customer growth and the replacement of aging infrastructure to maintain plant reliability as per the needs analysis documented in the Asset Management Plan, and other key business initiatives

2015 Revenue Assumptions

Electricity Distribution Revenue

Previous Assumptions

2015 increase was based on 4rd Generation Incentive Regulation Mechanism (4GIRM) inflation less productivity factor plus increase in load for a net annual increase of 1.0%

Current 2015 Assumptions

2015 rates will be based on 4th Generation mechanism (4GIRM)

Productivity target 0% given by OEB

Assume stretch factor remains the same 0.3%

Inflation assumption to be updated with the latest information

Load growth to be updated with latest consumption trend

Guideline: *Hydro Ottawa Limited electricity distribution rates and revenue will be guided by the 4th Generation Incentive Rate Mechanism (4GIRM)*

Revenue Generating Programs

***Conservation and Demand Management (CDM)*:**

- The existing CDM contract with OPA expires at end of 2014. It is assumed the four-year financial incentives will be partially achieved through achievement of conservation targets with lower than budgeted spending
    - Potential for up to $2.4M one time payment in 2015

- Electricity Distributors Association (EDA) and the Ontario Power Authority (OPA) to negotiate a new Master Agreement covering 2015 to 2020. The new Conservation First Framework to roll out in 2015

- 2015 Budget assumes similar terms and conditions of the current program. No assumption of incentive revenue from the new program

2015 Expense Assumptions

Compensation and Workforce Planning

Previous Assumptions	Current 2015 Assumptions
Compensation estimates based on the renewed 2013 collective agreement and include annual increases in OMERS contributory earnings, benefits, and statutory employment contributions	Base compensation estimates unchanged OMERS premiums remain flat as per the recent OMERS announcement Benefit premiums to be updated with the terms of the new insured benefits provider
No net new additional headcount	Assumption unchanged
Vacancy allowance	Assumption unchanged

Guideline:

- *Compensation estimates will be based on the renewed 2013 collective agreement and required OMERS contributory earnings, benefits, and statutory employment contributions*
- *All new headcount requests must be offset by identification of a corresponding headcount reduction, supported by the Strategic Workforce Plans and approved by Executive Management Team prior to inclusion in the budget*

Operating, Maintenance and Administration

Previous Assumptions

2.5% inflationary increase with the exception of cost recovery operations such as CDM and the Light Rail commitment.

Current 2015 Assumptions

2.13% inflation factor
OM&A will be reviewed and updated with the latest contract pricing including but not limited to

- IT Maintenance Contracts
- Vegetation Management
- Underground Locates
- Call Centre Contract

Productivity improvements will be identified and measured in each Division

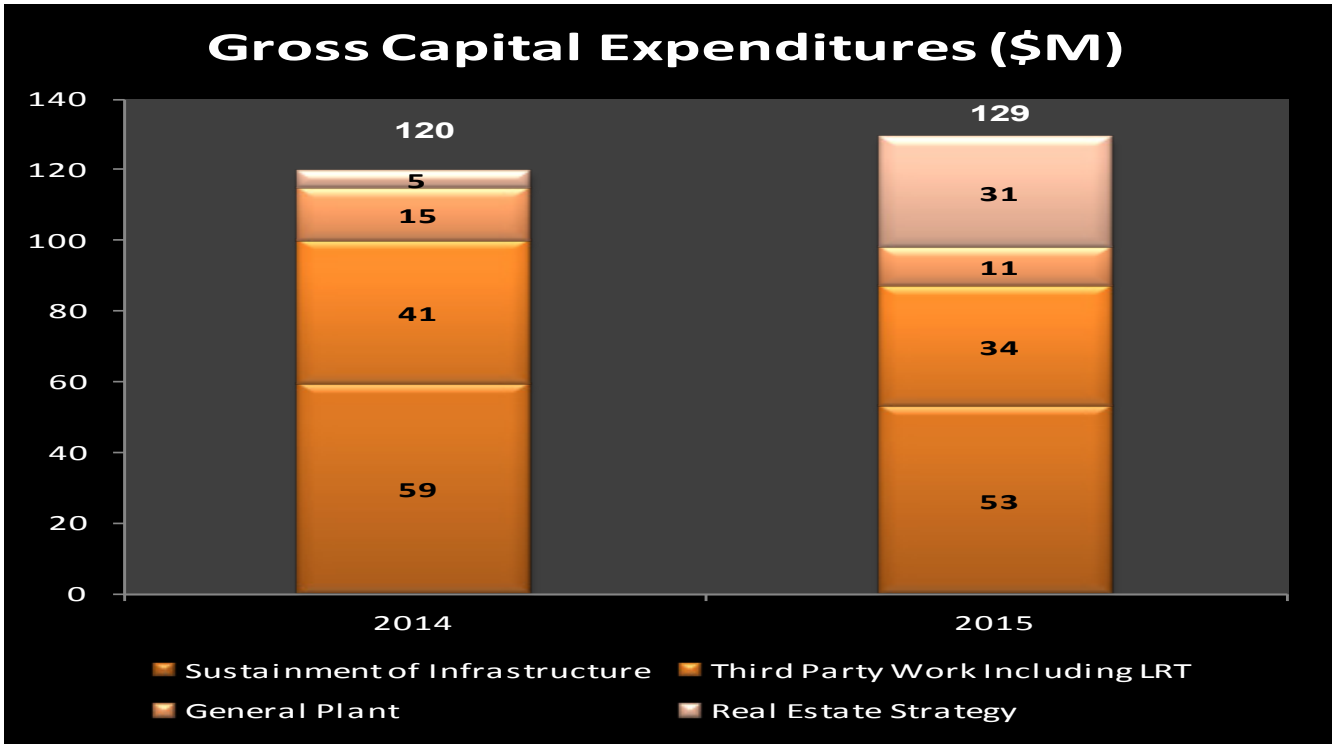
Guidelines:

- *Spending on non-compensation OM&A will be adjusted for an inflationary factor not to exceed 2.13% and updated contract pricing*
- *Strategic priorities and revenue generating programs will be funded in accordance with Executive Management Team approval*

2015 Capital Program Assumptions

2014-2015 Capital Program

2012-2016 Financial Outlook, Plus Real Estate Strategy



Guideline:

- Capital investment will provide for customer growth and the replacement of aging infrastructure to maintain plant reliability as per the needs analysis documented in the Asset Management Plan, and other key business initiatives

2015 Budget Guidelines Summary

- *2015 is the fourth year in the 2012-2016 Strategic Direction and Financial Outlook*
  - *Original projection of net income is lowest in planning horizon, as electricity distribution rates were last rebased for 2012.*
- *Previous assumptions have been reviewed and updated, and key developments in the business environment have been and will be comprehended, including but not limited to:*
  - Known changes in the Business and Regulatory environment
  - Revised assumptions from changes in contracts/programs
    - Potential for recognition of CDM 2011-2014 program incentives
    - Capital Cost Allowance tax impacts on significant projects
  - Identified needs for continued funding for Strategic Priorities arising from customer demands, aging resources, business growth, and regulatory and technological changes
- *Productivity improvements will be identified and measured in each Division*

2014-2015 Statement of Income

as presented to Board on December 12, 2013

$Millions	FY14 Budget	FY15 Plan
Revenue		
Distribution Revenue	156.7	158.3
Other Distribution	11.0	11.2
	167.7	**169.5**
Expenses		
Compensation	70.3	73.2
Other Operating Expenses	42.9	43.9
Gross expenses	**113.2**	**117.1**
Allocations	(28.7)	(29.6)
Net expenses	**84.5**	**87.5**
Conservation & Demand Management		
Program Revenue	16.4	13.2
Program Expenses	16.3	13.2
	0.1	-
Light Rail Transit		
Program Revenue	1.1	0.3
Program Expenses	1.1	0.3
	-	-
EBITDA	**83.3**	**82.0**
Amortization	36.2	37.0
EBIT	**47.1**	**45.0**
Interest	17.3	18.7
Corporate Taxes	3.0	1.9
Net Income	**26.8**	**24.3**

While noted in the 2015 Financial Plan presented to the Board last December, the potential impact of CDM incentive revenue was not confirmed.

Schedule for 2015 Business Plan & Budget

August 28, 2014	HOL Board receives Budget Guidelines
	HOHI Board receives and endorses Budget Guidelines to guide preparation of annual business plan priorities and budget
November 27, 2014	HOL Board endorses HOL Business Plan Priorities, Budget and Financial Plan, and Performance Scorecard and recommends to HOHI Board
	HOHI Board receives for approval ▪ HOL Business Plan Priorities, Budget and Financial Plan, and Performance Scorecard – Goals & Supporting Initiatives (Qualitative), and Measures & Targets (Quantitative) ▪ Business Plan Priorities, Budget and Financial Plan, and Performance Scorecard – Goals & Supporting Initiatives (Qualitative) and Measures & Targets (Quantitative)

Response to Consumers Council of Canada Interrogatory Question #6

Reference: (Ex. A/T2/S1/p. 15)

Question #6:

Please explain how a negative X factor will provide an incentive for Hydro Ottawa to pursue productivity initiatives. Why should past industry performance be indicative of Hydro Ottawa's future performance?

Response:

a. Hydro Ottawa's incentive to pursue productivity initiatives is not tied to the X factor in its Custom rate setting mechanisms. Hydro Ottawa's incentive arises from a confluence of forces (aging workforce/infrastructure) that must be managed in order to continue to deliver on the company's mission of providing reliable electricity service to the customers and businesses in the City of Ottawa and the Village of Casselman. Hydro Ottawa is nevertheless incentivized to pursue productivity initiatives via the earning sharing mechanism wherein it is poised to earn a reward for aggressively pursuing productivity efficiencies.

Whether the X factor is positive, negative, or zero there is no impact on the incentives for Hydro Ottawa to find and realize productivity gains. The financial impact (on a marginal basis) of a realized productivity gain would be identical under a 0.0% X factor or a negative productivity factor

b. Hydro Ottawa agrees with CCC's observation that past industry performance is not necessarily indicative of future performance. Having said this Hydro Ottawa's benchmarking expert PSE estimates based on PEG's most recent annual

benchmarking update a trend variable that illustrates a continued negative productivity trend continues in the Ontario Industry.

Also, please see Interrogatory Response to OEB Staff Question # 7.

Response to Consumers Council of Canada Interrogatory Question #7

Reference: (Ex. A/T2/S1/p. 16)

Question #7:

With respect to Hydro Ottawa's request for Z-factor relief, will the materiality threshold of $880,000 apply to a one-time event or multiple events that would add up to amounts above the $880,000?

Response:

Hydro Ottawa's request for Z factor relief will apply to a one-time event the costs of which exceed Hydro Ottawa's materiality threshold as adjusted to reflect any revised revenue requirement arising as an outcome of the current proceeding. Hydro Ottawa interprets one-time events to include but not be limited to events such as:

a. Costs incurred due to extreme weather;
b. Costs incurred to comply with new or amended government legislation, regulations, policies or other form of government direction. This shall include but not be limited to new tax rates or laws;
c. Costs incurred to comply with unanticipated changes to IESO market rules and OEB codes or policies.

Response to Consumers Council of Canada Interrogatory Question #8

Reference: (Ex. A/T2/S1/p. 20)

Question #8:

Please provide an explanation as to what OM&A items are captured by the following categories: non-discretionary; controllable; and discretionary.

Response:

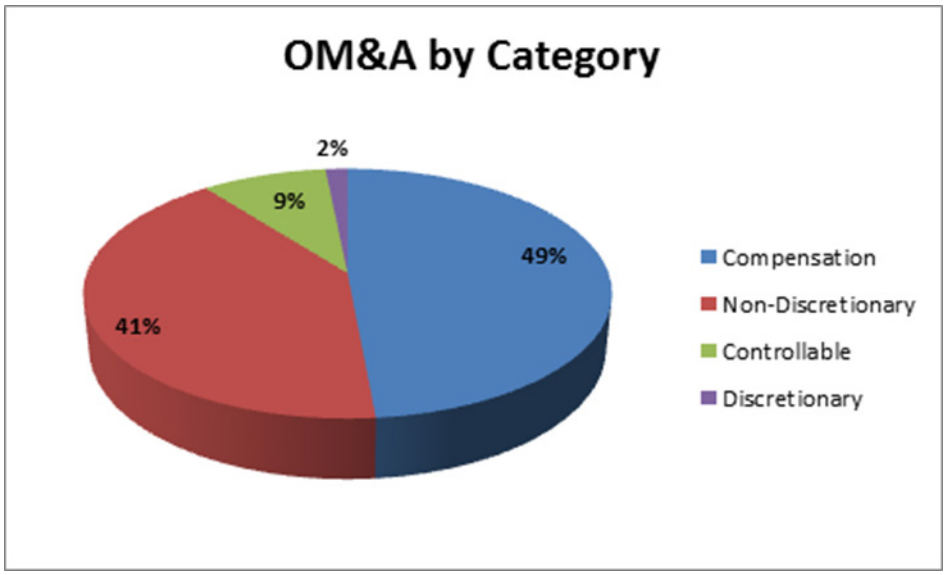
As noted in Exhibit D-1-2, during its 2014 budget process, Hydro Ottawa undertook a comprehensive review[1] of its OM&A costs. The review captured all the costs of the main operational business activities broken down into four distinct categories, namely:

1. Compensation: Headcount costs including payroll and benefits;
2. Non-Discretionary OM&A: Statutory requirement costs that are fixed or dictated by external factors and/or minimum contracts. Examples include the OEB fees, property tax, audit fees, and insurance premium, and underground locates;
3. Controllable OM&A: Costs that must be incurred. Volumes and/or service levels are controlled by management and can be adjusted in the short term. Examples include bank charges, fuel, utilities, manhole cleaning; and
4. Costs that can be reallocated or eliminated without significant impact to current operations or customer relations. Examples include non-safety training, non-essential consulting, travel, and meals, community services.

[1] The OM&A review and analysis was inclusive of Hydro Ottawa and its affiliates and not limited to Hydro Ottawa distribution.

Figure 1 below denotes compensation costs represent 49% of Hydro Ottawa's OM&A costs while 41% are non-discretionary costs, 9% are controllable and only 2% are discretionary.

Figure 1 – OM&A by Category



Source: Hydro Ottawa 2014 Analysis

Response to Consumers Council of Canada Interrogatory Question #9

Reference:

(Ex. A/T2/S1/p. 16)

Question #9:

A-CCC-9

Hydro Ottawa is proposing an earnings sharing mechanism whereby the overearnings from 0-150 basis points are fully retained by the shareholder. Would Hydro Ottawa be agreeable to an ESM whereby the overearnings are shared on a 50:50 basis with its customers? If not, why not? Why is it appropriate to use utility overearnings to fund municipal activities outside of the electricity sector rather than flowing the benefits back to Hydro Ottawa's customers?

Response:

Hydro Ottawa is not prepared to share earnings above its deemed ROE on a 50:50 basis on the grounds that the earnings retained up to 150 bps via the earnings sharing mechanism is the only mechanism through which Hydro Ottawa has the potential to be rewarded or incentivized for the substantial risk it undertakes during the course of its five year Custom IR term.

Hydro Ottawa has not proposed a symmetrical earning sharing mechanism. Consequently, Hydro Ottawa and its shareholder bears all the risk associated with under-earning below its deemed Return on Equity (ROE).

Response to Consumers Council of Canada Interrogatory Question #10

Reference:

(Ex. A/T2/S1/p. 24)

Question #10:

A-CCC-10

Please indicate whether the Estimated Bill Impacts in Table 11 are inclusive or exclusive of the proposed DVA rate riders and Y factors. If the rider amounts are not included, please recast the impacts including the rider impacts.

Response:

a) The estimated bill impacts included in Table 11 are exclusive (before) DVA rate riders and Y factor impacts.
b) See Hydro Ottawa's response to interrogatory OEB Staff # 1 regarding updates to bill impacts including Y factor rate rider impacts.

Response to Consumers Council of Canada Interrogatory Question #11

Reference: (Ex. A/T2/S2/p. 5)

Question #11:

Hydro Ottawa is proposing an annual written reporting process. It is Hydro Ottawa's intent to only file the OEB Scorecard Results and a capital expenditure update? If not, what other reporting does Hydro Ottawa propose? What would be the specific timing of this process?

Response:

a. Hydro Ottawa confirms its intent to file annually OEB scorecard results and a capital expenditure update.

b. Hydro Ottawa proposes to maintain all other OEB annual reporting.

c. Hydro Ottawa proposes to file its OEB scorecard results on or before September 30 and its capital expenditure update on or before April 30 each year.

Response to Consumers Council of Canada Interrogatory Question #12

Reference: (Ex. A/T2/S2/p. 6)

Question #12:

Hydro Ottawa held a customer engagement process to collect customer opinions on planned expenditures and outcomes identified in the 2016 application. Please indicate to what extent Hydro Ottawa changed its proposals or budgets in response to that customer engagement.

Response:

As Hydro Ottawa has demonstrated in the evidence filed on the record in Exhibit A-3-1 and in Exhibit D-1-6, customer engagement is an ongoing activity that not only informs Hydro Ottawa of customer preferences but enables Hydro Ottawa to adjust plans as necessary.

Hydro Ottawa's ongoing customer engagement activities include customer consultations (i.e., open houses, key accounts program), regular, general and transactional surveys, participation in customer associations, customer persona research, ongoing contact with customers through inbound telephone inquiries, social media, Hydro Ottawa's corporate website, conservation programs and trade show events, as well as, active participation in various electricity industry associations and events. Hydro Ottawa incorporates this feedback and insight when developing its various plans and programs which, in turn, influences budgetary priorities and thresholds.

Hydro Ottawa considers customer engagement an essential part of doing business. As captured in Chapter 5 of the filing requirements, the customer engagement exercise led

by Innovative Research Group and the resulting Customer Consultation Report, issued April 2015, helped reinforce the direction that Hydro Ottawa has taken, based on the ongoing customer engagement activities outlined above.

Response to Consumers Council of Canada Interrogatory Question #13

Reference: (Ex. A/T3/S1/p. 1)

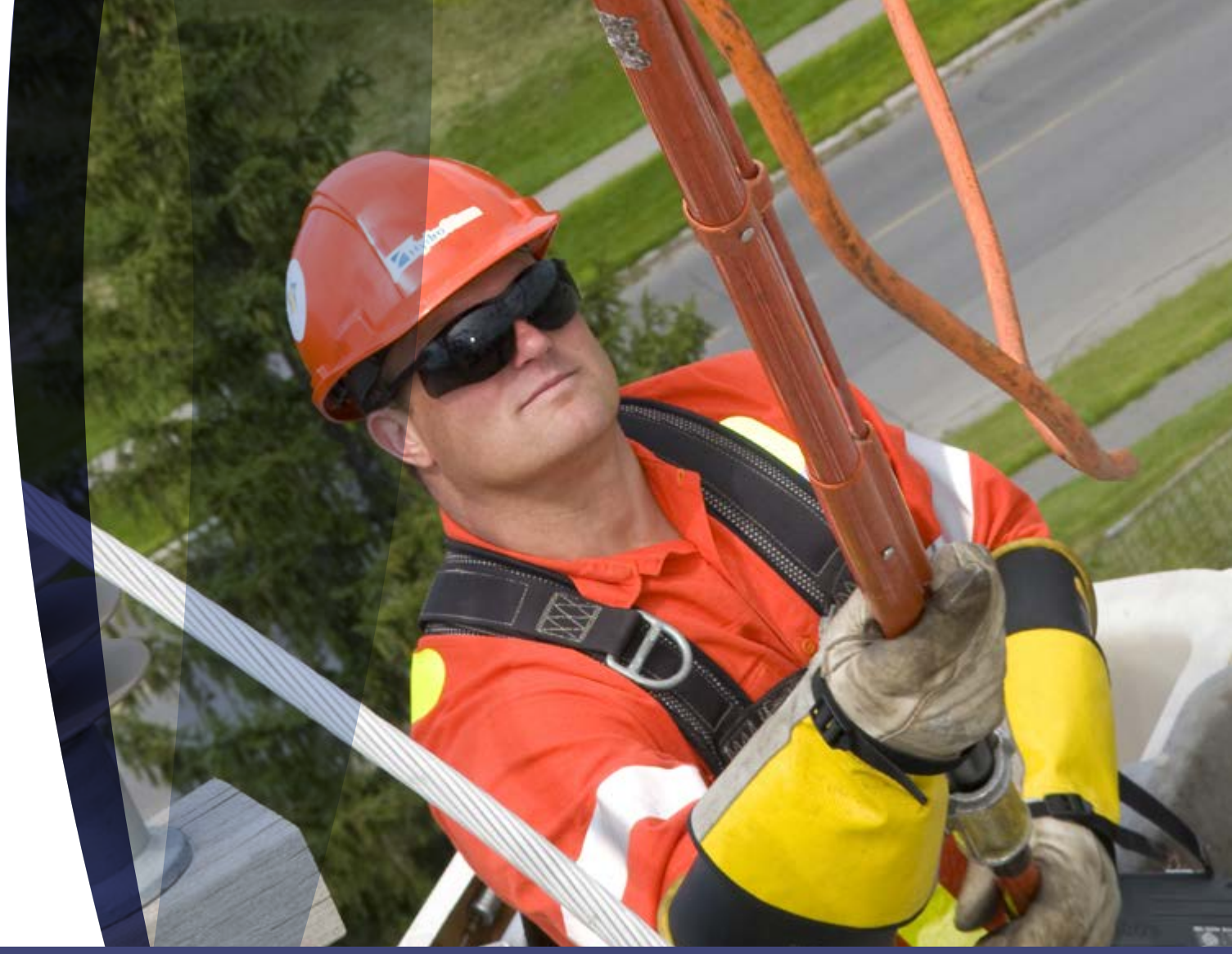
Question #13:

Please provide a copy of Hydro Ottawa's *2012-2016 Strategic Direction: Creating Long-Term Value.*

Response:

Hydro Ottawa's 2012-2016 Strategic Direction: Creating Long-Term Value can be accessed online at https://static.hydroottawa.com/documents/publications/Strategic-Direction-E.pdf and is appended as attachment Att-CCC-Q13-A.

It's important to note that Hydro Ottawa's strategic direction is a holistic document designed to set the long term direction for all companies under the Hydro Ottawa Holding Inc. umbrella. The scope of Hydro Ottawa's 2012-2016 Strategic Direction accordingly extends well beyond its regulated distribution services and encompasses its generation and affiliate services.



CREATING LONG-TERM VALUE




strategic direction
2012-2016

HydroOttawa
Holding Inc.

OUR MISSION

To create long-term value for our shareholder, benefitting our customers and the communities we serve

OUR ORGANIZATIONAL VALUES

Teamwork, Integrity, Excellence and Service

OUR VISION

Hydro Ottawa—a leading, trusted, integrated utility services company

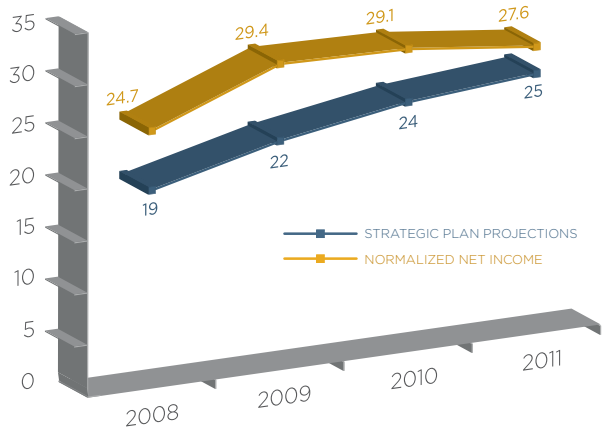
contents

1. overview of strategic direction

1.1 INTRODUCTION

Hydro Ottawa's 2012-2016 Strategic Direction presents a comprehensive overview of our business strategy and financial projections for the next five years. It builds on our strengths and achievements, and responds to a changing business environment that presents both challenges and opportunities for the Hydro Ottawa Group of Companies (Hydro Ottawa).

Since its creation in November 2000 through the amalgamation of five local electric utilities, Hydro Ottawa has become one of Ontario's leading utility companies—in terms of service delivery, financial performance and environmental leadership. In 2008, we set out financial targets for the five-year period 2008-2012. The company has surpassed expectations in each of the first four years of that plan, with normalized net income exceeding projections by 24 percent, dividends 40 percent higher than target, and shareholder value growing by more than $135 million.



NET INCOME VS. PLAN > $ MILLIONS

24% amount normalized net income has exceeded projections over the first four years of the 2008-2012 Strategic Direction and Financial Outlook

Hydro Ottawa has also been recognized as a leader by our peers and other third parties, with recognition including the Electricity Distributors Association Customer Service Excellence Award in 2012, the United Way Community Builder Award in 2011, One of Canada's 50 Greenest Employers for two years in a row in 2011 and 2012, One of the *National Capital Region's Top 25 Employers* for four consecutive years from 2009 to 2012, and One of the *50 Most Engaged Workplaces in Canada* for the second year in a row in 2011.

This solid performance is a testament to the commitment to excellence that Hydro Ottawa employees bring to their work every day.

We are proud of what we have achieved as a company. At the same time, we believe that a refreshed strategic direction is essential if we are to be a successful utility of tomorrow. As outlined in the pages that follow, our business environment is changing, and we must change with it.

To ensure Hydro Ottawa's continued success and sustainability in the years ahead, the Board and management engaged in a long-term strategic planning process in 2011. This process involved reviewing the company's strategic direction and performance over the period of the preceding strategic plan, identifying emerging trends, issues and opportunities in our business environment, and assessing the organization's capability to deliver longer-term results.

The outcome is a refreshed and realigned strategic plan that will ensure that the company not only survives but thrives over the next five years.

1.2 STRATEGY

Our mission as we move forward into our future remains the same—to deliver value, both as a community asset delivering

essential services to Ottawa residents, and as the City of Ottawa's single biggest investment.

With that mission in mind, our goal over the next five years is two-fold:

- to continue to effectively fulfil our core mandate to provide a safe, reliable, affordable and sustainable supply of electricity to the over 305,000 homes and businesses in our City that rely upon it every day; and
- to move the company from good to great, leveraging our position as a leading and trusted service provider to become one of Canada's most successful integrated utilities of tomorrow.

To achieve these goals, Hydro Ottawa's strategy is to put the customer at the centre of everything we do. Understanding and responding to the customer's needs and expectations—for service quality, cleaner energy, and greater control over the management of energy costs—will be key to Hydro Ottawa's continued success in an evolving landscape. The customer value we provide 'up to and beyond the meter' will drive all critical areas of performance—our financial strength and business growth, our operational efficiency and effectiveness, and our contributions to the well being of our community.

To enhance our ability to respond to customer needs and expectations, and ensure long-term financial sustainability, Hydro Ottawa will maintain a focus on strategic business growth within our core areas of strength.

Taken as a whole, we believe this strategy for the company's future presents a balanced program for solid financial and operating performance, coupled with sustainable and profitable business growth. We are proud that in pursuing these goals, we will continue to contribute to the City of Ottawa's own objective of financial sustainability, while ensuring for our community a more sustainable energy future.

1.3 FOUR STRATEGIC OBJECTIVES

Hydro Ottawa has achieved good results by focusing on four critical areas of performance—our four Key Areas of Focus. In each of these areas, we have set one overarching objective:

- CUSTOMER VALUE:
  We will deliver value across the entire customer experience;
- FINANCIAL STRENGTH:
  We will create sustainable growth in our business and our earnings;
- ORGANIZATIONAL EFFECTIVENESS:
  We will achieve performance excellence; and
- CORPORATE CITIZENSHIP:
  We will contribute to the well being of the community.

These four areas of focus will continue to guide our activities throughout the current plan, but one, Customer Value, takes on central importance.

Delivering essential services

2. our business

Hydro Ottawa Holding Inc. (HOHI) was created in November 2000 following the amalgamation of the municipalities of the former Region of Ottawa-Carleton and the restructuring of the Ontario electricity sector as a result of the *Electricity Act, 1998*. This Act required all hydro utilities to operate as business corporations.

HOHI is a for-profit company that is wholly owned by the City of Ottawa, and governed by an independent Board of Directors appointed by its shareholder.

The company's core businesses are electricity distribution, renewable energy generation and related services. HOHI owns and operates two subsidiary companies.

Hydro Ottawa Limited

Hydro Ottawa Limited is a regulated electricity distribution company operating in the City of Ottawa and the Village of Casselman. As the third largest municipally-owned electrical utility in Ontario, Hydro Ottawa Limited maintains one of the safest, most reliable and cost-effective electricity distribution systems in the province, and serves over 305,000 residential and commercial customers across a service area of 1,104 square kilometres. As a condition of its distribution licence, the company is required to meet conservation and demand management targets established by the Ontario Energy Board (OEB).

Hydro Ottawa Limited receives power from the provincial electricity grid and transports it across a distribution network comprising 85 distribution stations, 2,700 kilometres of underground cable, 2,900 kilometres of overhead lines, 43,000 transformers and 48,400 hydro poles.

The company's customer base grows by an average of 1 percent per year.

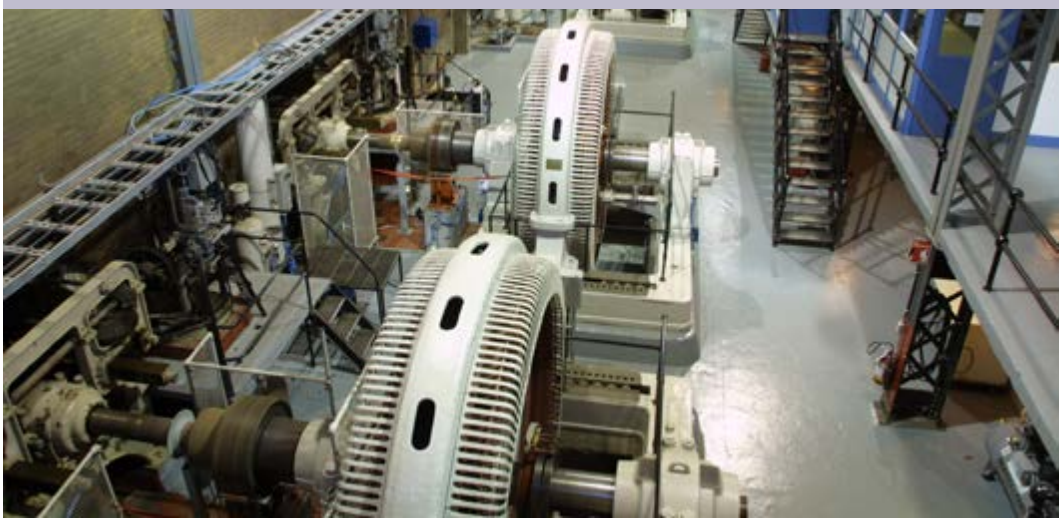
Energy Ottawa Inc. (Energy Ottawa)

A generator of renewable energy and provider of commercial energy management services, Energy Ottawa is the largest municipally-owned producer of green power in Ontario.

Its run of the river hydroelectric facilities at Chaudière Falls in the city's core produce on average more than 125,000 megawatt-hours (MWh) of EcoLogo certified green power and are under a 20-year power purchase agreement with the Ontario Power Authority (rates are guaranteed and include annual inflation protection until 2030). In addition, the Trail Road landfill gas-to-energy plant, PowerTrail Inc., a joint venture 60 percent owned by Energy Ottawa, converts millions of tonnes of previously flared-off methane gas into renewable energy. As of 2012, construction is underway on a second jointly-owned landfill gas-to-energy plant in Eastern Ontario, which is scheduled to begin production early in 2013.

- Largest electricity distributor in eastern Ontario
- Third largest municipally-owned electricity distributor in Ontario
- More than 305,000 customers
- More than 600 employees
- Service area of 1,104 square kilometers
- 85 distribution stations
- 2,700 kilometres of underground cable
- 2,900 kilometres of overhead lines
- 43,000 transformers
- 48,400 poles
- Capital investment of $100M per year

- Ottawa's largest producer of green power
- Energy services saved the City of Ottawa $5.75 million over five years



Understanding the changing business environment

3. strategic context

At Hydro Ottawa, we believe that the successful *utilities of tomorrow* will continue to be those that are able to anticipate and meet the needs of their customers and other stakeholders, and respond to the requirements of a changing business environment.

This section of the Strategic Direction outlines some of the most significant trends in our business environment, which help shape the strategy that follows.

3.1 THE CUSTOMER: THE HEART OF TOMORROW'S UTILITIES

The stage has been set in Ontario for the utility of tomorrow — customer-centric, responsive, and a single point of contact for its customers' electricity requirements.

The emergence of the integrated utility is the outcome of strategic shifts in the energy sector in Ontario during the last five years: the emphasis on conservation; investments in green energy; a province-wide roll-out of smart meters; the beginnings of a smart grid; and the integration of the customer in laying the foundation for a distributed generation system.

The central place now occupied by the customer represents the true change in the fundamentals of the utilities business. Customers are no longer just consumers of electricity, but also generators of electricity and managers of energy conservation.

Hydro Ottawa recognizes this centrality of the customer as the key driver of its strategy over the next five years. The customer value we provide "up to and beyond the meter" will drive our financial strength and business growth, our operational efficiency and effectiveness, and our contributions to the well being of our community.

3.1.1 DRIVING CUSTOMER VALUE

The new value proposition to the customer will be driven by a strategic emphasis on the following.

Investments in infrastructure

A Conference Board of Canada study estimates that utilities across Ontario must invest $21 billion over the next 20 years for the replacement and refurbishment of aging infrastructure, and to facilitate smart grid developments.

In Ottawa, where two-thirds of the infrastructure is more than 25 years old, improvements to the distribution system must also consider the projected growth in population and substantial investments in municipal infrastructure, including public transit.

Customer Segmentation and Communication

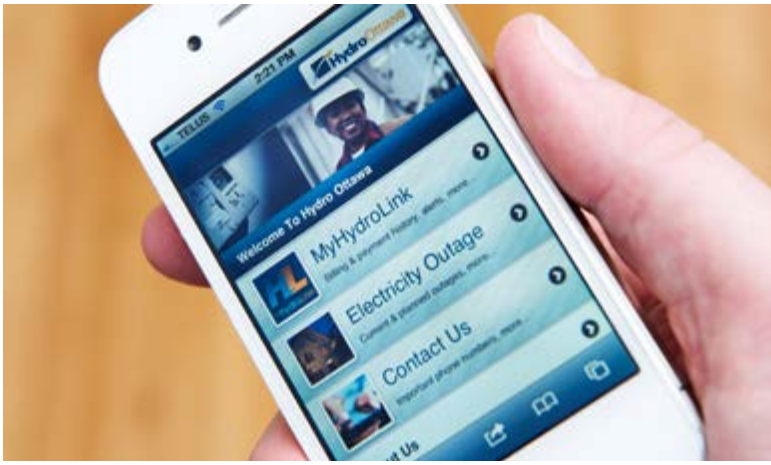
As the customer's place within the electricity system evolves, successful utilities will be those that recognize that customers are not all the same, and adapt and tailor their service delivery to the specific needs of individual customers, leveraging technology to enhance the customer experience.

Research shows that all customers—residential, small commercial, industrial, institutional—will look for ways to reduce the impact of rising rates, which are seen as inevitable, given the scale of capital investments needed to modernize decades-old infrastructure. Across the world, customers perceive their local utilities as the preferred partner in value-added services beyond the meter.

Tomorrow's leading utilities must not only meet customers' expectations for innovative tools and information to help them manage rising energy costs, but also recognize the business opportunities that arise from this expectation, and respond in ways that benefit customers, shareholders, and the environment.

3.2 TECHNOLOGY INVESTMENTS—NEED FOR ECONOMIES OF SCALE AND SCOPE

While foundational pieces of the smart grid infrastructure have been put in place, utilities will still need to make substantial investments in technology. Operational, administrative, and customer-facing technologies are converging, dramatically increasing the flow of information and the ability to respond to it. From advanced metering at the customer's home, to intelligent system controls based on real-time information, to more dynamic customer care and back-office support, and back to the energy user through web interfaces and web applications that put information and control in the hands of



the customer, modern utility service is built upon increasingly sophisticated and interlinking systems.

Technological advancement brings efficiencies, but also requires significant investments. Going it alone may no longer be a feasible option for many utilities. In this regard, a recent position paper of Ontario's Electricity Distributors Association highlights how crucial it will be to achieve economies of scale and economies of scope.

3.3 EVOLUTION OF THE POLICY AND REGULATORY ENVIRONMENT

Containing rising rates for consumers while at the same time facilitating infrastructure and technology investments is the key challenge facing regulators. An option that may be considered is a regulatory framework that recognizes interdependencies in the system and encourages achieving greater efficiency in the sector through economies of scale and scope, and more integrated utility services.

Fiscal pressures faced by the Province of Ontario have now prompted a rationalization of the regulatory framework, including a reduction in the number of regulatory agencies.

In parallel, initiatives such as the Ministry of Energy's *Ontario Distribution Sector Review Panel* and the Ontario Energy Board's consultations for the development of a *Renewed Regulatory Framework for Electricity* could pave the way for benefits to ratepayers through economies of scale, greater efficiency across entire regions and service areas, consolidation and integration.

Fiscal pressure in Ontario may induce a change in policy vis-à-vis municipally-owned utilities, which could be required to maintain standards of customer service, reliability, technological conformance and financial viability with less Provincial and regulatory support. In such a scenario, a relaxation or elimination of some of the more restrictive aspects of the Ontario Energy Board Act would afford utilities opportunities (and imperatives) to achieve higher back-office efficiencies, develop additional revenue streams, and provide seamless energy-related offerings to customers.

Certain signals in recent years, such as transferring Conservation and Demand Management mandates to Local Distribution Companies (LDCs), or allowing LDCs to own and operate generation plants of up to 10 MW capacity, appear to reinforce a trend towards the integration of generation, distribution, and energy management.

There is also a distinct prospect of regulatory encouragement of greater collaboration, cooperation and, if

necessary, consolidation of LDCs. The downward trend in utilities' distribution revenue, as a result of conservation, could also provide some impetus to this movement.

These areas of policy and regulation are evolving. The speed of this change and the direction it takes will have a significant impact on Hydro Ottawa's business strategy and success. The organization is well positioned to provide services to smaller utilities, or contemplate mergers and acquisitions. Put simply, Hydro Ottawa stands ready to embrace this new future.

3.4 STRENGTHENING CORE COMPETENCIES— WORKFORCE PLANNING

Utilities across Canada are facing challenges in replacing and renewing their aging workforce, while ensuring operational capacity and continuity.

Forecasting talent demands, anticipating supply gaps, expanding and strengthening apprenticeship, internship and succession planning programs, will all be crucial in maintaining organizational effectiveness. Sustaining the success achieved so far by Hydro Ottawa with its strategic workforce

ELIGIBLE RETIREMENTS: 2012-2021

- 42.3 percent of the total employee population
- 50.4 percent of the trades and technical employee population

LOSS OF LABOUR FORCE EXPERIENCE 2012-2021

- 6,216 years of experience are eligible for retirement, including 3,544 years of service in trades and technical jobs

planning will need to be an area of focus for the organization.

At the same time, workforce planning and the related training and development strategies may offer Hydro Ottawa another business opportunity, providing services to smaller utilities that may have greater difficulty renewing their aging workforce.

3.5 CHANGING AND ENHANCING VALUE STREAMS

The core competencies and value streams of integrated utilities will remain unchanged:

- GENERATION:
  Expand renewable generation capacity. Pursue distributed generation, co-generation and district energy opportunities.
- DISTRIBUTION:
  Examine opportunities to expand service territory through mergers or acquisitions.
- ENERGY MANAGEMENT:
  Take on a range of roles as conservation and energy management become pervasive. Offer specialized services to other utilities in transitioning to the smart grid and adapting to the new energy landscape.

The value streams of the future will derive from utilities' capacity to capture their expertise in each of these core competencies and translate them into revenue-earning propositions for diverse customers. These customers may include not only users of electricity but also other utilities, even non-electrical utilities, who will be on the lookout for expertise in a range of business activities and processes, including project management; workforce planning; training and development; billing and collection activities; asset planning and management; system hosting and sharing.

Hydro Ottawa is positioned to achieve excellence not only in its core competencies but also to scale up and monetize the cutting-edge expertise it has achieved in a number of areas.

Ensuring a more sustainable energy future

4. strategic direction

4.1 OUR MISSION

To create long-term value for our shareholder, benefitting our customers and the communities we serve.

Hydro Ottawa is both a community asset and an investment for our shareholder, the City of Ottawa. As a community asset, our purpose is to continue to provide effective, efficient and reliable services to our customers, and to continue to be a strong strategic partner with the City, helping to deliver on its economic development and environmental agendas. As an investment, our purpose is to provide stable, reliable and growing returns, and to increase shareholder value both in the short and long-term.

4.2 OUR GUIDING PRINCIPLES

Hydro Ottawa is committed to creating long-term value in a manner that will withstand the test of public scrutiny and inspire confidence and trust. To that end, we strive to achieve excellent operating and financial results while abiding by professional standards of conduct. We are guided not only by legal obligations, but also by best governance and business practices, and standards established by independent agencies. These expectations provide the foundation for our commitments to all of our stakeholders, and are reflected in our organizational values, our *Code of Business Conduct*, and our operating policies and procedures.

4.2.1 OUR ORGANIZATIONAL VALUES

At Hydro Ottawa we are committed to an organizational environment that fosters and demonstrates ethical business conduct at all levels and reflects our shared values of teamwork, integrity, excellence and service. Every employee must lead by example in this endeavour.

4.2.2 OUR COMMITMENTS TO OUR STAKEHOLDERS

Hydro Ottawa takes into account the interests of all our stakeholders including employees, customers, suppliers, and the communities and environment in which we operate.

Employees

The quality of our workforce is our strength and we will strive to hire and retain the best-qualified people available and maximize their opportunities for success. We are committed to maintaining a safe, secure and healthy work environment enriched by diversity and characterized by open communication, trust, and fair treatment.

Customers

Our continued success depends on the quality of our customer interactions, and we are committed to delivering value across the entire customer experience. We are honest and fair in our relationships with our customers, and provide reliable, responsive and innovative products and services in compliance with legislated rights and standards for access, safety, health and environmental protection.

Suppliers and Contractors

We are honest and fair in our relationships with our suppliers and contractors and purchase equipment, supplies and services on the basis of merit. We pay suppliers and contractors in accordance with agreed terms, encourage them to adopt responsible business practices, and require them to adhere to our health, safety and environment standards when working for Hydro Ottawa.

Community and the Environment

We are committed to being a responsible corporate citizen and will contribute to making the communities in which we operate better places to live and do business. We are sensitive to the community's needs, and dedicated to protecting and preserving the environment where we operate.

Shareholder and Other Suppliers of Finance

We are financially accountable to our shareholder and to the institutions that underwrite our operations, and communicate to them all matters material to the organization. We protect our shareholder's funds, and manage risks effectively. We communicate to our shareholder all matters that are material to an understanding of our corporate governance.

4.3 OUR VISION AND STRATEGY

4.3.1 OUR VISION

Hydro Ottawa — a leading, trusted, integrated utility services company.

Hydro Ottawa's vision is to be a leading and trusted integrated utility services company. This vision is built upon the objectives that were set out for the company at its inception — to increase the value of the company for its shareholder, to deliver efficient and effective service to our customers, and to grow competitive businesses that maximize the value of our existing assets and core competencies.

Hydro Ottawa has worked steadily towards these objectives since its creation in November 2000. Today, the company is a recognized leader in each of its core businesses, has grown significantly in value, and has delivered solid financial returns for several consecutive years.

The goal of Hydro Ottawa's five-year Strategic Direction is to move the company from good to great, leveraging our position as a leading and trusted service provider to become one of Canada's most successful *integrated utilities of tomorrow*.

Leading

For Hydro Ottawa, leading means consistently being among the top performers in the business, in every critical area of our operations; and being regarded as a credible and trusted voice in our industry, helping to shape policy, regulatory and operational responses to the critical issues of the day.

As our industry evolves in response to customer needs and technological and policy change, our goal is to ensure Hydro Ottawa continues to be a leader in this shifting strategic context, becoming one of the most successful utility companies in Canada.

Trusted

Trust is fundamental to Hydro Ottawa's success — a continuing belief among our stakeholders that we will deliver on our mission, reliably, in a transparent and accountable fashion.

We are a company with very deep roots in our community, established over more than 100 years of service, and we continue to be recognized as a service leader, receiving the Electricity Distributors Association's *Customer Service Excellence Award* in 2011.

In the years to come, we will continue to demonstrate that we have the strength and ability to deliver on our mandate, coupled with a commitment to transparency, accountability, and the well-being of our community.

Integrated

While yesterday's most successful utilities were vertically integrated — providing generation, transmission and distribution services — a new model of integrated utility is emerging based on a well-connected value chain in 'close to the customer' utility services. These horizontally integrated utilities are leveraging the synergies between utility functions to deliver efficiencies to customers, and value to shareholders.

The distribution of utility commodities is similar, whether the commodity is electricity, water, or heat. The skill sets employed to develop renewable energy facilities and install electrical infrastructure can be applied to other energy systems, such as district energy and distributed generation.

Hydro Ottawa's strategic vision involves realizing synergies and economies of scale in 'close to the customer' utility services, to create additional value for the company's shareholder, and savings and enhanced service to customers.

4.3.2 OUR STRATEGY

The essence of Hydro Ottawa's strategy is to put the customer at the centre of everything we do. Understanding and responding to the customer's needs and expectations — for service quality, cleaner energy, and greater control over the management of energy costs — will be key to Hydro Ottawa's continued success in an evolving landscape. The customer value we provide 'up to and beyond the meter' will drive all critical areas of performance — our financial strength and business growth, our operational efficiency and effectiveness, and our contributions to the well being of our community.

This means reorienting our business around the customer, focusing our efforts on enhancing the customer

experience. It means viewing our business from the customer point of view to understand customer perceptions and requirements, simplifying and improving interactions to make it easier to do business with us, and introducing new and innovative solutions to meet customer needs.

To enhance our ability to respond to customer needs and expectations, and ensure long-term financial sustainability, Hydro Ottawa will also maintain a focus on strategic business growth within our core areas of strength. Our growth agenda involves three basic components:

- achieving economies of scale by expanding our electricity distribution business beyond its current service territory, and leveraging our core systems to support other utility services;
- increasing the supply of clean energy for customers and earnings for our shareholder by expanding our renewable generation; and
- bringing innovative solutions to energy-conscious consumers and businesses, while meeting mandatory conservation targets set by the province of Ontario, by growing our energy management expertise.

To achieve our strategy, the plan is structured around four critical areas of performance that have driven our success to date—our four Key Areas of Focus. These four areas of focus will continue to guide our activities throughout the current plan, but one, Customer Value, takes on central importance.

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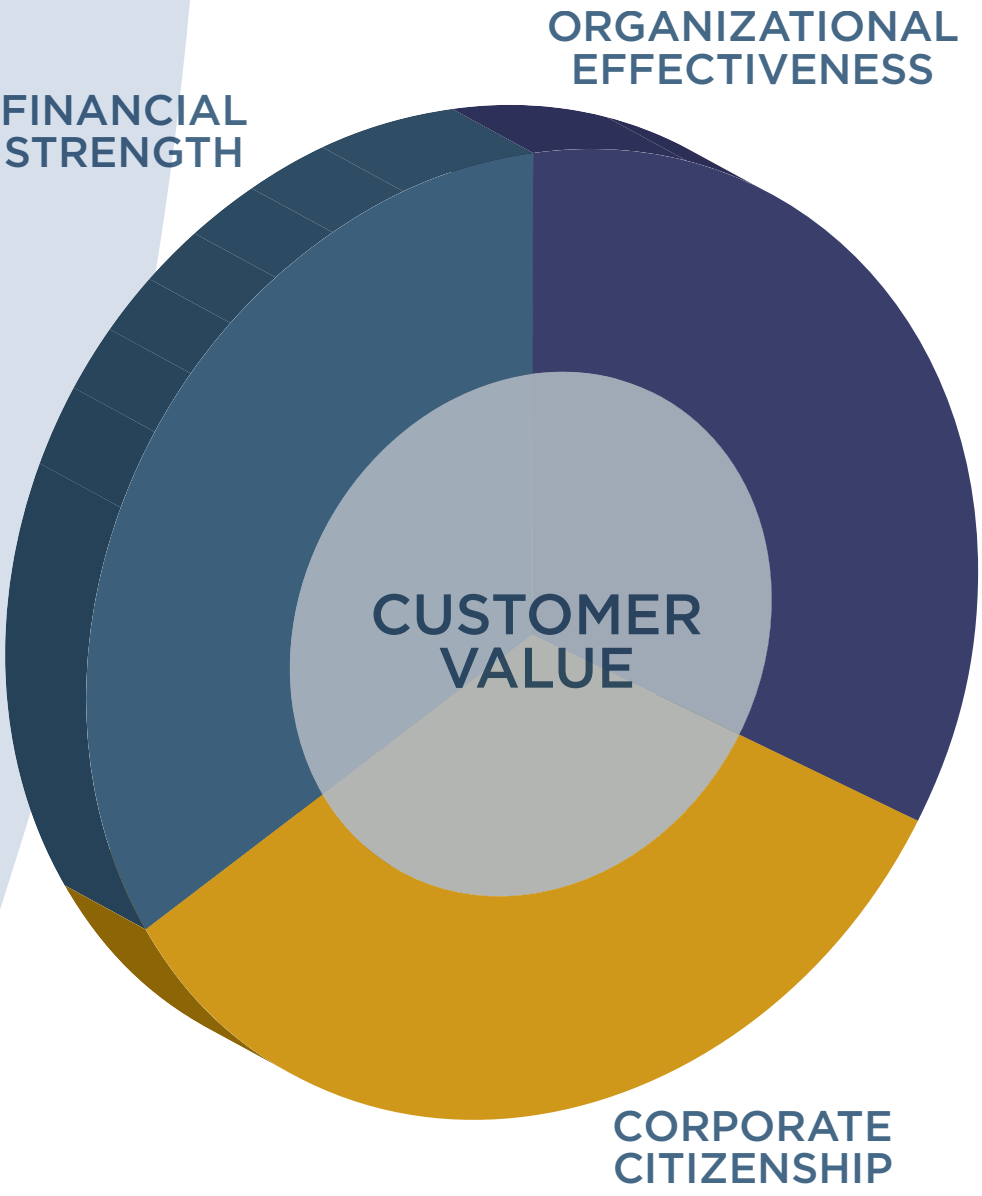
4.4 DELIVERING ON OUR VISION—FOUR KEY AREAS OF FOCUS



CUSTOMER VALUE

Strategic Objective

We will deliver value across the entire customer experience

> by providing reliable, responsive and innovative services at competitive rates

FINANCIAL STRENGTH

Strategic Objective

We will create sustainable growth in our business and our earnings

> by improving productivity and pursuing business growth opportunities that leverage our strengths — our core capabilities, our assets and our people

ORGANIZATIONAL EFFECTIVENESS

Strategic Objective

We will achieve performance excellence

> by cultivating a culture of innovation and continuous improvement

CORPORATE CITIZENSHIP

Strategic Objective

We will contribute to the well-being of the community

> by acting at all times as a responsible and engaged corporate citizen

4.4.1 CUSTOMER VALUE

As a company that provides an essential service to the public, nothing is more critical to Hydro Ottawa's success than the ability to deliver value to our customers.

The fundamentals of customer value in the electricity business are quality and cost—delivering a reliable service, while operating efficiently and effectively to keep rates competitive. Hydro Ottawa is consistently among the top performers in Ontario in both these areas.

But the customer's place within the electricity system is also evolving. Customers are no longer just consumers of electricity, but also generators of electricity and managers of energy conservation, thereby making them integral and active participants in the management of our electricity system.

Furthermore, the transformation and empowerment of the Canadian consumer in general has been growing steadily over the past decade, with more than 80 percent of Canadians over the age of 16 now connected to the internet and the large amount of information it puts in their hands. Consequently,

consumers are becoming increasingly informed and enabled — and they want the highest quality of tailored service they can get. The traditional monopolistic service offering is no longer sufficient and will need to evolve to support the unique needs of our customers.

As more and more of our customers embrace technology and mobile devices — from smartphones to iPads and whatever new product tomorrow will bring — they are necessarily going to become that much more empowered and have even higher expectations of Hydro Ottawa.

Our objective is to meet or exceed their diverse needs and requirements by delivering the greatest possible value across the entire customer experience.

To achieve this, Hydro Ottawa will focus on service quality and responsiveness, assisting our customers in managing their energy consumption and electricity costs, and maintaining overall system reliability.

Our approach will include:

- a focus on detailed customer knowledge to guide us in understanding, anticipating and responding to customer needs;
- the revision of our conditions of service — our operating practices, levels of service and connection policies — to be more customer-centric; and
- effective and innovative use of technology and communication to enhance the customer experience, and provide solutions to help customers conserve energy and manage costs.

Talent management strategies will likewise shift to support the organization in becoming a leader in customer satisfaction, including enhanced training for all Hydro Ottawa employees to support them as ambassadors for our company, our brand, our expectations, and our commitments to all our stakeholders.

Moreover, Hydro Ottawa will continue to make significant investments to maintain and enhance the reliability of our distribution infrastructure, and will undertake to develop and implement a Smart Grid roadmap — our Grid Transformation Action Plan — to enhance system operations and our relationship with our customers.

4.4.2 FINANCIAL STRENGTH

Hydro Ottawa has achieved strong financial results over the past several years, surpassing the financial targets set out in our previous five-year plan by a substantial margin. Our objective over the next five years is to continue this trend of solid financial performance, while creating sustainable growth in our business and our earnings.

The financial targets set out in the Financial Outlook section of this document significantly exceed those set out in the previous plan. They are aggressive but achievable targets. While delivering on this five-year plan, we also want to build a foundation for further growth and value-creation in the future.

As with all other elements of this five-year strategy, Hydro Ottawa's plan for financial strength is based on our strategic focus on the customer. Meeting the customer's needs — for efficient service, cleaner energy, and greater control over energy costs — is not only good service, it is also good business. Continuing to be a leader in these areas is the key to Hydro Ottawa's continued financial success.

Our ability to meet customer needs can be enhanced through strategic growth. Economies of scale can be achieved by expanding our electricity distribution business beyond its current service territory and leveraging our core systems to support other utility services. Expanding renewable generation increases the supply of clean energy for customers and earnings for our shareholder. Growing our energy management expertise will allow us to bring innovative solutions to energy-conscious consumers and businesses while meeting mandatory conservation targets set by the province of Ontario.

As such, Hydro Ottawa will maintain a focus on strategic growth within our core areas of strength.

Electricity Distribution

For more than 100 years, Hydro Ottawa and its predecessor companies have delivered a reliable supply of electricity to Ottawa homes and businesses. That core service is the bedrock of our success, and will continue to be the dominant element of our business operations.

The approval of the company's 2012 Electricity Distribution Rate Application puts these operations on a stable financial footing for the next few years. This will allow Hydro Ottawa to make important investments in our distribution system to maintain reliable service for the future, without compromising the company's financial strength.

At the same time, revenue growth under the current regulatory model is modest, and this is projected to continue throughout the term of the current plan. In order to successfully manage the challenges of aging infrastructure and high retirement rates in the skilled trades, which require investments in new equipment and apprenticeship programs, Hydro Ottawa will need to maintain its focus on cost containment and productivity improvement. These strategies have been an essential part of Hydro Ottawa's healthy financial performance over the past several years.

Another important factor is customer growth, since electricity distribution involves significant economies of scale. Some customer growth occurs organically as development occurs within Hydro Ottawa's service territory, with the company's customer base growing by approximately 1 percent year. More significant growth could

occur through the amalgamation of Hydro One customers within the City of Ottawa boundaries, or through consolidation with other local electricity distribution companies. Hydro Ottawa will continue to examine opportunities to expand our service territory through mergers or acquisitions where there is a clear benefit to our customers and our shareholder.

Both the rate regulation model within the province, and the potential for further consolidation within the electricity distribution sector, are currently under review at the provincial level. The outcomes of these reviews may present opportunities for Hydro Ottawa. As a service leader, and one of the largest and most efficient local electrical utilities in the province, Hydro Ottawa is well-positioned to respond.

Renewable Energy

Hydro Ottawa is a leader in renewable energy generation. With its EcoLogo III certified run-of-the-river hydroelectric facilities at Chaudière Falls on the Ottawa River, and the Trail Road landfill gas-to-energy plant, the company is the largest producer of green energy in eastern Ontario.

Chaudière Falls Ring Dam

Significant investments were made in refurbishing and expanding the Chaudière facilities beginning in 2000-2001, and they have produced consistent revenue and growing returns since that time. A new long-term pricing agreement was negotiated for the output from these facilities in 2010, ensuring consistent pricing for 20 years, with no risk from electricity spot market price volatility.

Ontario Local Distribution Companies

Source: Electricity Distributors Association

Given the company's expertise and track-record with this type of project, Hydro Ottawa continues to examine opportunities to expand its hydroelectric generation capacity. Under the right circumstances, including stable revenues from long-term power purchase agreements with guaranteed pricing, strategic growth of this nature could occur within the time frame of the current plan.

In addition to its waterpower assets, Hydro Ottawa is the majority owner of a landfill gas-to-energy plant at Trail Road, with another similar plant under construction at Moose Creek. This technology has matured in the past five years, and is providing growing production and revenues, along with the environmental benefits of producing clean energy from previously flared-off landfill gas. In 2012, the PowerTrail facility was expanded through the addition of a sixth engine. The new facility at Moose Creek, which is also a joint-venture partnership, is expected to be in full operation in early 2013.

Solar power, distributed generation, co-generation, and district energy

opportunities also remain a focus for future growth. In particular, agreements are in place with the City of Ottawa to install solar panels on 20 municipal buildings, and a 12 megawatt ground-mounted solar facility at the former Nepean landfill. It is expected that within the time frame of the current plan, upgrades will be completed to the provincial transmission system that will enable these projects to move forward.

Energy Management and Conservation

Hydro Ottawa has also been a leader in energy management and conservation, creating innovative conservation programs that have now been adopted province-wide, and operating a growing commercial energy management service business.

Energy Ottawa's commercial electricity management dashboard

Conservation and energy management have become more pervasive in Hydro Ottawa's operations and culture in recent years. They are now part of our everyday interaction with customers.

Our focus for the next five years will be two-fold: to meet and exceed the aggressive conservation targets mandated by the province of Ontario, by providing innovative and user-friendly conservation options to

our customers; and continuing to be a leader in commercial energy-management services, helping businesses and institutions to enhance their financial and environmental performance while generating returns for our shareholder.

Beginning in 2011, Hydro Ottawa, like all utilities in Ontario, is mandated to meet aggressive multi-year targets for reduced energy consumption through conservation programs, as a condition of our electricity distribution license. The first round of targets must be achieved by 2014, and Hydro Ottawa is investing significant resources to do just that. Utilities that meet and exceed their targets will benefit from financial incentives. In the process, we have the opportunity to interact even more closely with our customers to help them manage their bills.

At the same time, and separate from these conservation programs and targets, Hydro Ottawa continues to expand its leading commercial energy services business, helping companies and institutions to reduce their energy costs. Revenues from this business line are projected to grow throughout the period of this plan, based on recognized expertise in a broad range of services, from opportunity analysis to design and implementation of "turnkey" energy efficiency projects. Our "Energy Dashboard" service, being launched in 2012, will provide monitoring, display and reporting of water, gas and

electricity usage for large commercial buildings, assisting customers in their conservation efforts.

As part of this business line, our Energy Services team continues to be the City of Ottawa's preferred partner for energy management initiatives, with numerous energy cost reduction projects planned and under way in facilities ranging from OC Transpo buildings to waste-water plants.

Integrated Utility Services

Achieving economies of scale is a common business strategy. And it is perhaps especially relevant to modern utilities. 21st century utilities require sophisticated and expensive systems for customer service management, billing and collections, and the safe and efficient operation of increasingly "smart" distribution networks. These systems may be out of reach for smaller utilities.

The core capabilities of electricity distributors are also very similar to those required to provide other utility services, from street lighting to water and wastewater. By leveraging assets and expertise to provide similar products and services, utilities can create synergies that deliver savings to ratepayers, and additional value to shareholders.

Over the term of this Strategic Direction, Hydro Ottawa will proactively seek opportunities to partner with municipalities and other utilities in service delivery.

4.4.3 ORGANIZATIONAL EFFECTIVENESS

Performance excellence. These two simple words convey Hydro Ottawa's objective in the area of Organizational Effectiveness. Our aim is to sustain a high performance workforce and operations that deliver ever-improving value to our customers and stakeholders, and ensure our company's success and sustainability.

We will do this by cultivating a culture of innovation and continuous improvement, and focusing on three outcomes in particular: a safe and healthy work environment; an engaged, aligned and prepared workforce; and efficient and effective operations that enhance the customer experience.

Health and Safety

A fundamental component of Hydro Ottawa's commitment to operating efficiently and effectively is the very high priority we place on protecting the health and safety of our employees and our community.

We have established an integrated health, safety and environment management system (HSE) that has achieved and maintained certification to the international standards of Occupational Health and Safety Assessment Series (OHSAS) 18001 and International Organization for Standardization (ISO) 14001 since November 2007; we provide safe work practices training for all employees consistent with industry best practices; and our company's safety performance has been solid over the past several years.

Health and Safety will continue to be a primary focus for the company throughout the period of this Strategic Direction.

Workforce Capacity and Capability

Recruiting, developing and retaining highly skilled employees is crucial to Hydro Ottawa's continued success. Like many other companies and utilities, Hydro Ottawa faces challenging workforce demographics that require a concerted response.

Hydro Ottawa stands to lose approximately 25 percent of our employees to retirement by 2017. In the next 10 years, more than half of the existing trades and technical talent within the company will be eligible for retirement.

To ensure success, we must not only recruit replacements for retiring workers, but also plan for and facilitate an effective transfer of knowledge and skills from our veteran workforce to the next generation.

Our comprehensive talent management strategy includes initiatives such as strategic workforce planning, in-house apprenticeship and intern programs, succession planning, training and development, reward and recognition, and employee and retiree engagement. This strategy will help to ensure operational capacity and continuity,

including the capability of our workforce to build and sustain relationships with our customers; innovate and transition to new technologies; develop new products, services and work processes; and meet changing business and regulatory demands.

Operational Performance and Productivity

As we prepare for a future of smart grids, evolving customer expectations, and increasing emphasis on conservation and renewable energy, efficient and effective operations that enhance the customer experience have never been more important to Hydro Ottawa.

Since 2007, Hydro Ottawa has set and achieved annual productivity improvement targets, focusing on maximizing the efficiency and effectiveness of our operations by reducing waste and optimizing productivity at every opportunity. We have also continued to leverage new technologies to allow us to identify and respond to problems in our distribution system more quickly, and to provide more information, more control, and added value to customers.

A focus on productivity and leveraging innovation and technology to improve efficiency and enhance service is a commitment we will continue over the course of this plan. Our approach will include listening to our customers to identify opportunities for innovation, reviewing our key work systems and

processes with a view to simplifying and improving interactions to make it easier to do business with us, and introducing new and innovative solutions that respond to customer needs and requirements.

As in the past, our technology decisions in the future will be based on two simple considerations: will they enhance service to the customer, or create efficiencies that will increase our competitiveness?

We will continue to invest in technologies that meet these criteria, and continue to integrate our existing technology to maximize benefits for our customers and our shareholder.

4.4.4 CORPORATE CITIZENSHIP

As a community company that delivers essential services to Ottawa residents—and whose predecessor companies have done so for more than 100 years—contributing to the well-being of the community has always been a part of Hydro Ottawa's core mandate. It's an integral part of our mission, to create long-term value for our shareholder, benefitting our customers and the communities we serve.

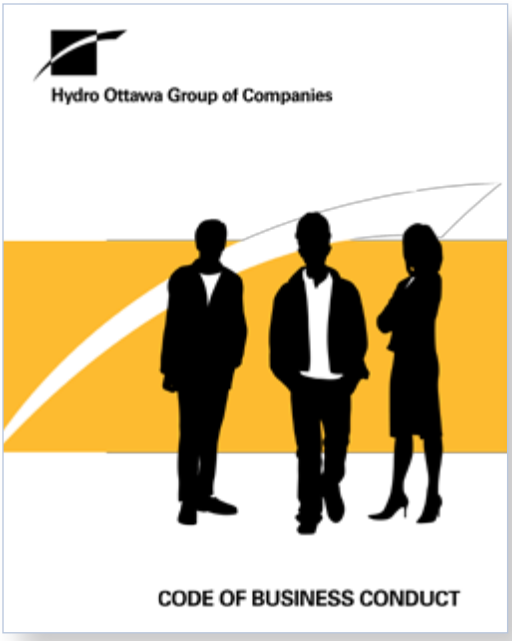
Out of this mandate, a commitment to fulfill our governance, environmental and social responsibilities as a company has naturally evolved. This is a commitment we will continue to enhance over the course of this plan.

This approach is not only true to our roots as a company; it enhances our corporate performance as well. As leading companies have come to realize, good corporate citizenship can and does drive growth in value, as stakeholder trust creates new opportunities, reassures regulators, increases customer loyalty, and attracts good business partners and talented employees.

To deliver on our commitment, we will continue to emphasize fours aspects of good corporate citizenship: good governance; stakeholder engagement; environmental sustainability; and investing in our community.

Corporate Governance

Hydro Ottawa has long recognized that good corporate governance is the glue that holds together responsible business practices. By making governance a core focus over the past several years, Hydro Ottawa has established leading governance practices for a company of its size and mandate, and adheres to high standards of integrity, transparency and disclosure. We will continue to ensure that this is the case, by regularly assessing emerging best practices, and comparing ourselves to the best-governed private and public sector organizations.



Stakeholder Engagement

We also recognize that maintaining the trust and confidence of our stakeholders is essential to the company's performance. We are committed to taking into account the concerns and interests of all our stakeholders including employees, customers, suppliers, our shareholder and the communities and environment in which we operate, and have entrenched our pledges to them as guiding principles to this strategic direction. We will continue to operate with the interests of these groups in mind, and will actively encourage their participation in shaping the future of the company. Our emphasis will be on increasing our understanding

of stakeholder requirements and perceptions, and timely, accurate, and transparent disclosure mechanisms and communication.

Environmental Sustainability

Hydro Ottawa is already making an important contribution to environmental sustainability by generating renewable energy and actively promoting energy conservation. Equally important, though, is the need to continuously reduce the impact of our own operations on the environment through the use of "green" technology, resource-conserving activities and practices, and other means. This has been an increasing focus for Hydro Ottawa in recent years through our Environmental Sustainability Strategy, and will continue to be a key goal over the course of the current plan.

Community Investment

Our company has a proud tradition of contributing to quality of life in our community, be it through our United Way campaigns that have raised over one million dollars since the company was formed over eleven years ago, our electricity safety and conservation presentations that have educated over 100,000 children and youth, our continuing efforts to help mitigate the impact of energy costs for those in need, and the volunteer contributions of our employees that have benefitted many community initiatives. These efforts will continue and grow as part of our community investment program going forward.

Creating long-term value for our shareholder

5. financial outlook

5.1 FINANCIAL OUTLOOK

This Financial Outlook presents high-level projections for Hydro Ottawa's revenues, expenses and major capital expenditures that support the company's business lines, and the key assumptions and risks that underlie these projections.

All financial data presented in the Financial Outlook is in accordance with Modified International Reporting Standards (MIFRS). In January 2006, the Canadian Accounting Standards Board announced the decision to replace Canadian Generally Accepted Accounting Principles (CGAAP) with IFRS. As a Government Business Enterprise, Hydro Ottawa is required to convert to IFRS. Hydro Ottawa has adopted Modified IFRS as the reporting standard, where the modification is to recognize regulatory assets and liabilities as incurred and as approved by the Ontario Energy Board (OEB). Hydro Ottawa had a cost of service electricity distribution rate application approved on this basis for rates effective January 1, 2012.

Hydro Ottawa's objective is to continue to provide efficient, reliable electricity distribution services to our customers at a competitive cost, and to generate electricity from renewable resources, while creating sustainable growth in our business and our earnings. We will achieve this by continuing to invest in our core distribution assets, improving productivity across all of our businesses, and pursuing business growth opportunities that leverage our strengths. Our main indicator of financial performance is our ability to create value for Hydro Ottawa's sole shareholder, the City of Ottawa, including dividends and growth in the company's equity.

Historically, Hydro Ottawa has achieved solid financial results, with growth in net income and shareholder equity. Since the introduction of a dividend policy in 2004, the company has delivered $121.3 million to its shareholder.

The financial projections outlined in this five-year *Financial Outlook* continue this trend of solid performance, with annual net income from current operations in the range of $26 to $31 million per annum, and projected dividends totalling $90 million by 2016.

When growth in equity and dividends are combined, the plan is expected to generate $150 million in shareholder value over the five-year period. This projection significantly exceeds that of the previous *2008–2012 Strategic Direction and Financial Outlook*, where shareholder value was projected to increase by $117 million.

Revenue and cost projections are derived from analysis of current and future economic trends, the regulatory environment, and capital investments required to maintain and upgrade our electricity distribution and generation infrastructure.

5.1.1 REVENUE PROJECTIONS

Hydro Ottawa's total revenues are projected to grow moderately over the period of the Financial Outlook, due largely to projected customer growth in our regulated business, and growth in generation and other non-distribution revenues.

The largest component in Hydro Ottawa's forecast of total revenues is the cost of power recovered from the customer through provincially established rates. The cost of power is a flow-through amount, which poses limited risk to Hydro Ottawa's financial performance either positively or negatively.

Hydro Ottawa's electricity distribution revenue — the portion of revenues that is collected from electricity customers and retained by Hydro Ottawa — makes up only 20 percent of a typical residential customer's electricity bill, with the balance being commodity charges and provincially regulated transmission charges, wholesale market charges, debt retirement charges, and harmonized sales tax.

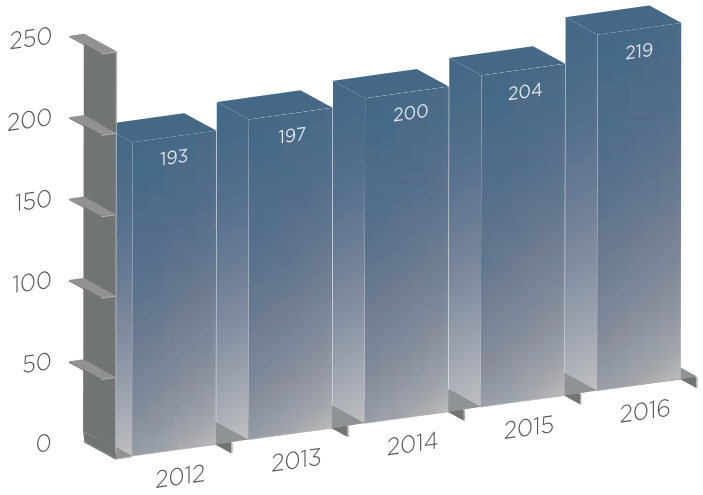
Electricity distribution revenues in 2012 retained by Hydro Ottawa reflect the impact of the distribution rate application approved on December 28, 2011. Distribution revenues beyond 2012 assume only a modest annual increase of 1.5 percent per annum arising from the OEB 3rd Generation Incentive Rate Making (3GIRM) mechanism, which adjusts rates annually based upon an inflationary index minus a productivity improvement factor. For the period 2009 to 2011, 3GIRM rate increases have been 1.18 percent, 0.18 percent, and 0.18 percent respectively. The assumption of 1.5 percent per annum also factors in organic growth in customers within the service territory.

This moderate inflationary adjustment is assumed through 2015, while full re-basing of electricity distribution rates is assumed again for 2016, in accordance with current OEB procedures for rate re-basing.

Electricity generation revenue from the Chaudière Falls generation stations on the Ottawa River are based on production assumptions derived from 40 years of historic water levels, and pricing in accordance with a 20 year Heritage Contract Pricing agreement secured in April 2010.

The Energy Services business line assumes the continuation and expansion of the existing business model and annual revenue growth.

The five-year revenue profile for Hydro Ottawa, excluding flow-through revenue, is as indicated in the chart below.



REVENUE > $ MILLIONS

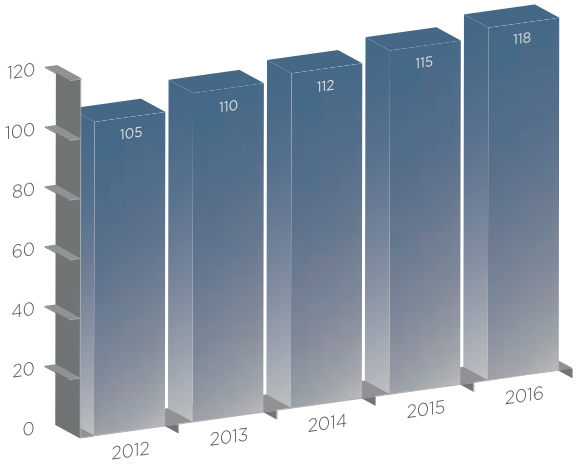
5.1.2 COST DRIVERS

Similar to its total revenues, Hydro Ottawa's largest component of operating expense is the cost of power purchased from the provincial grid, which will fluctuate based on the commodity price for electricity. This cost is designed by the OEB to be fully recoverable through the commodity rates charged to the customer. In the absence of regulatory change, there is limited risk to Hydro Ottawa's financial performance from the cost of power. Risk arises from Hydro Ottawa Limited's full responsibility for bad debts, and cash flow impacts from commodity rate increases, as the cost

of power is the single largest monthly expenditure of the company.

Operating, Maintenance and Administration Costs

The most significant cost directly controllable by management is operating, maintenance and administration (OM&A) expenses. This includes internal labour costs, materials, and external service contracts.



OPERATING, MAINTENANCE AND ADMINISTRATION EXPENSES > $ MILLIONS

A key financial challenge for Hydro Ottawa is that as noted above, under the current 3rd Generation Incentive Rate Making mechanism, the largest revenue source is projected to inflate by 1.5 percent per annum on average through 2015. Curtailing annual spending increases to that rate with a growing customer base and a primarily unionized labour force is a challenge. Even with cost control and productivity improvement, OM&A costs escalate faster than revenue in years between rate rebasing.

The 2012 projection reflects cost control in accordance with the OEB decision on the 2012 Rate Application. Hydro Ottawa's 2012 OM&A level reflects an annual increase of 2.5 percent per annum since the previous rate re-basing in 2008. This reflects controlled OM&A growth, while ensuring that all strategic priorities are advanced within this funding envelope.

Hydro Ottawa achieves annual productivity improvements to enhance financial performance and contain costs. This practice will be continued throughout the period of the plan. Productivity improvements are a must to partially offset the rising cost of labour, materials, and external service contracts integral to our business.

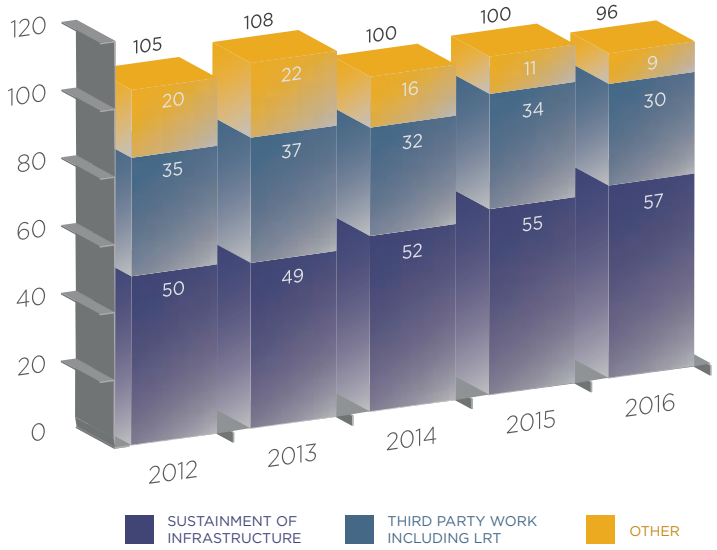
Capital Expenditures

Another significant cost driver for Hydro Ottawa is the capital expenditure program required for the maintenance and enhancement of infrastructure. Hydro Ottawa's electricity distribution

and generation reliability is contingent upon life-cycle investment programs accelerating in the coming years. The regulated distribution business will incur the majority of capital expenditures, as we continue to invest to sustain the reliability of the distribution system. Programs include station and distribution system rehabilitation and upgrades, and expansion of sub-stations to accommodate customer growth and provide sufficient capacity for emergency and peak load situations.

While the majority of capital investment is attributable to ensuring the ongoing reliability and replacement of aging infrastructure, additional investments are necessary for the upgrade of the Customer Care and Billing System in order to respond to increasing market and regulatory changes, and for expansion and changes to third party electrical infrastructure.

Hydro Ottawa will also be a key strategic partner in the City's Light Rail project (LRT) over the period of this financial plan, as critical capital investments are required to ensure the operation and the reliability of the system.



GROSS CAPITAL EXPENDITURES > $ MILLIONS

Capital investment plans are in line with those presented to the OEB as part of the approved 2012 electricity distribution rate application, and are consistent with the needs identified in Hydro Ottawa's Asset Management Plan.

Hydro Ottawa's amortization expense and financing charges are reflective of the capital investment described above, and as a result are projected to increase over the period.

In summary, with the rate rebasing approved for 2012, Hydro Ottawa's electricity distribution operations are appropriately funded. Over the subsequent years, in the absence of new opportunities, electricity revenue growth is not projected to keep pace with cost increases arising from customer growth and contractual and inflationary pressures. With cost control and productivity improvements in place, current operations are projected to generate $140 million in net income.

Revenues and Expenses — Financial Projections

	FINANCIAL OUTLOOK				
Consolidated Statement of Income ($ Millions)	2012	2013	2014	2015	2016
Revenues					
Power Recovery	693	725	763	803	845
Distribution and Other Revenues	193	197	200	204	219
	885	**922**	**963**	**1007**	**1064**
Expenses					
Purchased Power	693	725	763	803	845
Operating, Maintenance & Administration	106	110	112	115	118
	798	**835**	**875**	**918**	**963**
EBITDA	**87**	**88**	**88**	**89**	**101**
Amortization, Interest, Taxes	59	60	61	63	70
Net Income from Current Operations	***28***	***28***	***27***	***26***	***31***

5.1.3 GROWTH IN BUSINESS AND EARNINGS

Hydro Ottawa is committed to expanding existing business lines and growing earnings beyond the projections arising from current operations. Hydro Ottawa will continue to pursue business growth opportunities that will leverage its operational and financial strengths, and increase shareholder value, as follows:

i) BUSINESS DEVELOPMENT expanding the electricity distribution business beyond its current service territory, expanding hydroelectric and other renewable generation capacity, and diversification of business lines with a focus on compatible, low risk opportunities that offer stable long-term returns.

   For example, In accordance with the Shareholder Declaration issued by Ottawa City Council, Hydro Ottawa continues to pursue the objective of having all electricity customers within the City of Ottawa receive electricity distribution services from its Local Distribution Company. In addition, strategic partnerships with the City of Ottawa are under review, to ensure common services are provided in the most efficient and effective manner for the ratepayer.

ii) REGULATORY MODEL REVIEW For the subsequent three years of the plan in which no cost-of-service application is expected to be filed, adjustments to distribution rates under 3GIRM may be permitted for incremental capital costs above a prescribed threshold, which may be attained as Hydro Ottawa is required to invest in replacement and expansion of aging infrastructure. In addition, Hydro Ottawa will continue to monitor and influence the Renewed Regulatory Framework for Electricity proceeding underway at the Ontario Energy Board.

iii) CONSERVATION AND DEMAND MANAGEMENT PROGRAM INCENTIVES The current contract with the Ontario Power Authority has prescribed very aggressive conservation targets for the period 2011-2014. To the extent Hydro Ottawa can exceed these targets by promoting and empowering conservation in local customers, financial incentives may be achieved beyond those assumed in the current financial projections.

As noted above, current business operations are projected to generate $140 million in net income over the five-year plan. Business growth opportunities should add as much as $10 million over the period, for a combined net income projection of $150 million, and resulting dividends of $90 million. Returns on growth are expected to be realized primarily in the outer years of the plan, while investments will take place throughout.

ANNUAL NET INCOME > $ MILLIONS

Business development initiatives may require additional capital investment over the period of the Financial Outlook. It is anticipated that any new financing requirements can be met through unused capacity in existing credit facilities or project financing, and will not compromise the sustainment of existing electricity distribution and generation infrastructure.

5.2 RISKS AND UNCERTAINTIES

The ability to manage and mitigate risk, to maintain flexibility, and to respond effectively to changes in our business environment will be critical to Hydro Ottawa's continued success.

While we are confident in our assessment of Hydro Ottawa's business environment as a whole, future events may differ significantly from what we expect. Some of our assumptions may prove unwarranted, subsequent events will change the complexion of current trends, and not all opportunities currently envisaged will turn out to be viable.

Our Enterprise Risk Management (ERM) system establishes the infrastructure to allow us to predict and respond to risks and opportunities impacting our

Strategic Direction and business activities, and to do so in an effective, consistent and integrated manner. Our three-year Business Planning cycle, with annual updates, also enables continuous review of assumptions and the state of the market in which we operate.

Some of the key factors that could adversely impact the achievement of the projected results outlined above include the following.

Policy and Regulatory Environment

Hydro Ottawa's largest businesses operate in a regulated environment. Our business performance could be adversely affected by significant policy and regulatory changes, including but not limited to changes in rate regulation, policies relating to the production and procurement of renewable and clean energy, conservation and demand management, the consolidation of electrical utilities, restrictions on utility service provision, or changes to license requirements.

The OEB approves local electricity distribution rates based on projected consumption levels. If actual experience varies from the projections, Hydro Ottawa's net income will be affected.

Provincial Conservation Demand Management programs call for a 1,330 megawatt reduction in Ontario's peak electricity demand and 6,000 gigawatt hours of reduced electricity consumption by 2014. The OEB has recognized the need to compensate for such lost revenue, but there is no certainty that such compensation will be sufficient to cover all lost revenue.

Should adverse regulatory decisions impact revenues or costs by as little as 1 percent, a reduction of over $1.5 million per year in net income could result.

Weather

Severe weather can significantly impact financial results. Storms increase maintenance costs to repair or replace damaged equipment and infrastructure needed to ensure the reliability of the electricity distribution system. Weather fluctuations also influence distribution revenues, which tend to increase with severe weather and decrease with moderate weather, and renewable energy production, which depends upon factors such as water flows (hydroelectric).

Economy

The state of the local, provincial, and national economy could have a significant impact on Hydro Ottawa's business performance, through factors such as interest rates, inflation, customer credit conditions, and weakening demand for electricity and/or value-added services. Net income risk arising from uncertain economic conditions comes in many forms. A change of 0.5 percent on long-term interest rates could impact the plan from 2015 forward by $1.25 million per year. A 1 percent reduction in electricity use creates a risk of over $1 million per year in loss of revenue and net income, unless there is a corresponding reduction in expenses, which may not be feasible in a sector heavily driven by fixed costs. A 1 percent reduction in customer growth creates a risk of over $0.5 million per year.

Dependence on Partners

The growth opportunities identified in the strategic plan may depend upon the presence of willing partners, and/or partners that perform to expectations. An absence of willing merger or acquisition partners, or of municipalities willing to partner on utility service delivery, could negatively impact Hydro Ottawa's ability to deliver on its financial objectives, as could the underperformance of key business partners.

Labour Force Demographics

An inability to recruit and retain a sufficient number of skilled employees could negatively impact Hydro Ottawa's ability to deliver on the objectives set out in the strategic plan. Current workforce demographics across the electricity sector present an emerging

risk that must be managed, particularly in the trades, as retirements are outpacing new entrants to the workforce. Apprentice training and succession planning programs are underway to mitigate this risk.

Technology Infrastructure

Hydro Ottawa's business performance is dependent upon complex technology systems, including administrative information technology, customer care and billing information systems, advanced metering, and operational technologies. The failure of one or more of these key systems, or a failure of the company to plan effectively for future technology needs or transition effectively to technology systems such as the provincial Meter Data Management and Repository system could adversely impact the company's business performance.

5.3 CONCLUSION

Subject to the risks and uncertainties presented in this document, Hydro Ottawa will continue to provide efficient, reliable electricity distribution services to customers at a competitive cost, generate power from renewable sources, and provide energy services and conservation expertise while maintaining sustainable earnings. The company will achieve this by continuing to invest in core distribution assets, improving productivity, and pursuing business growth opportunities that leverage corporate strengths.

With the successful approval of the 2012 Electricity Distribution Rate Application by the OEB on December 28, 2011, the company's regulated subsidiary is well positioned for 2012, but faces the financial challenge of cost increases that are projected to outpace organic revenue growth.

The company continues to actively pursue opportunities for expansion in non-regulated business lines in accordance with the endorsed strategy, as evidenced by the commencement of construction of a second landfill gas collection and utilization system by its newly formed joint venture: Moose Creek Energy LP.

Despite the financial challenges and risks noted, Hydro Ottawa will generate significantly greater shareholder value than the previous five-year plan.

Monitoring progress

6. governance and reporting

Accountability for the effective operation of the Corporation and its subsidiaries rests with an eleven member Board of Directors, which provides direction to the Corporation on behalf of the shareholder, the City of Ottawa. The Board provides leadership for the company within a framework of effective controls that enables risks to be assessed and managed, and is responsible for supervising the management of the business and affairs of the company and its subsidiaries.

In carrying out its oversight function, the Board of Directors is guided by a Shareholder Declaration issued by Ottawa City Council and revised from time to time.

In 2006, a separate Board of Directors was established to oversee the operations of Hydro Ottawa Limited, in accordance with the Affiliate Relationships Code for Electricity Distributors and Transmitters issued by the Ontario Energy Board. The powers and functions of that Board are set out in a Shareholder Declaration issued by the Hydro Ottawa Holding Inc. Board of Directors.

On a day-to-day basis, the Corporation is led by an Executive Management Team, comprising the Corporation's President and Chief Executive Officer, the Chief Financial Officer and the senior executives of the subsidiaries and critical function areas. This team oversees the alignment of business practices and strategies with the goals of the Corporation, and drives

performance by managing risks and opportunities. The Executive Management Team is accountable to the Corporation's Board of Directors through the President and Chief Executive Officer.

The Board will monitor progress against the strategic plan on a quarterly basis and make adjustments as required by changing circumstances. The Corporation will report on progress annually to the Shareholder, at the time of the Annual General Meeting. A summary of the Corporation's financial results is provided to the shareholder on a quarterly basis through the City Manager.

Quality in a service or product is not what you put into it. It is what the customer gets out of it. Good service is good business. It's not the employer who pays the wages. Employers handle the money. It is the customer who pays the wages. It is not the strongest of the species that survives, nor the most intelligent, but the one most responsive to change. If you do build a great experience, customers tell each other about that. Word of mouth is very powerful. The more you engage with customers the clearer things become and the easier it is to determine what you should be doing. Know what your customers want most and what your company does best. Focus on where those two meet. Customer service is not a department, it's everyone's job. A customer is the most important visitor on our premises, he is not dependent on us. We are dependent on him. He is not an interruption in our work. He is the purpose of it. He is not an outsider in our business. He is part of it. We are not doing him a favour by serving him. He is doing us a favour by giving us an opportunity to do so. The most important adage and the only adage is, the customer comes first, whatever the business, the customer comes first. Quality in a service or product is not what you put into it. It is what the customer gets out of it. Good service is good business. It's not the employer who pays the wages. Employers handle the money. It is the customer who pays the wages. It is not the strongest of the species that survives, nor the most intelligent, but the one most responsive to change. If you do build a great experience, customers tell each other about that. Word of mouth is very powerful. The more you engage with customers the clearer things become and the easier it is to determine what you should be doing. Know what your customers want most and what your company does best. Focus on where those two meet. Customer service is not a department, it's everyone's job. A customer is the most important visitor on our premises, he is not dependent on us. We are dependent on him. He is not an interruption in our work. He is the purpose of it. He is not an outsider in our business. He is part of it. We are not doing him a favour by serving him. He is doing us a favour by giving us an opportunity to do so. The most important adage and the only adage is, the customer comes first, whatever the business, the customer comes first. Quality in a service or product is not what you put into it. It is what the customer gets out of it. Good service is good business. It's not the employer who pays the wages. Employers handle the money. It is the customer who pays the wages. It is not the strongest of the species that survives, nor the most intelligent, but the one most responsive to change. If you do build a great experience, customers tell each other about that. Word of mouth is very powerful. The more you engage with customers the clearer things become and the easier it is to determine what you should be doing. Know what your customers want most and what your company does best. Focus on where those two meet. Customer service is not a department, it's everyone's job. A customer is the most important visitor on our premises, he is not dependent on us. We are dependent on him. He is not an interruption in our work. He is the purpose of it. He is not an outsider in our business. He is part of it. We are not doing him a favour by serving him. He is doing us a favour by giving us an opportunity to do so. The most important adage and the only adage is, the customer comes first, whatever the business, the customer comes first.

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Response to Consumers Council of Canada Interrogatory Question #14

Reference:(Ex. A/T3/S1)

Question #14:

Please provide a schedule which sets out detailed historical costs related to all Customer Engagement activities and forecast costs for the period 2012-2020.

Response:

Table 1 below sets out the OM&A costs related to all customer engagement activities for 2012-2016 and Table 2 below sets out the capital costs for 2012-2020.

Table 1: 2012-2016 Customer Engagement OM&A Costs ($000's)

	2012 Actual	2013 Actual	2014 Actual	2015 Budget	2016 Budget
Call Center	4,938	4,811	4,954	5,046	5,098
Web Site Costs	90	103	196	538	549
Customer Experience	980	885	677	1,220	1,381
Key Accounts	110	114	166	254	262
LEAP Program	185	187	187	191	210
Communications	1,356	1,326	1,000	1,309	1,354
Other Community Relations	58	148	158	227	232
Total Customer & Community Relations	***7,716***	***7,574***	***7,338***	***8,785***	***9,085***
Conditions of Service	-	-	21	34	-
Hosting for MyHydroLink	46	49	51	55	56
Custom IR Application	-	-	5	135	-
Total Customer Engagement - OM&A	**7,762**	**7,622**	**7,415**	**9,009**	**9,141**

Table 2: 2012-2020 Customer Engagement Capital Costs ($000's)

	2012 Actual	2013 Actual	2014 Actual	2015 Budget	2016 Budget	2017 Budget	2018 Budget	2019 Budget	2020 Budget
Customer Experience	131	146	115	486	972	1,183	162	162	101
CC&B Program	10,050	13,051	5,033	1,958	2,763	870	774	6,344	785
Web Site	185	192	259	5	5	308	213	152	253
Total	**10,365**	**13,389**	**5,407**	**2,450**	**3,740**	**2,361**	**1,148**	**6,658**	**1,139**

Response to Consumers Council of Canada Interrogatory Question #15

Reference: (Ex. A/T3/S1/p. 20)

Question #15:

Was the work produced by Innovative Research Group subject to an RFP process? If so, please provide the RFP. If not, why not? Please provide the Terms of Reference for the Innovative Research work. What is the total expected cost of this work? Please identify any aspects of the Application that were changed as a result of this research.

Response:

The services provided by Innovative Research Group (INNOVATIVE) were procured through a Direct Source Rationale. INNOVATIVE provided a unique stakeholder consultation service that was required by Hydro Ottawa as part of the 2016 rate application. In particular, INNOVATIVE had significant experience delivering customer engagement research programs for other LDCs, including programs for other Ontario utilities that meet and exceed the customer-centric approach detailed in the Ontario Energy Board's *Renewed Regulatory Framework for Electricity Distributors.* The time, effort and expense of a competitive procurement process were not deemed justified, given the nature of goods and services being acquired.

INNOVATIVE was responsible for the following key deliverables:

- Developing draft consultation materials
- Conducting workbook testing with customer focus groups
- Developing online workbook consultation
- Conducting workbook-led customer focus groups
- Conducting Mid-market customer workshops

- Conducting the telephone survey
- Validating the survey
- Producing a report of the customer engagement findings

The total costs incurred to date with respect to the customer engagement work relating to the 2016 rate application, by INNOVATIVE is $139,798.

As a result of Hydro Ottawa's customer engagement activities with respect to the 2016 rate application, no material changes were made to the Application. The INNOVATIVE survey helped to validate the work that Hydro Ottawa has been doing – work that has been prioritized based on Hydro Ottawa's ongoing customer engagement. For further details, please see Interrogatory Response to OEB Staff Question #9.

Response to Consumers Council of Canada Interrogatory Question #16

Reference: (Ex. A/T6/S9)

Question #16:

Hydro Ottawa expects to be in a position to file a new lead/lag study in Q3 of 2015. What is the status of the study? Who is undertaking the study? Is Hydro Ottawa proposing that the results of that study be used in setting rates for the years 2016-2020? If not, why not?

Response:

a. Work has begun on generating and analysing the data necessary to produce the lead/lag study.

b. The study will be completed an external consulting firm.

c. Yes, Hydro Ottawa is proposing that the results of the study inform rate setting for the 2016-2020 term.

Response to Consumers Council of Canada Interrogatory Question #17

Reference: (Ex. B/T1/S2/p.135/Table 3.1.2)

Question #17:

The Capital program/System Access/Plant relocation is described as work triggered by 3rd party typically 50% contributed capital. Please explain why the contribution would only be 50% when the work is triggered by 3rd party projects. Please provide the specific % contribution for each type of plant relocation Hydro Ottawa is involved with.

Response:

To clarify the section in Exhibit B-1-2 Table 3.1.2 – System Access Capital Program & Budget Program Descriptions pertaining to plant relocation, the majority of Hydro Ottawa Limited plant relocations are at the request of the road authority.

As per Hydro Ottawa Limited's Conditions of Service (please see Exhibit A-6-10 – Conditions of Service), "If a Customer requests the relocation of Hydro Ottawa plant, Hydro Ottawa will, if feasible, accommodate such a request if it does not pose a risk to public or worker safety, or result in degradation of system capacity, reliability, operability, or maintainability. In the absence of existing agreements or legislation, Hydro Ottawa is not obligated to relocate its plant; however, if relocation is feasible, the Customer shall be responsible for the Costs of relocation." This also applies to other utilities requesting Hydro Ottawa Limited to relocate its plant.

However, where the Ministry of Transportation & Communications requires the relocation of Hydro Ottawa Limited plant located on or adjacent to right-of-ways under the Ministry's jurisdiction and control, the Public Service Works on Highways Act cost

sharing shall apply. Relocations initiated by the City of Ottawa road authority for the purposes of road widening also follow this formula. This applies for:

- Like for like utility relocations associated with road geometry changes that would cause safety hazard to road traffic; or
- Road authorities work on its road related structures (e.g. Storm sewers, bike lanes, sidewalks, and sound barriers)

The following cost sharing formula will apply:

- When the road authority has requested Hydro Ottawa Limited to relocate its plant within 5 years from road authority's approval for new plant, the road authority shall pay the Actual Costs of the plant relocation
- When the road authority has requested Hydro Ottawa Limited to relocate its plant after 5 years from the road authority's approval for new plant and where no provisions for cost sharing is provided for by prior agreement or permit, the road authority shall pay 50% of the cost of labour.
- When the road authority has requested Hydro Ottawa Limited to relocate its plant after 5 years from road authority's approval for new plant and where provisions for cost sharing is provided for by prior agreement or permit, the road authority shall pay as provided for in the agreement or permit.

Actual costs means all costs related to the relocation of the plant excepting costs such as preliminary meetings with road authority personnel. These costs may include the cost of planning, design, site supervision, inspection easements, etc.

Labour means the actual wages paid to all workmen up to and including the foreman for time actually spent on the work and in travelling to and from the work and the cost of food, lodging, and transportation for such workmen where necessary for the proper carrying out of the work. Labour costs may also include:

- The cost of using mechanical labour savings equipment in the work; and
- Necessary transportation charges for equipment used in the work;

Response to Consumers Council of Canada Interrogatory Question #18

Reference: (Ex. B/T1/S2/p.222/Table 3.4.3/Table 3.4.4)

Question #18:

Please provide the categories of plant relocation project (i.e. the City of Ottawa Light Rail Transit) for each year and the percentage of cost that Hydro Ottawa had/will have to pay for each category.

Response:

Hydro Ottawa does not classify its plant relocation spending beyond the Program level. Please see the Tables below for the percentages of cost that Hydro Ottawa paid/will have to pay for each category for years 2011 – 2020.

Table CCC #18 – 1: Plant Relocation & Upgrade Expenditures & Contributions 2011-2014:

	Actual			
	2011	**2012**	**2013**	**2014**
Expenditures ($'000)	7,743	5,942	10,005	9,207
Contributions ($'000)	- 5,148	- 3,911	- 4,417	- 6,195
% paid by HOL	34%	34%	56%	33%

2015 – 2020:

	Budget					
	2015	**2016**	**2017**	**2018**	**2019**	**2020**
Expenditures ($'000)	7,814	7,620	7,773	7,928	8,087	8,248
Contributions ($'000)	- 4,842	- 4,573	- 4,664	- 4,757	- 4,852	- 4,949
% paid by HOL	38%	40%	40%	40%	40%	40%

Response to Consumers Council of Canada Interrogatory Question #19

Reference: (Ex. B/T1/S2/p.226/lines7–11)

Question #19:

The evidence states that, "Hydro Ottawa expects the spending in this category to remain at the current levels through to 2020" for the reasons listed in this section. Please explain why Hydro Ottawa has not included actual forecasted costs for these projects since most of the projects in this category will already be planned into the future, with known projected costs and percentage on contribution? Please provide these costs and percentages.

Response:

Hydro Ottawa Limited forecasts the future spend on plant relocation in Exhibit B-1-2 Table 3.4.4 – System Access Forecasted Spend.

The majority of the plant relocation work is driven by the City of Ottawa. These projects are not yet specifically planned, however through working closely with the City of Ottawa it is anticipated that expenditure levels will remain consistent.

Please see Interrogatory Response to CCC #17 for information on the percentage of contribution.

Response to Consumers Council of Canada Interrogatory Question #20

Reference: (Ex. B/T1/S2/Table 3.4.3)

Question #20:

The evidence states that trends should remain consistent with the historic values. Given the actual costs in 2014 are 16% less than forecast should the projected costs for 2016 to 2020 shown in table 3.4.4 not be updated?

Response:

Residential spending was 16% below budget in 2014, it is assumed that this is the point that this question is referring to.

HOL maintains that the values in Table 3.4.4 are valid. Prior to 2014 the two-year rolling average on Residential spending was $6.8M in 2012 and $6.4M in 2013. Hydro Ottawa's 2016 – 2020 forecasted Residential spending more closely reflects historical trending prior to the variance experienced in 2014. In addition, approximately 100% of Residential spending is contributed by 3rd parties. Hydro Ottawa does not expect this contribution ratio to change in the future so any forecasted increases in Residential spending are negated by the offsetting contributions.

Response to Consumers Council of Canada Interrogatory Question #21

Reference: (Ex. B/T1/S2/Table 3.4.3 and p.223)

Question #21:

The evidence states that the overall trend has seen a relatively consistent spending profile. This is not illustrated in Table 3.4.3 where it is shown that Commercial System Access in 2014 was $3M less than in 2013. Even with this 23% downturn Hydro Ottawa has forecasted a $5M increase in 2015 from 2014 and another increase in 2016 of over $1M greater than the 2015 forecast. Please explain the rationale for these large increases in the plan years.

Response:

Prior to 2014 Hydro Ottawa saw its two-year rolling average on Commercial System Access spending increase from approximately $9.4M in 2011 to $10.5M in 2012 to $11.2M in 2013 which represent annual increases in the range of 7% - 12%. In 2014 there were several customer-driven delays that caused spending to be lower than in prior years which have been factored into the 2015 forecast. Hydro Ottawa's 2016 forecast amount of $13.4M represents a 9% increase over the 2015 forecasted total which is in line with the increases to the two-year averages excluding 2014.

In addition, historically approximately 90% of the spending on Commercial System Access projects was contributed by 3rd parties. Hydro Ottawa does not expect this contribution ratio to change in the future which reduces the impact of any forecasted spending increases.

Response to Consumers Council of Canada Interrogatory Question #22

Reference: (Ex. B/T1/S2/Table 3.4.3)

Question #22:

Are there any 3rd party contributions for System Expansion work? If so, please list what they were and are expected to be for the years 2011 – 2020.

Response:

Please see the Table below for gross spending and contributions received for System Expansion work for the years 2011 – 2014 and expected contributions to be received for the years 2015-2020.

Table CCC #22-1: System Expansion Expenditures and Contributions

2011-2014:

($000s)	Actual			
	2011	2012	2013	2014
Expenditures	2,881	1,682	5,917	9,464
Contributions	-520	-430	-2,609	-1,092
% of cost paid by HOL	82%	74%	56%	88%

2015-2020:

($000s)	Budget					
	2015	2016	2017	2018	2019	2020
Expenditures	3,727	3,479	2,366	2,413	2,462	2,511
Contributions	-1,620	-872	-591	-603	-615	-628
% of cost paid by HOL	57%	75%	75%	75%	75%	75%

Based on historical trends roughly 25% of the cost of System Expansion work is contributed by 3rd parties. The amounts vary subject to the Economic Evaluation model and the nature of the work (e.g. 100% of the cost is contributed for Connection Assets). 2013 was a record high 44% contributed due to an anomaly with a large Public Works and Government Services Canada (PWGSC) project which was 100% contributed. This project will also distort the average rates. For budgeting purposes, Hydro Ottawa used a normalized rate of 25%.

Response to Consumers Council of Canada Interrogatory Question #23

Reference: (Ex.B/T1/S2/Table 3.4.3)

Question #23:

Are there any 3rd party contributions for Infill & Upgrade work? If so please list what they were/are expected to be for the years 2011 – 2020.

Response:

Please see the Table below for contributions received for Infill & Upgrade work for the years 2011 – 2014 and expected contributions to be received for the years 2015-2020.

Table CCC #23 -1: Infill & Upgrade Expenditures & Contributions

2011-2014

($000s)	Actual			
	2011	2012	2013	2014
Expenditures	2,661	2,731	3,178	3,291
Contributions	-1,772	-993	-1,432	-1,377
% of cost paid by HOL	33%	64%	55%	58%

2015-2020:

($000s)	Budget					
	2015	2016	2017	2018	2019	2020
Expenditures	3,075	3,160	3,223	3,288	3,353	3,420
Contributions	-1,233	-1,265	-1,289	-1,315	-1,341	-1,368
% of cost paid by HOL	60%	60%	60%	60%	60%	60%

Based on historical trends roughly 40% of the cost of Infill & Upgrade work is contributed by 3rd parties. The amounts vary subject to the Economic Evaluation model and the nature of the work (e.g. 100% of the cost is contributed for Connection Assets). 2011 was a higher than usual 67% contributed due to a spike in Microfit connections. These contributions will also distort the average rates. For budgeting purposes, Hydro Ottawa used a normalized rate of 40%.

Response to Consumers Council of Canada Interrogatory Question #24

Reference: (Ex. B/T1/S2/p.138/Figure 3.1.2)

Question #24:

This Figure illustrates the breakdown for the System Renewal Investment Category. It illustrates the capital programs that match the categories shown in Tables 3.4.5 and Table 3.4.6 (Ex. B/T1/S2p.228-229). Figure 3.1.2 also illustrates the budgeted programs and projects. Attachment B-1(A) then describes each project. Please expand Tables 3.4.5 and Table 3.4.6 to include the list of budgeted programs and the specific projects for Station Assets and Distribution Assets (since they are above the threshold dollar value) in the year they are in-service. CCC is looking to cross-reference these Tables with the projects listed in Attachment B-1(A).

Response:

Attachment B-(1)A – Material Investments includes a program level business case for each program in System Renewal. It also provides project details for each of the projects in 2016. System Service includes business cases for projects with budgets that exceed the materiality threshold.

Table CCC #24-1 shows 2016 project budgets for each of the projects within System Renewal and System Service.

1 **Table CCC #24 – 1: 2016 Project Budgets**

System Renewal Forecasted Spend			
Capital Program	**Budget Program**	**Project**	**2016**
Stations Assets	**Stations Transformer Repl.**	92008485 - Merivale DS Rebuild	$6,530,468
		92008491 - Longfields XFRM Base Rpl- Incl	$578,377
		92008579 - TFX Repl-13/4kV AlbionUA T1&T2	$1,973,419
		92008661 - XFRM Repl. Bronson SBT1 & SBT2	$1,647,056
	Stations Switchgear Repl.	92008657 - Woodroffe TW - 13kV SG Replac	$3,421,729
		92010156 - Munster Recloser	$217,658
		92010241 - Overbrook TO Switchgear Rep	$1,145,963
		92010243 - Casselman Reclosers	$378,671
		92010319 - Henderson Switchgear Repl	$259,965
	Stations Plant Failure	92004361 - Plant Failure Stations	$184,661
Stations Assets Total			**$16,337,967**
Stations Refurbishment	**Stations Enhancements**	92001012 - Station Replacement	$505,400
		92010247 - Langs Battery Replacement	$59,290
		92010402 - Slater SA Cable Racking Repl.	$32,327
Stations Refurbishment Total			**$597,017**
Distribution Asset	**Pole Replacement**	92006287 - 43D2D- PofW and Greenbank	$2,456,004
		92008625 - Centretown East Pole Repl.	$2,600,000
		92010158 - Trans-Canada Pole Line	$670,228
		92010253 - Alphabet Avenue Phase 1 Pole	$1,223,795
		92010273 - Centretown West Pole Repl. 1.1	$440,000
		92008551 - 64A3A - South East Kilborn Area Pole Repl	$1,250,921
	Elbow & Insert Repl.	92010229 - 2016 Elbow/Insert Gloucester 6	$289,165
	Distribution Trans. Repl.	92008627 - PCB Regulatory Compliance -Ph3	$364,743
		92010279 - Submersible Transformer Repl	$442,456
	Civil Rehabilitation	92010283 - New Civil on Carling	$2,602,393
		92010285 - 2016 Manhole Replacement	$551,000
	Cable Replacement	92008567 - Stittsville Main Upgrades	$1,297,916
		92008609 - Blackburn 4F8 - Phase 4	$1,610,836
		92010206 - Butyl Rubber - Tanglewood Subd	$2,540,156
		92010289 - Pothead Repl. @ 470 Cambridge	$25,127
		92010472 - 2016 Cable Injection	$500,000
	Switchgear	92010160 - S98 Replacement	$170,666

	New & Rehab	92010162 - S54 Replacement	$170,665
		92010164 - S45 Replacement	$170,666
		92010166 - S584 Replacement	$170,666
		92010168 - S62 Replacement	$170,666
		92010212 - SE20 Replacement and Relocation	$107,818
		92010261 - SW89 S/G Replacement	$122,855
		92010263 - SW190 S/G Replacement	$125,159
	O/H Equipment New & Rehab	92010170 - Ferbank Reclosers	$165,000
		92010172 - TFXF1 Huntmar Recloser	$83,000
		92007746 - SMD-20 Switch Replacement	$536,572
	Distribution Plant Failure	92004299 - Plant Failure O/H Switches	$106,325
		92004300 - Plant Failure Padmoun Switches	$105,801
		92004301 - Plant Failure Polemount TFRMS	$158,740
		92004302 - Plant Failure Padmount TFRMS	$958,420
		92004303 - Plant Failure XLPE Cable	$209,712
		92004304 - Plant Failure PILC Cable	$247,217
		92004306 - Plant Failure Primary O/H Cond	$149,874
		92004307 - Plant Failure U/G Sec. Service	$96,247
		92004308 - Plant Failure O/H Sec. Service	$85,074
		92004309 - Plant Failure Manholes & Bases	$22,581
		92004310 - Plant Failure Duct Structures	$22,117
		92004311 - Plant Failure Insulators	$46,675
		92004312 - Plant Failure Elbows & Inserts	$43,472
		92004313 - Plant Failure Dist. Arrestors	$20,459
		92004314 - Plant Failure Poles	$542,716
Distribution Asset Total			**$23,673,903**
Metering	**Remote Disconnect Smart Meter**	92003564 - Remote Disconnected Smart Meter	$414,570
Metering Total			**$414,570**
Grand Total			**$41,023,457**

1

System Service Forecasted Spend			
Capital Program	**Budget Program**	**Project**	**2016**
Stations Capacity	Stations New Capacity	92008537 - New South 28KV Substation	$140,000
		92008593 - Richmond South DS	$3,315,359
		92008899 - TFX New Leitrim T1 (Island)	$2,213,855

Stations Capacity Total			**$5,669,214**
Distribution Enhancements	Line Extensions	92008531 - West 44kV OH Line Extension	$1,995,330
		92010174 - Springbrook Drive Trunk	$990,342
		92010176 - Abbott Street Trunk	$1,023,392
		92010178 - Granite Ridge Trunk	$511,668
		92010180 - Richardson Side TFX/MWD/KAN	$736,778
		92010182 - Sweetnam Rebuild and Extension	$258,336
		92010265 - 77M2 Ext Mer Bleue Nav Renaud	$692,516
		92010269 - 2207 Transfer	$251,778
		92010291 - TM1AH Capacity Upgrade	$997,852
		92010293 - TH1UL/UL1AH Line Upgrade	$63,641
	System Voltage Conversion	92008794 - Nicolls Island Voltage Conv	$100,429
		92010184 - Goulbourn St Voltage Convers	$801,609
		92010186 - Richmond Volt Conv - McBean	$971,285
		92010188 - Richmond Voltage Conv - Shea	$665,351
		92010295 - Convert Vaults on SA19	$219,226
	System Reliability	92009223 - Worst Feeder Betterment 13-20	$158,913
		92010190 - Fairwinds Tie	$137,864
		92010297 - Load meter on Secondary Vaults	$31,745
	Dist. Minor Enhancements	92001781 - Low Value Stock	$472,372
		92009227 - Level C Design Time	$209,934
Distribution Enhancements Total			**$11,290,361**
Automation	SCADA Upgrades	92010422 - GT SCADA Replacement Prjct	$1,010,800
	SCADA - RTU Automation	92004596 - Station Transducer Replacement	$123,701
		92005506 - 2011 SCADA Minor Enhancement	$44,837
	Distribution Automation	92010192 - Hazeldean SCADA-Mates	$236,322
		92010194 - Muns/Beckh Rabbit Scadamates	$211,205
		92010214 - CS23867 Replacement	$177,111
		92010299 - Automate S29446 TH11	$52,753
		92010414 - GT Telecom Master Plan (OTN)	$3,207,009
		92010468 - 2016 FCI Installations	$68,588
	Stations Automation	92010249 - New Kelman 2016 1 of 2	$68,114
		92010251 - New Kelman 2016 -2 of 2	$68,114
Automation Total			**$5,268,554**
Grand Total			**$22,228,129**

Hydro Ottawa Limited would like to note the following corrections to Attachment B-(1)A – Material Investments:

- Project 92007746 - SMD-20 Switch Replacement was extended into 2016
- Project 92010212 - SE20 Replacement and Relocation should be starting in 2016
- Project 92008609 - Blackburn 4F8 - Phase 4 should be starting in 2016
- Project 92008551 - 64A3A - South East Kilborn Area Pole Replacement included the 2015 and 2016 scope (phase 1 & phase 2, respectively), however, the capital cost stated is only for phase 1. Including phase 2 brings the capital cost to $2,304,921
- Please see Interrogatory Response to OEB #15 part x for updated 92010414 - GT Telecom Master Plan (OTN) project
- The following table is the corrected civil rehabilitation.

Table CCC #24 – 2: Civil Rehabilitation Expenditure

Historical ($M)					Future ($M)				
2011	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
$0.4	$0.2	$0.3	$0.5	$0.54	$3.15	$0.64	$0.73	$0.66	$0.69

Response to Consumers Council of Canada Interrogatory Question #25

Reference: (Ex. B/T1/S2/Table 3.4.3)

Question #25:

Please explain why Stations Asset costs are projected to increase by $4M from 2014 to 2015.

Response:

Spending in both the Stations Asset and Stations Capacity programs are directly linked and are prioritized along with all other programs. Historically HOL's spending on the Stations Asset and Stations Capacity Capital Programs has ranged between $20M and $24M. The total spending in these two Capital Programs in 2014 was $18M and is to increase to $19M in 2015. While there may be a larger increase in the Stations Asset Capital Program alone from 2014 to 2015, the combination of the two Capital Programs is returning to the historical range.

Response to Consumers Council of Canada Interrogatory Question #26

Reference: (Ex. B/T1/S2/p. 228)

Question #26:

On line 4 it states that, "the focus on proactive replacement is expected to reduce the required spend on plant failure", but the cost variance and explanation for costs (pp. 229/l13) explains that the costs are "mainly due to spending in the Distribution Plant Failure Budget Program" Please explain.

Response:

Hydro Ottawa assumes that the references are as follows:

- Exhibit B-1-2 page 230 line 4, updated June 29, 2015
- Exhibit B-1-2 page 231 line 13, updated June 29, 2015

Hydro Ottawa Limited optimizes proactive replacement while trying to reduce distribution failure spending. Projected plant failure rates are directly related to proactive replacement rates as it is shown by asset type in Attachment B-1(B) – Annual Planning Report – 2014 Asset Management Plan. Based on our analysis there exists a point at which proactive replacement levels maintains plant failure levels. Once that level of proactive replacements is increased past this point, plant failure levels are expected to decrease.

As it is highlighted in Table CCC #26-1, Hydro Ottawa is not solely relying on increased capital spending to reduce plant failure expenditures and improve related reliability results.

Table CCC #26-1 below shows Hydro Ottawa's 2016 planned proactive replacements.

Table CCC #26 – 1: 2016 Planned Replacements

Budget Program	Annual Replacement Rate to Maintain/Improve Failures	2016 Replacement Count
Stations Transformer Repl.	5	3
Stations Switchgear Repl.	5	5
Planned Pole Replacement	1250	411
Planned Civil Rehabilitation	10	11
Planned Cable Replacement	98	17.1

In addition to direct investments in the distribution system, to control the trend of rising plant failures, Hydro Ottawa Limited is taking a multi-pronged approach as follows:

- Improved planning and prioritizing of the capital program with the use of new tools such as CopperLeaf C55 as well as improved Health Index models being completed in 2015 which will aid in the timing of specific asset replacements.
- Improved execution of the capital program through the use of tools such as workforce scheduling which will help more work to be completed within the same budget envelopes.
- Increased data analysis to refine targeted spending levels and projected impacts.
- The use of new technologies such as cable injection for cable life extension.

Response to Consumers Council of Canada Interrogatory Question #27

Reference: (Ex. B/T1/S2/Table 3.4.3)

Question #27:

Please explain why Stations Asset costs are projected to remain $5M to $7M higher from 2016 to 2020 compared to the historic spend.

Response:

Spending in 2014 in the Stations Asset capital program was $13.3M and is budgeted to be $17.2M in 2015. The average spending in 2016 to 2020 is budgeted to be $14.3M, which is in line with the current spending.

Please also see Interrogatory Response to CCC #25.

Response to Consumers Council of Canada Interrogatory Question #28

Reference: (Ex. B/T1/S2/Figure 3.1.3)

Question #28:

This Figure illustrates the breakdown for the System Services Investment Category. It illustrates the capital programs that match the categories shown in Tables 3.4.7 and Table 3.4.8 (Ex. B/T1/S2/p.234-236). Figure 3.1.3 also illustrates the budgeted programs and projects. Attachment B-1(A) then describes each project. Please expand Tables 3.4.7 and Table 3.4.8 to include the list of budgeted programs and the specific projects for each of the Capital Program categories (that are above the threshold dollar value) in the year they are in-service. CCC is looking to cross reference these Tables with the projects listed in Attachment B-1(A).

Response:

Please see Interrogatory Response to CCC #24.

Response to Consumers Council of Canada Interrogatory Question #29

Reference: (Ex. B/T1/S2/Table 3.4.11)

Question #29:

Please provide the specific reference to the project(s) that make up the large expenditure in Customer Service in 2019.

Response:

The projects that make up the large expenditure in 2019 for Customer Service are the shown in Table CCC #29-1.

Table CCC #29 – 1: 2019 Customer Service Projects

Project	Cost ($'000)
CC&B Upgrade	6,064
Meter to Cash System Enhancements	280
Customer Service Strategy	162
Web Development	152
Total	**6,658**

Response to Consumers Council of Canada Interrogatory Question #30

Reference: (Ex.B/T1/S2/Table 3.4.11)

Question #30:

Please explain the large increase in spending on the ERP program in 2016.

Response:

The large increase in forecasted spending is related to ERP (JDE) Application Upgrade project which is outlined in detail in Attachment B-1(A) – Material Investments, Section 4, General Plant.

Response to Consumers Council of Canada Interrogatory Question #31

Reference: (Ex. B/T1/S2/Table 3.4.9/3.4.11)

Question #31:

On page 240/l.17-18 it states the IT New Initiative project – Asset Planning software was completed in 2014. Please explain why costs are higher in 2015 and 2016 than they were in the year the project was completed (2014).

Response:

In 2014, as one of a number of IT initiative projects, implementation of the Asset Planning software project was completed. Projects are continually identified to enhance business requirements and/or leverage technology advancements. Please reference EB-2015-0004 Exhibit B-1-2 Table 3.1.5 for further details.

Response to Consumers Council of Canada Interrogatory Question #32

Reference: (Ex. B/T1/S2/Table 3.4.9)

Question #32:

Please provide further details regarding the $17,682M expenditure for Hydro One payments in 2014.

Response:

The $17.7M expenditure for Hydro One payments in 2014 are for engineering and/or construction costs as required in the agreements between Hydro Ottawa and Hydro One.

Table CCC #32 – 1: 2014 Hydro One Payments

Category	Project	Expenditure
Initial Hydro One Payments	Merivale DS Rebuild	$30,000
	Marchwood DESN	$172,339
	Hinchey New Switchgear Lineup	$291,530
	Lisgar Transformation Upgrade	$100,000
	Orleans TS Egress	$1,454,956
True-up Payments	Cyrville MTS	$4,000,000
	Hawthorne 155kV Lines CCRA	$11,700,000
	Limebank Transformation Upgrade	$(67,025)
Total		**$17,681,799**

Please also see Interrogatory Response to Energy Probe #5 part c for more information.

Response to Consumers Council of Canada Interrogatory Question #33

Reference: (Ex. D/T1/S2)

Question #33:

Does Hydro Ottawa undertake compensation studies to assess its compensation levels relative to other like organizations? If not, why not? If, so please provide all of the studies.

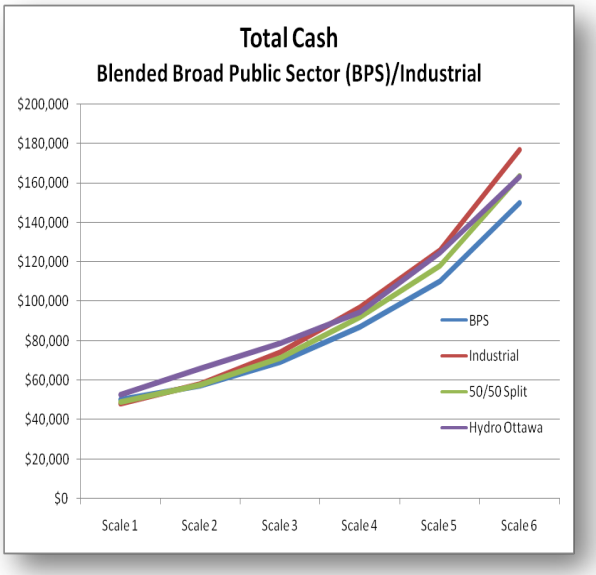
Response:

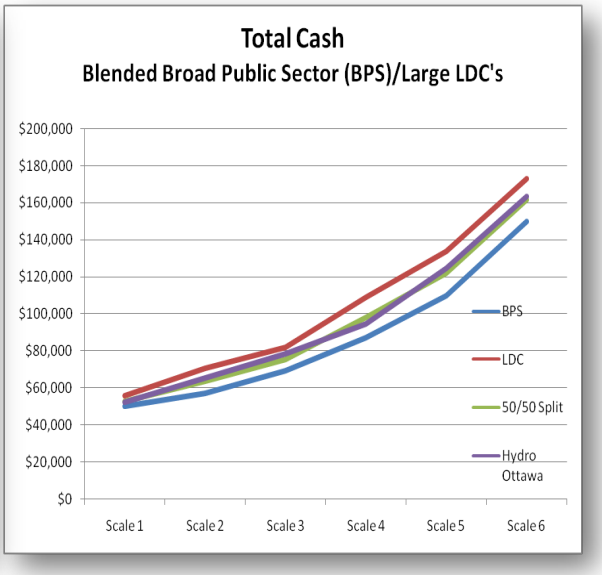
Yes, Hydro Ottawa leverages benchmarking data from third party sources to assess compensation levels relative to other like organizations.

As it relates to its unionized employees, as part of collective bargaining in 2013, Hydro Ottawa was guided by 2012 rate information from the MEARIE Group's database of industry wages, which is populated with wage rate data from the collective agreements of participating Ontario Local Distribution Companies.

With respect to management group employees, in 2012, Hydro Ottawa compared its average total cash compensation by salary scale to benchmark data using The Hay Group's 2012 compensation database. Specifically, Hydro Ottawa compared itself against the Broader Public Sector/Industrial Sector benchmark, in which each sector was equally weighted. Hydro Ottawa also compared itself against the Broader Public Sector/Large Local Distribution Companies benchmark. Again, with each sector equally weighted.

The results of these comparisons are detailed below.





These comparisons resulted in the adjustment of the salary scales as of January 1, 2013. Hydro Ottawa's practice is to review salary scales every four years.

Response to Consumers Council of Canada Interrogatory Question #34

Reference: (Ex. D/T1/S2/Attachment D-1(A))

Question #34:

The 2014 budget letter states that a vacancy allowance will continue to be budgeted at the corporate level at a rate of 2.5% per annum. How does this vacancy rate impact OM&A levels? How was the 2.5% derived?

Response:

The vacancy allowance is an estimate of savings from vacant positions. A credit for vacancy allowance offsets the compensation costs and thus reduces the total amount of OM&A. It is expected there will be vacancies during the year due to attrition or internal movements such as promotion. While a position is vacant compensation payments do not occur. The 2.5% was a placeholder at the time the budget memo was drafted; a 3% factor was used in the 2016 Budget for a total credit of $2.3M. The 3% is based on historical analysis.

Response to Consumers Council of Canada Interrogatory Question #35

Reference: (Ex. D/T1/S3)

Question #35:

Has Hydro Ottawa assessed the extent to which the smart meter program has reduced its distribution operating costs? If not, why not? If so, are those efficiencies embedded in the 2016 forecast? Please identify any savings embedded in the forecasts.

Response:

As discussed under Section 4.0 in Exhibit D-1-1 in Hydro Ottawa's 2012 Rate Application (EB-2011-0054), smart meters have completely changed the way utilities perform meter reading. Since 2009, Hydro Ottawa has seen reduced meter reading expense and incorporated this into our forecast. However, Hydro Ottawa has incurred increased IT costs including software licenses, IT maintenance and support, data storage, and higher customer expectations as a result of the smart meter / Time-Of-Use program.

Response to Consumers Council of Canada Interrogatory Question #36

Reference: (Ex. D/T1/S3/p. 3)

Question #36:

The evidence states that Hydro Ottawa has taken measures to constrain benefits and pensions, one of which was to partner for a new insurance provider for benefits. What are the annual savings associated with the change? Are those savings reflected in the 2016 base revenue requirement?

Response:

As outlined in Exhibit D, Tab 1, Schedule 8, Page 5, Hydro Ottawa has partnered with a new insured benefits provider for all of the company's insured benefit plans. The forecasted savings in 2015 are estimated to be slightly over $672,000. These savings are forecasted to decrease in 2016, estimated to be slightly over $417,000 as a result of the expiration of the rate guarantee for certain insured benefits leading to expected increases in premiums.

The forecasted savings in 2016 have been reflected in the 2016 base revenue requirement.

Response to Consumers Council of Canada Interrogatory Question #37

Reference: (Ex. D/T1/S3/p. 4)

Question #37:

Please provide Hydro Ottawa's detailed policy regarding vegetation management. What is the rationale for the current cycle? What are the annual savings expected in 2016 and beyond related to the 2014 and 2015 storm hardening program. Please provide a detailed breakdown of the $3.507 million budget for vegetation management in 2016. Does Hydro Ottawa benchmark its vegetation management program in any way?

Response:

Hydro Ottawa is required to trim vegetation near its plant under Ontario Regulation 22/04 – Electrical Distribution Safety 4. (4) 3. and Electricity Act, 1998 c. 15, Schedule, A s.40 (4). Hydro Ottawa performs reliability analyses to determine cause and effect of system outages. For more details on the process for reporting outages, refer to Attachment B-1(B) – Annual Planning Report – 2014 Reliability Plan.

For a discussion on the background rationale for the existing Hydro Ottawa trim cycles please see Hydro Ottawa Limited EB 2011 0054, Exhibit D1-4-2. During 2012 and 2013, Hydro Ottawa performed a regional vegetation management survey to gather detailed information such as species, clearance, and overhang info on spans to be used in improving the vegetation program. Hydro Ottawa hired a Consultant to review vegetation management and trim standards, and recommend revisions to the vegetation management plan. The Consultant recommended new trim standards, more effective auditing of trim clearances achieved, removal of overhanging limbs and benchmarks that

can be used going forward. Please see attachment Att-CCC-Q37-A for the full consultant report.

The Storm Hardening project targeted the removal of branches overhanging overhead power lines. The resulting cost savings is related to avoided damage to the overhead lines and associated outages as a result of those overhanging branches. Predicting cost savings from the Storm Hardening project is an extremely difficult task as there are many unpredictable external forces such as wind and freezing rain that affect vegetation. Hydro Ottawa proceeded with Storm Hardening Project as a recommendation of a Vegetation Consultant (refer to Att-CCC-Q37-A). Hydro Ottawa was influenced by the 2013 Toronto ice storm to remove overhang in order to storm harden its system. Removing the overhang vegetation will make the system more resilient to major storms; ice storms and extreme wind storms. Hydro Ottawa is going to continue to analyze vegetation related outages including outages during major storm events to confirm the effectiveness of the project.

The 2016 vegetation management budget of $3.507 million consists of labour, materials, fleet, outside service contractors and burdens and encompasses regular, off cycle, emergency, storm, emerald ash borer trimming, and wood chip disposal.

- Labour & Fleet $467,375
- Materials & Outside Services $2,901,236
- Burdens $138,352

Included in the above budget is $389k to remove Emerald Ash Borer (EAB) infected trees. Hydro Ottawa has to supervise removal of, or perform the removal of, EAB infected trees in proximity to its overhead lines as third parties remove the trees. The City estimated approximately 25 percent of the tree canopy is made up of ash trees.

Please refer to Att-CCC-Q37-A for the benchmarking performed by Hydro Ottawa.

Evaluation of Hydro Ottawa Limited's Vegetation Management Program

May 2014

Sculpture on corner of Kent and Slater Street, Ottawa, Ontario

This evaluation report was prepared by SRL Corp

INTRODUCTION

Hydro Ottawa conducted a three-day meeting to discuss its Vegetation Management Program, and to garner assistance with a tender bid document. The meeting was held on-site at the office of Hydro Ottawa (1970 Merivale Road), from April 29 – May 1, 2014. In attendance were John Vedder, Margaret DeFazio, and Kevin Ainsworth of Hydro Ottawa, and Stan Veraart of SRL Corp. Two field visits were also conducted at this time, one led by Louis Lauzon.

This report is based on evaluations of Hydro Ottawa's current Vegetation Management Program, and provides a review of the survey data, an analysis of what it shows, along with feedback on its operations and structure. The addends also offer recommendations for how to further develop a VM program. Hydro Ottawa Vegetation Management Program is a relatively young program, begun only in 2008, and is active in implementing continuous process improvements, one of which is improving their field (pruning) practices. A positive next step could be to develop strategic plans for future direction.

The following evaluation report is presented in three parts:

1. Subcontractor Management
2. Internal Management
3. Stakeholder Management – external clients

Each section identifies Best Management Practices in the field, enumerates observations of Hydro Ottawa's practices, and makes recommendations for continuous improvement and growth.

SRL Corp would like to take the opportunity to sincerely thank Hydro Ottawa for its active interest in balancing tree growth with utility needs, and the invitation to be involved; we trust this evaluation report and our findings are constructive to Hydro Ottawa's goals. SRL Corp feels confident that its feedback will benefit Hydro Ottawa's strong and successful Vegetation Management Team.

Sincerely,

Stan Veraart
President, SRL Corp

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1. SUBCONTRACTOR MANAGEMENT

As trees and other vegetation are integral to communities, their care is subject to high degrees of public exposure. Pruning can create noticeable changes in landscapes, so it is not uncommon for customers to express their concerns and preferences, or to critique utility companies' vegetation work. Of course, most utility companies rely on contractors to provide necessary trimming services that affect public areas. If a contractor were to suspend proper pruning techniques to address customers' concerns – or if it is not clear what the utility standards are – he may inadvertently produce a negative impact on the health of the vegetation and budgeted costs. The effect of both can shorten pruning cycle times and increase costs and safety hazards. The health and efficacy of any Vegetation Management Program depends on a strong partnership and agreement between the utility company and its vegetation management contractor(s). Hydro Ottawa's goal has been to develop positive relationships with contractors and customers, and when confronted with concerns, it is also beneficial for a utility company to have a clear vision and plan to communicate. This develops manageable expectations and positive relationships with both contractor and customers.

Since trees and vegetation will always grow, Hydro Ottawa's pruning shall continue to concentrate on defining trimming techniques to encourage desirable future growth (low-impact shapes), creating the least amount of tree damage and reducing potential risks and establishing cost-reductive growth. A way of establishing clear and manageable expectations between Utility Company and Contractor is to have highly specific, documented guidelines and best management pruning standards in place.

The International Society of Arboriculture's (ISA) Best Management Practices (BMP) are the recommended standard in regards to pruning, specifically the practices described in its publication BMP: Utility Pruning of Trees. Along with these practices, incorporate the pruning practices described by Dr. Alex Shigo in his publication Pruning Trees Near Electric Utility Lines. Below is an outline of select practices/standards that are in alignment with the above resources, their descriptions, and explanations of why these pruning practices are essential. It is extremely important to hold the vegetation management contractors to these standards of work.

For Example:

- A proper cut is placed in such a way that the branch bark ridge or branch collar is not damaged. This allows the tree to seal the pruning cut, eliminating future exposure to pathogens and thereby reducing tree failure risks.
- Prune back to main lateral or main stem, not damaging the branch bark ridge or branch collar, and do not prune mid-branch or leave pruning stubs. A tree is not able to seal a mid-branch cut, and the wound will be vulnerable to pathogens for the rest of the tree's life.
- It is never recommended to prune more than 25% of a tree's live tissue. Hydro Ottawa's exemption from pruning for 3.5 meters of clearance in cases where mutilation of a tree would occur is a good demonstration of this principle.
- Incorporate “directional pruning” in a pruning program. Directional pruning is the process of administering strategic cuts from an early age to “train” trees to grow into a certain direction or shape. The “V” or “L” tree shapes are examples of directional pruning.

- Do not “top” trees. “Topping” is the practice of removing the entire top of a tree. This technique is quickly vanishing because it stimulates fast-growing new growth (water sprouts, or shoots). The resulting new growth is poorly connected to the tree, increasing tree branch failure rates, and creates additional pruning needs.
- Have standards in place for a minimum branch distance from a primary line. In Hydro Ottawa's vegetation program, these clearance standards read: “to trim to 3 meters” (not requiring a continuous minimum clearance).

All pruning specifications are communicated to the vegetation contractor(s) in a signed contract. However, a frequent reminder of theses specifications through extensive audits of pruning work is recommended, particularly if pruning requirements are not being met. Pruning expectations should be clearly communicated prior to the contractor bidding on the work to be performed.

The majority (more than 50%) of Hydro Ottawa’s tree inventory exists of fast and medium-fast growing trees, such as Maples, Ash, Elm, and Poplar, making the VM work challenging.

Tree Species	**Total Amount of listed Trees**	**Percentage of Systems Vegetation**
Maples (all Maples)	17436	31.84 %
Spruce	6693	12.22 %
Ash	5137	9.38 %
Elm	4502	8.22 %
Cedar	3415	6.24 %
Pine	3318	6.06 %
Poplar	2457	4.49 %
Fruit Trees	2287	4.18 %
Basswood/Linden	1890	3.45 %
Locust	1520	2.78 %
14 other tree species	6313	11.14 %

Data Extracted from Hydro Ottawa’s Vegetation System Shape files

We recommend having expected growth rates per tree category available in writing for vegetation contractor(s) to review so they can prune back far enough to attain the specified clearance.

1. In the Ottawa Ontario area (as is the case in most regions), fast-growing species should be trimmed back further from the primary lines than slow growing species. It is not uncommon for fast growing species (Silver Maple, Manitoba Maple, Elm, Chinese Elm, Willow, Poplar, Ash, etc.) to grow 3 - 3.5 meters in a three-year period, and young fast-growing tree species can be expected to grow even more quickly.
2. In the Ottawa Ontario region, expect grow back of 1.5 - 2.5 meters in three years for medium-fast growing species (Oak, Red Maple, Norwegian Maple, Crimson Maple, Black Walnut, Birch, Beech, Butternut, most fruit trees, Locust, Gingko, Basswood, Linden, Ornamentals, etc.).

3. It would be good to prune back enough to hold a trimming cycle for slow growing tree species (Ironwood, Sugar Maple, Pine, Spruce, Cedar, Fir, Tamarack, hemlock, etc.) of at least 0.6 - 1 meter in a three-year period.

According to the power line vegetation inventory Hydro Ottawa Limited conducted and completed in 2012, certain pertinent data became available to guide and direct vegetation contractors. Among the data was the percentage of overhang above lines. "Overhang" is defined as a branch overhanging a primary power line. As is further described in chapter 3, overhang causes an increased risk factor as it relates to outages. A good practice is removal of overhang using the wire-to-sky (also known as L-shape) trimming technique. This technique prescribes the pruning of all branches hanging over the lines (overhang).

Overhang Class	**Total Number of Occurrences per spans**	**Percentage of Occurrences Larger than 1 %**
Very Light, Lower Risk	1450	3.2 %
Other Overhang categories	1048	2.3 %
None	24259	53.8 %
No Value	18395	40.7 %

Data Extracted from Hydro Ottawa's Vegetation System Shape files

As can be seen above, a total of 5.5 % of Hydro Ottawa's lines are overhanging. It is possible for this percentage to be a little higher, for 18,395 spans have a no value listed. Part of Hydro Ottawa's continuing improvement processes includes the expressed desire to start eliminating overhang from it system all together.

Most utilities work with the vegetation contractor(s) to establish "smart removal" criteria and guidelines. Smart removals are preferable to line clearance in certain situations. They are often fast-growing trees located directly underneath a power line and or conductor, which would require frequent pruning; such trees would never have a natural form due to clearance requirements. They may also be brush that would interfere with the power line. Others could be large, previously topped trees under the line, or trees with a high risk of failure (leaning, decline; sever die back, hollow, etc.).

In Hydro Ottawa's power line vegetation inventory database, a total of 468 smart removals are listed. This number can be expected to go up when some or most trees that were previously topped are also considered for removal.

In addition to the identification of smart removals, data was collected in regards to main boles growing within 3 meters/10 feet from the primary.

Main Bole	**Number of spans having one or more main boles within 3 meters of primary**	**%**
No	24385	54 %
Yes, can be maintained	1269	2.8 %
Yes, difficult to maintain	1082	2.2 %
No Value	18416	41 %

Data Extracted from Hydro Ottawa's Vegetation System Shape files

Main boles near the power line, when not suitable for removal, could require a higher level of care (see chapter 3 for information regarding Grandfather Trees.)

Based on field observations within Hydro Ottawa, as well as the data listed above in regards to:

- The amount of vast growing species on the system,
- The identified overhang classes and Hydro's expressed desire to remove overhang
- The listed smart removals and the likely possibility of an increase in the number of smart removals (see comments above)
- A possible new approach regarding main boles within 3 meters of primary,

An initial cost increase during the next vegetation pruning cycle can be expected. Do note that removals require an up-front cost investment, but will no longer require pruning maintenance once performed.

Some utilities implement separate pruning specifications for vegetation crews to follow for trees that provide an intrinsic value to a neighborhood and/or align with city canopy programs. These older, matured trees, referred to as Grandfather Trees, are pruned less aggressively and are thus scheduled for trims more frequently. Further recommendations regarding Grandfather Trees can be found in chapter three.

2. INTERNAL MANAGEMENT

Although Hydro Ottawa's Vegetation Management Program is a relatively young program, it already has an entire vegetation inventory system in place, which includes different data categories. This is significant, as the different data categories provide insights and perspectives for managerial purposes. This data allows for proper planning in regards to amount of work to be expected and the associated costs, as well as developing long term vegetation strategies and goals as it relates to trim cycles.

For example, one of the data categories is “trim class”. The related data can be used to build detailed estimates of workloads for Hydro Ottawa required to complete any given area. An inventory was created, detailing which spans experience heavy, medium, light, or very light vegetation.

Trim Class	Number of spans per trim class	%
Very Light	3253	7.2 %
Light	19107	42.3 %
Medium	3895	8.6 %
Heavy	461	1.1 %
No Value	18436	40.8 %

Data Extracted from Hydro Ottawa’s Vegetation System Shape files

Based on this data, it shows that 49.5% of the spans only experience “very light” or “light” vegetation growth; meaning that an area spanning 4 to 7 meters has associated trim work with it. Only a very minor 1.1% of the spans qualify as “heavy trim” areas (qualification is 50 meters or more per span). When the above data is plotted against a grid map, contractors can use this data for bidding purposes.

The vegetation management system provides yet another asset: detailed information regarding vegetation clearance distance from primary lines.

Clearance	Number of spans	%
Within 1‘	638	1
Within 2‘	811	2
Within 3’	3022	7
Within 5’	6276	14
Within 7’	4749	10.5
Within 10’	4331	9.5
10 or more	6913	15
No Value	18412	41

Data Extracted from Hydro Ottawa’s Vegetation System Shape files

The measurements were taken at the closest point of vegetation to the primary power line on the entire span. This information provides good insight into the expected workload for a vegetation contractor.

Time was spent analyzing the trim cycle data. This category lists the projected trim cycle for a span in

order to maintain proper clearance from primary.

Trim Cycle	Number of Spans	%
1 year	125	
2 years	8928	20
3 years	16821	37
4 years	700	1.5
5 years	44	
No	18534	41

Data Extracted from Hydro Ottawa's Vegetation System Shape files

The data was plotted against a grid GIS map and compared to the current trim cycles in place. The comparison showed that, for the most part, the areas are trimmed at a proper frequency. Some small adjustments to certain areas are recommended:

- West portion of area VMC03 can be trimmed on a 3-year cycle
- West portion of area VMC05 can be trimmed on a 3-year cycle
- Southern part of VMC20 can be trimmed on a 3-year cycle
- Northern part of VMS33 can be trimmed on a 2-year cycle
- Northern part of VME23 can be trimmed on a 2-year cycle

For a visual of these areas, see the embedded map:

Minimum Trim Cycle and New Areas(2).pd

With the continued use of the vegetation data inventory system, combined with the proper pruning practices in place, expectations are that additional 2-year trim cycle areas can be transitioned to 3-year trim cycles, and some 3-year trim cycle areas have the potential be transitioned to 4-year trim cycles. Lengthening trim cycles reduces costs with proper management (so as to not increase exposed risks).

The data category listing information about access to span (roadside, off-road, backyard climb, backyard lift) was not analyzed, however provides a key factor in scheduling and planning brushing resources. The different access levels have an impact on budgeting and forecasting.

Along with the Vegetation Inventory Program, Hydro Ottawa excels in having a separate Vegetation Management Plan in place (with its own budget) that deals with certain tree diseases – mainly with the Emerald Ash Borer (EAB). In the past, it was the Dutch Elm disease that killed many trees in Ottawa, and it is quite possible that other existing tree diseases will impact current vegetation in the future, in the same way that the EAB is killing trees today.

The combined efforts of this program and the data inventory system can help to more closely predict future costs and budgetary needs. For example, the total number of identified Ash trees on Hydro's

system is just under 6,000, and when plotted against a GIS grid map, there was indication that some 2-year pruning areas could quickly transition to a 3-year trimming cycle once the Ash trees are removed. Since Hydro Ottawa has recognized the importance of proper cost tracking, its time and effort are well spent in documenting incurred cost; this provides a solid foundation for future cost calculation options.

Time was spent brainstorming for additional continuous improvement possibilities to enhance to Hydro Ottawa's vegetation program with. Ideas included: performing additional field audits, identifying Grandfather Trees, and creating customer training videos. For expanded reference, Appendix A lists additional results of the brainstorm session, as well as observations made. Appendix B provides information on future ideas to continue to further enhance, build, design, and develop Hydro's current vegetation program.

3. EXTERNAL STAKEHOLDERS' COOPERATION

A steady dose of freezing rain can quickly cover a landscape with a solid layer of ice, as was the case this past winter (2013) in the city of Toronto and surrounding areas. The ice storm caused hundreds of thousands of people to lose power virtually overnight due to bent tree limbs and entire trees falling over. Overhang (a tree branch that hangs over the power line) is often the culprit in causing outages, as these branches bend or break under the weight of ice. This exposed risk factor is something Hydro indicated wanting to address (see chapter 1) and at the same time use as a leverage tool to create a higher level of awareness and understanding among customers and manage customers pruning expectation. The next few paragraphs will address additional possibilities to continue to build better relationships with the people it serves.

It is possible to develop favorable relationships with constituents, e.g., the City of Ottawa, by, among other things, improving pruning practices. As in the case of an ice storm, proper directional pruning would shift a tree's weight away from a power line, decreasing the chances of interference with it. Another smart management method is to plant the right tree in the right place, preventing mature trees from reaching a height that would interfere with the power line. When covered in ice, it would not impact the power line. Along with increased efficiency and budgetary benefits, continually improving pruning practices shows a good faith effort to respond to customer concerns.

Other possibilities for developing good relationships lie in creating joint tree strategies, public outreach programs, and increasing transparency – thus fostering trust, commitment, and understanding. Improved pruning strategies would provide material to educate the public on why certain practices are necessary, preparing customers for what to expect, and explaining Hydro Ottawa's concentrated efforts to ensure the best management methods possible. Hydro Ottawa's current brochures (e.g., Tree Planting Advice and Swimming Pools in the Vicinity of Electrical Wires) are good examples. Education can be highly effective, multi-purpose, and multi-dimensional. It may include initiative to communicate work intentions and efforts through blogs, web FAQ pages, pruning videos, and improved notification processes, or releasing strategic messages to encourage recognition for programs. If crafted properly, these steps have the added benefit of setting customer expectations.

Setting expectations is a significant foundation to any communication between utility and customer. It identifies a problem or common need, and addresses the necessary steps for resolution. If any dispute or amendment to procedure is to be made, these educational components provide the language and framework for discussion. These efforts must be backed up with a long-term vision for community trees, communicating it when appropriate.

In addition, Hydro Ottawa expressed an interest to invest in specific programs that will address popular items such as Grandfather Trees. Implement special pruning requirements for trees that provide intrinsic value to a neighborhood and/or align with city canopy programs. These older, matured trees, referred to as Grandfather Trees, are pruned less aggressively and are thus scheduled for trims more frequently. The first step in the Grandfather Tree Project is to locate and identify these trees. The city of Ottawa's computer-based tree inventory mapping system could be a tool in identifying the Grandfather Trees. Ottawa's Trees and Community Forest Project could be of help or

give guidance in the right direction. Once identified, the trees species, locations, and pruning specs should be communicated to the planner/notifier, VM contractor(s), and auditor(s). In addition, public awareness of the Grandfather Trees project could be provided to Hydro Ottawa's customers through media support, articles, and interviews.

Externally, identify cross-points with third-parties who share a common interest: they will have expense budgets as well, and their work efforts will directly align with Hydro Ottawa's to improve performance. Search out organizations with a common interest in certain vegetation, and apply the proper vegetation at the power lines. For example, if an organization wishes to increase pollinator shrubs and plants, encourage them to plant in right-of-way areas, as their plants will never need pruning. Specifically, Collaborate with City of Ottawa urban foresters to coordinate VM Program efforts with beautification efforts – planting decorative trees which will not require reshaping/pruning. Work together with Ottawa's "Trees in Trust" Program to streamline future outcomes. Study the appropriate ecological utility right-of-way practices (http://www.rights-of-way.org/), and approach the Nature Conservancy of Canada (NCC) to develop a VM Plan based on ecology. This foundation should expose ample common ground and mutual willingness to improve the ROW vegetation on NCC land. Along with this, plant the "right tree in the right place" and apply proper pruning standards.

As a result of these partnerships, shared constituents are satisfied, city lights stay on, the green canopy is maintained, and groundwork is laid to address future conflicts or issues. Focusing on these win-win efforts can enhance community relations and reduce cost over time. Pairing with local organizations such as Ecology Ottawa and their Tree Ottawa program – or perhaps working even with subdivision within Ottawa such as the Glebe Community Association – can be a lasting means of building relationships, and ease internal workloads, reduce cost, and have the potential to increase public trust by association. The combined work of these organization can make Ottawa tree canopy the greenest in Canada. What a great way to accomplish such a goal – with joint efforts and partnerships.

In doing so, some of the Eastern Native Trees worth considering for planting in yards with limited space in Urban Ottawa (in the order of appearance in Farrar's "Trees in Canada"). (Note: this list is rather arbitrary, and plants not mentioned explicitly may still be perfectly suitable!)

Eastern Red Juniper *(Juniperus virginiana)*: slow-growing small tree especially suited to dry, poor soils.
Eastern White Thuja *(Thuja occidentalis)*: slow-growing small tree.
Pitch Pine *(Pinus rigida)*: smallish tree grows well on poor or good soils.
Balsam Fir *(Abies balsamea)*: on moist well-drained but rich sites, narrow crown takes up little lateral space.
Black Spruce *(Picea mariana)*: similar habitat and rationale to Balsam Fir.
Black Maple *(Acer nigrum)*: More urban tolerant than the similar Sugar Maple, and native.
Striped Maple *(Acer pensylvanicum)* : small trees suited to cool shady sites.
Mountain Maple *(Acer spicatum)*: small trees suited to cool shady sites.
Ohio Buckeye *(Aesculus glabra):* a smaller and hardy alternative to the non-native Horse chestnut
Shagbark Hickory *(Carya ovata)*: a slow-growing hardy tree with strong wood and edible nuts
American Ash *(Sorbus americana)*: Small trees favoring cool sites.
Showy Mountain Ash *(Sorbus decora)*: Small trees favoring cool sites.
Swamp White Oak *(Querucs bicolor)*: smallish for a tree-sized oak.
Dwarf Chinquapin Oak *(Querucus prinoides)*: small and shrubby.
Bear Oak *(Quercus ilicifolia)*: a shrubby oak.
Hornbeam *(Carpinus caroliniana)*: tall shrub for shady locations.

Hop-hornbeam *(Ostrya virginiana)*: small tree can grow in almost any condition except wet.
Canada Plum *(Prunus nigra)*: small tree with edible plums.
Peach-leaf Willow *(Salix amygdaloides)*: for wet soils, often narrow crowned for a Willow.
Winterberry *(Ilex verticillata)*: tall shrub, female plants have attractive winter berries.
Bladdernut *(Staphylea trifolia)*: Attractive tall shrub, adaptable to growing conditions.
Alternate-leaved Dogwood *(Cornus alternifolia):* tall shrubs ideal for shady locations.
Round-leaved Dogwood *(Cornus rugosa)*: tall shrubs ideal for shady locations.
Buttonbush *(Cephalanthus occidentalis)*: tall shrub for wet locations.

APPENDIX A: SOME OBSERVATIONS AND RECOMMENDATION BASED ON SITE VISIT

- Continuation of the VM inventory is of utmost importance. The collection of the existing vegetation was an important step in the right direction. In order to manage a VM program effectively current information of existing vegetation on all lines is crucial.
- Explore options to enhance the planning and notification activities that come with an all-round VM program.
- Develop a ten year Vegetation Management Plan. in this plan, pay attention to the proper pruning standards, planning notification procedures, auditing procedures, process mapping, and cost reduction strategies
- Develop Measurements of Success for VM Program
- Promote Best Management Practices for Pruning (doing so will decrease the necessity for mid-cycle pruning)
- Further define/describe grandfathered tree requirements
- Work together with the city of Ottawa to map out the Grandfather Trees encroaching onto the Primary Lines; develop annual (or every other year) pruning cycle for Grandfather Trees
  [For additional information about grandfather trees, see the next chapter.]
- Take one step at a time, don't change everything at once
- Audit 100% of VM Contractor's work (not periodic or spot audits, but 100%). Audit not only on minimum clearance distance from primary wire (holding a trim cycle), but also on pruning techniques used. In addition have the auditor maintain the electronic VM database.
- Have system wide clarity of what it means to hold cycle.
- Continue to work with customer outreach, education, and cooperation.
- It would be good if the Request for Proposal (Tender Bid) to be created spring 2014 consist of a flexible contract type, designed to maximize the value per dollar invested. This is accomplished by assuming that VM contractors and Hydro Ottawa reach common goals and objectives. Contract value can be measured by price alone, or include safety standards, reliability of service, customer relations, productivity, work quality, as well as contract responsiveness in regards to work scope changes, storm response, record keeping. The lowest cost bidder is not guaranteed to provide the best value for the money spent. The RFP can exist of Time and Material, Lump Sum, Unit Price, Performance Based work, or any combination of the four. It is important to give the contract type enough consideration for the contract type, in combination with the specifications will set the undertone for the work to be performed.
- To implement additional Best Management Pruning Practices, in combination with an enhanced or new contract type can be overwhelming. Consider improving VM standards for 25% of the VM area at a time instead of upgrading the entire system all at once. Each year add 25% to the improved areas, this to make the quality improvements less daunting.

APPENDIX B: VEGETATION MANAGEMENT PRACTICES in regards to PROGRAM BUDGET

1. How to Get Better Value for The Money: A Look at Vegetation Management and Pruning Practices As They Relate To A Budget
    1A. Increase efficiency with a long-term plan; outline 10-year plan details
    1B. How Hydro Ottawa can come up to spec by Process Mapping and developing Standard Operating Procedures (SOP)
    1C. Next Steps: Exploring tactical plans to achieve strategic goals

Operating with uncertain, annual, and diminishing budgets can be challenging, especially while managing living organisms such as trees. Attempts are often made to reduce Vegetation Management expenses quickly, but may not always be effective in the long run. For example, at times, certain pruning techniques that appear to be effective can be counterproductive to budgetary goals. These techniques can cause trees to react in such a way that there is increased growth the next year, as they actually stimulate rapid re-growth. The resulting re-growth (i.e., water shoots) have poor branch connections that could ultimately result in breaking branches causing outages. Pruning in such a manner shortens the pruning cycle and increases potential risks, thereby increasing the vegetation management workload and costs.

Establishing a strong, cost-stable program requires a long-term vegetation program that includes best management pruning practices, enforcing their use, being prepared for natural threats to trees (diseases, infestations), initiating cooperative planting programs, and increasing program transparency with internal and external stakeholders. The final outcome will reduce cost and outage risks, improve client satisfaction levels, and develop strategic community relations – as well as enhance tree health. Demonstrable results can be witnessed at other utilities, large and small... so how do most utility companies accomplish this?

<u>Components of Successful VM Programs:</u>

- Clearly define and enforce a continuous “clearing distance” (in meters or feet) from primary line at all times.
- Observe proper pruning practices as describe in the ISA best management practices. These practices promote economic and efficiency goals. Some <u>pruning practices to incorporate</u>: directional pruning, ground-to-sky, wire-to-sky (eliminating overhang), pruning back to main lateral, tree-cut branch removal (to maintain branch collar, allowing the cut to seal)
- Identify counterproductive pruning practices. <u>Pruning practices to move away from</u>: pruning mid-branch, allowing stubs to remain, “topping” a tree (completely lopping off the top of the main bole)
- Lengthen pruning cycle – prune vegetation with techniques that maximize life cycle
- Increase internal awareness of necessity to meet pruning specification.
- Enforce pruning specifications to reduce costly mid-cycle trimming. Hold contractor accountable to trimming standards (as outlined in specifications).
- Prune to expect growth that will not create line disturbance (directional pruning)
- Establish, or continue to update a vegetation inventory system to be able to answer key

questions such as primary species on system, average growth rate per species, location of trees, accessibility for pruning activities, and the like.

- Clearly define and concentrate on "smart removals" – remove trees, root re-sprouts, and new trees that would become pruning factors when they reaches maturity
- Have auxiliary response plans in place for threatening tree diseases, such as the EAB (Emerald Ash Borer), Verticillium Wilt, et cetera
- Incorporate programs such as, "The right tree in the right place" – working with property owners or municipalities to plant the most suitable tree for any given place
- Established vegetation guidelines, in regards to lessening of adverse impacts from trees, for new construction projects.
- A well designed (cost) record keeping system to, for example, be able to determine the average hours required to perform an activity, the number of trim units or cost to trim by circuit/grid. With the aid of a strong record keeping system, a utility could establish an incentive-based contract with VM contractors.
- A strong customer care and well-designed customer communication program in order to manage customer's expectations, as well as customer's participation.
- The presence and implementation of a 10 year vegetation management plan with clear goals and objectives defined.

DEVELOPING A 10-YEAR PLAN

Vegetation Programs significantly benefit from developing long-term plans. Such plans detail measurable goals and outline a structural framework, showing a clear trajectory for the following ten years. This will be the foundation for all vegetation work.

Beginning with a strategic vision and knowledge of best practices, this plan establishes clear expectations and procedures for every constituent of the Vegetation Management Program. Where programs are typically weakened due to staff turnover or changing procedures, this will provide continuity and guidance – internally and externally – regardless of who implements the program. Additionally, developing a long term plan would prioritize immediate improvements and implement cost saving practices over time.

Below are the recommended procedures to initiate a Vegetation Management 10-year plan.

NECESSARY STEPS:

- Develop Strategic Goals
  - Establish measurable goals. Goals must be clear and concrete, i.e., "to reduce the outages to 3% in the next 5 years, improving to 1.5 % in the next 10 years"
  - Within the 10-year strategic program, have short-term (3-year) and mid-term (6-year) and long term (10 years) goals to track success and cumulatively build towards the long-term plan

- Create an Internal Process Map for Work Flow
  - Outline Job descriptions, responsibilities, and measurements of productivity if

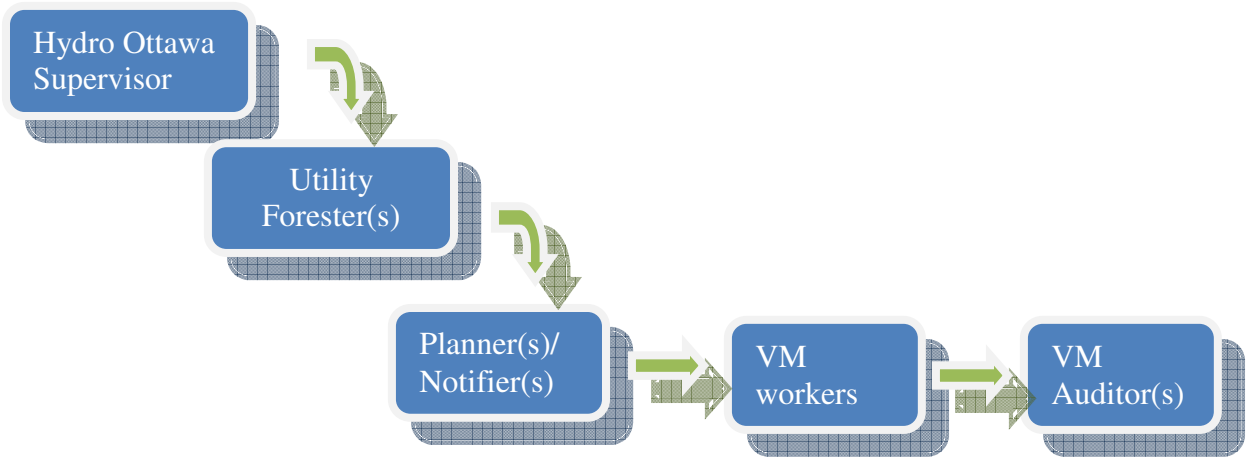
desired

- Define Standard Operating Procedures (SOP) for each position, focusing on Best Management Practices

PROCESS MAP

Process maps are an important reference point to discuss what work must be done within an organization, and how. It identifies who is responsible, the standards that inform each process, and how to achieve specific success. A key factor in creating a process map is to organize around a ***goal***, not tasks. Though people, technology, and techniques may change over time, the work flow remains the same. This is important because energy is not wasted on constantly regrouping – all energy can go into the work itself. Process maps have the added benefit of being able to clearly identify areas of complexity, generate ideas for improvement, and illustrate how those improvements can fit into an existing process.

In successful (efficient, highly functional) utility companies, a vegetation management process map/work flow similar as the following can be found:



This work flow includes the Planning & Notification Process, which creates a work plan for vegetation contractors, and informs utility customer of pruning activities (managing clients' expectations). Establishing expectations for vegetation pruning activities increases the ability to perform audits on contractors' work. This recommended work flow is outlined below.

ESSENTIAL POSITIONS, FUNCTIONS, AND PURPOSES

1. **Planner / Notifier** –
    1. creates a work plan for vegetation contractor according to tender specifications.
        Benefit/goal: creates consistency in work, and enhances proper directional vegetation growth.
    2. notifies customer of pruning activities which will have an impact on their property/trees; explains what activities will take place
        Benefit/goal: informs and educates customers; helps to manage

expectations

Means: a notification letter*, door hanger*, and/or call

* includes: illustrations, before/after pictures, description of work, contact number for additional questions etc. (Appendix B gives examples of notification door hangers.)

The link below provides access to a notification video created to educate customers and better manage their expectations. The embedded PDF documents are the door hanger examples shown in the video.
http://www.pge.com/en/myhome/servicerequests/treetrimming/index.page


Distribution Door Hanger Example.PDF


Transmission Door Hanger Example.PDF


Power Restoration Debris Notice.pdf

2. **Utility Forester** –
   Manager on staff (may be same as notifier/planner in small utility)
   a. delegates work to notifiers/planners
   b. intercedes in customer concerns, interruptions and outages
   c. checks status of notifier/planner, VM work, and auditor

3. **Contractor**
   a. implements work packages – the actual vegetation work (pruning) according to work plan and provided pruning specs.
   b. ensures minimal tree damages by following proper pruning practices
   c. ensures success of long term VM goal through implementation
   d. guarantees and follows through on customer's expectations

4. **Auditor** (internal or external to utility company) –
   a. ensures planning and execution were done correctly by comparing work plan with output, and comparing work plan with tender bid specs.
   b. After sign-off vegetation contractor receives invoiced amount for area audited.

5. **Supervisor** (within utility company) –
   a. Oversees entire program, managing Utility forester, Planner/Notifier, Vegetation Contractor, Auditor, invoices for contractor etc.
   b. ensures VM plan is implemented,
   c. direct contact within utility for customer decision process (makes executive decisions)

TACTICAL PLANNING FOR LONG-TERM GOALS

Begin tactical planning to support long-term goals. Tactical plans are short-term, immediate steps that support a broader goal, and are typically more detailed than the long-range plan. These plans may be included among the 3-year and 6-year plans. The following list provides directional recommendations

for how to focus efforts and effect immediate change.

- Provide continuous education and training in relevant knowledge areas for employees
- Sponsor directly relevant educational programs for staff, i.e., courses in pruning, internal team building and external sub-contractor management, as well as community development training programs
- Encourage and promote Best Management Practices in the field of Vegetation Management. Specifically, integrate key points into company/department ideology through training and exposure
- Actively measure the productivity of positions

Response to Consumers Council of Canada Interrogatory Question #38

Reference: (Ex. D/T1/S3/p. 6)

Question #38:

Please explain why IT maintenance costs are increasing in 2016 relative to previous years. Please provide a detailed breakdown of the 2016 IT Maintenance costs.

Response:

Table 6 in Exhibit D-1-3 represents the Information Management and Technology program, the same as presented in Table 8 in Exhibit D-1-3, rather than just IT maintenance costs. The IT maintenance costs invested across the company are provided in Table 1 below, which outlines the total IT maintenance in relation to the capital spending included in the Distribution System Plan, Table 3.4.9 in Exhibit B-1-2.

Table 1 - IT Maintenance

IT Maintenance Costs ($Mils)	2012 Actuals	2013 Actuals	2014 Actuals	2015 Bridge Year	2016 Test Year	CAGR (Cumulative Annual Growth Rate)
ERP/IT initiatives /Life cycle	$ 1.0	$ 1.2	$ 1.5	$ 1.4	$ 1.7	14.2%
Customer Service	3.3	3.6	4.4	4.8	4.8	9.8%
Operations Initiatives	0.8	0.8	0.9	1.1	1.2	10.7%
Total	$ 5.1	$ 5.6	$ 6.8	$ 7.3	$ 7.7	10.8%

Generally speaking, each dollar of investment in IT software/hardware attracts an associated IT maintenance cost of approximately 22 cents. These costs are necessary

for modifying software to correct issues discovered after initial deployment; modifying and enhancing the software solution to allow it to remain effective in a changing business environment due to continuing innovations; and to improve overall performance over the life of the product. As we continue to invest in new technologies, these costs will increase accordingly.

Table 2 below provides a detailed breakdown of the 2016 IT Maintenance Costs by investment category:

Table 2 – 2016 IT Maintenance by Investment Category

Investment Category	Maintenance Service	2016 Maintenance Costs ($000's)
ERP/IT initiatives /Life cycle	JDE ERP System	$ 852
	Communications equipment	345
	Software	320
	Hardware	140
	Subtotal	**$ 1,657**
Customer Service	Customer Care & Billing System	$ 2,597
	Meter to Cash Support System	1,600
	Outage Communication Optimization	259
	Web	360
	Subtotal	**$ 4,816**
Operations Initiatives	GIS	$ 737
	BPS Scheduling software	204
	Asset Planning Software	107
	SCADA	100
	Other	108
	Subtotal	**$ 1,256**
	Grand Total	**$7,729**

Response to Consumers Council of Canada Interrogatory Question #39

Reference: (Ex. D/T1/S3/p. 6)

Question #39:

Please explain how the 2016 forecast for Bad Debt was derived. Why is there an increase over 2015 despite the evidence that it is expected to stay relatively flat out to 2016?

Response:

Bad debt expense is budgeted based on percentage of total electricity billing including cost of power and distribution revenue. As electricity bill increases, bad debt expense is expected to increase proportionately. The percentage used for budget assumption stays flat at 0.2%. However the expense increases proportionate to the increase in customer electricity bills.

With reference to Exhibit D-1-3 Table 7 – Summary of Bad Debt Costs, the 2015 Budget was set at $1.5M, which is almost the same as 2012, and significantly below 2013 and 2014 actuals. It was a very aggressive target established with the intention to drive performance and test mitigation strategies to bring down bad debt expense as a result of recent spikes. Despite the increases in electricity billing, Hydro Ottawa is committed to keep bad debt percentage flat and maintain a maximum expense increase of $0.1M from the 2014 actual.

Response to Consumers Council of Canada Interrogatory Question #40

Reference: (Ex. D/T1/S3/p. 7 – Table 8)

Question #40:

Please provide the Board approved numbers for each budget category.

Response:

The Board approved a total OM&A spend in the 2012 rate application, there are no board approved numbers for the individual OM&A programs.

Response to Consumers Council of Canada Interrogatory Question #41

Reference: (Ex. D/T1/S4 – Appendix D-1(c) – Balanced Productivity Metrics)

Question #41:

Does this represent all of the metrics proposed for the rate plan period? If not, what other metrics are being proposed? Why will it take until year-end 2015 to establish targets?

Response:

This represents all of the metrics that have currently been established and are being tracked on Hydro Ottawa's Balanced Productivity Scorecard. During the rate plan period, however, Hydro Ottawa is not precluded from establishing other metrics and targets against which it will measure its performance. Hydro Ottawa is reviewing the data for its current metrics to determine appropriate baseline results prior to setting targets. It is anticipated that this will be completed by year end.

Currently Hydro Ottawa is working to develop Performance Matrices that will improve and enhance benchmarking, business plan development and accomplishment reporting processes by tracking effectiveness and efficiency of the investments made. The project will be complete in 2015. This will allow 2016 data to create a baseline to be compared to that of 2017 and on.

Response to Consumers Council of Canada Interrogatory Question #42

Reference: (Ex. D/T1/S4/p. 9)

Question #42:

Hydro Ottawa describes it streamlined project management processes and has indicated that the savings are $400,000 annually. Are these savings reflected in the 2016 base revenue requirement? If so, in what categories?

Response:

The savings identified from the streamlining of project management processes are productivity or opportunity cost savings. The Designers are using the time savings from the streamlined project management process and the other process improvements identified in Exhibit D-1-4 to complete more work, while also decreasing the overall number of design resources since 2012.

Response to Consumers Council of Canada Interrogatory Question #43

Reference: (Ex. D/T1/S4/p. 10)

Question #43:

Hydro Ottawa has signed three year standing offer arrangements with two Toronto based contractors. What is the annual cost of those contracts? How do these contracts operate? What happens at the end of the three years? What is the specific value this brings to Hydro Ottawa?

Response:

The three year standing offer agreements with two Toronto based contractors were set to expire during 2015 and have been extended by one year to February and July 2016 respectively. Hydro Ottawa intends to re-compete these engagements towards the end of 2015.

The contracts are time and material based so the annual cost fluctuates annually based on total man hours and vehicle hours consumed. Actual costs for the last couple years have been $5.8M – 2013, $8.8M – 2014, and $3.9M – YTD May 2015.

We rely on these contracts to complete our forecasted capital expenditures. They provide a good alternative to hiring full time staff or apprentices due to the flexibility of being able to increase or decrease the number of contract resources according to capital workload. Timely completion of the capital program helps achieve reliability and customer service targets.

Response to Consumers Council of Canada Interrogatory Question #44

Reference: (Ex. D/T1/S4/p. 15)

Question #44:

Please explain how the Capital Efficiency Gains from the AIP Implementation will be tracked and reported.

Response:

As described in Interrogatory Response to CCC #26, one of the purposes of the AIP software is to better prioritize investments to help close the gap between forecasted need and actual expenditure levels. As a result the desired outcome is a reduction in equipment related failure trends.

Currently Hydro Ottawa is working to develop Performance Matrices that will improve and enhance benchmarking, business plan development and accomplishment reporting processes by tracking effectiveness and efficiency of the investments made. The project will be complete in 2015. This will allow 2016 data to create a baseline to be compared to that of 2017 and on. The 2017 project list will be the first to be optimized using C55.

Response to Consumers Council of Canada Interrogatory Question #45

Reference: (Ex. D/T1/S5/ Attachment D-1(D))

Question #45:

Was the work undertaken by Power System Engineering Inc. subject to an RFP process? If not, why not? If so please provide the RFP. Please provide the Terms of Reference for the PSE work. What is the total expected cost of the PSE work? How much has been incurred to date?

Response:

a. Hydro Ottawa did not initiate a Request for Proposal (RFP) process before entering into a contract with Power System Engineering because PSE's field of expertise is econometrics which is a distinct and specialized field. The PSE contract was accordingly a sole source contract.

b. A copy of the Terms of the Contract can be found in IR:D-1-5(CCC #45)ORG Attachment 1.

c. The total expected cost of the PSE work will be determined by the volume of interrogatories and undertakings as well as the number of days PSE's work is tested at the technical and oral hearings. Hydro Ottawa is accordingly not in a position to accurately estimate that the total expected cost of the work undertaken by PSE.

d. Approximately $60,500 has been invoiced to Hydro Ottawa as of the date of this interrogatory.

Response to Consumers Council of Canada Interrogatory Question #46

Reference: (Ex. D/T1/S6/p. 1)

Question #46:

The evidence states that Hydro Ottawa has a 28% adoption rate for e-billing. What are the annual savings associated with this level of take-up? Does Hydro Ottawa expect this to increase over the term of the rate plan? If so, by how much? What type of e-billing service does Hydro Ottawa provide?

Response:

In May 2015 the number of accounts converted to electronic billing reached 91,013. Hydro Ottawa is pleased to be among industry leaders with a 28 percent adoption rate for E-Billing. Hydro Ottawa is now realizing over $1M of annualized operational cost avoidance through this program had the E-Billing solution not been implemented.

Every customer that converts to E-Billing enables Hydro Ottawa to reduce operational expenses of $11.09 per year (mainly in avoided postal fees).

With close to 230,000 customers still receiving paper bills, there is the opportunity to reduce an additional $2.6M in annualized operational costs if every customer were to convert to E-Billing - so the focus continues on the promotion of "Go Paperless". It is anticipated that the effort to attract new customer conversions will continue to increase as the growth in E-Billing uptake slows over time.

Hydro Ottawa utilizes the E-Billing services through a third party vendor.

Response to Consumers Council of Canada Interrogatory Question #47

Reference: (Ex. D/T1/S6/Attachment D-1 (F))

Question #47:

What was the cost of the Customer Persona Research Program? How were those costs recovered?

Response:

The total cost of the Customer Persona Research Program was $260,000 ($99,775 in 2012 and $169,225 in 2013).

Costs were recovered through Hydro Ottawa's 2012 Cost of Service rate application.

Response to Consumers Council of Canada Interrogatory Question #48

Reference: (Ex. D/T1/S8/p. 2)

Question #48:

Please describe in detail the Incentive Based Pay Program. What are the financial and non-financial objectives? What is the cost of the program in 2015 and 2016? Does Hydro Ottawa expect this program to change during the term of the rate plan? If so, in what ways would it change?

Response:

Incentive-based pay as described in Exhibit D, Tab 1, Schedule 8, Page 2 is a component of the total cash compensation of senior management employees.

Incentive-based pay is not guaranteed. Incentive-based pay is aligned with the corporate objectives outlined in Exhibit A, Tab 2, Schedule 1, Page 7, and performance and results are determined based on the achievement of associated initiatives in support of Hydro Ottawa's strategic direction. Incentive payments are contingent on overall corporate financial performance, and are subject to approval by the Board of Directors.

Incentive pay is based on the following blend of weighted performance factors, by eligible employee level:

Table 1: Performance Weightings

	Manager	Director	Executive
Corporate	-	30%	60%
Division	-	40%	40%
Individual	100%	30%	-

Incentive-based pay for the Director and Executive levels focuses significantly on collective performance given their direct line of sight and influence on the achievement of corporate objectives.

As indicated in Exhibit D, Tab 1, Schedule 8, Page 3 the cost of incentive pay is forecasted to be $687,036 in 2015 and $706,272 in 2016.

Hydro Ottawa does not expect this program to change during the term of the rate plan.

Response to Consumers Council of Canada Interrogatory Question #49

Reference: (Ex. D/T2/S4)

Question #49:

What are the expected regulatory costs associated with this proceeding? Please provide a detailed budget including costs incurred to date? Does Hydro Ottawa intend to amortize these costs over the 5-year term of the plan? If not, how will these costs be recovered?

Response:

The expected regulatory costs associated with this proceeding are forecasted to be approximately $757k. Below is a detailed budget which includes expenses incurred in 2014 and forecasted for 2015. No amounts are included in the 2016 Budget.

Table 1 – Regulatory Costs for 2016 Custom IR Application

Description	Budget
Consulting	$ 549,000
Legal	24,000
Media Communications	55,000
Travel	56,000
Training	39,000
Copy and Printing	34,000
Total	**$ 757,000**

Hydro Ottawa does not intend to amortize these costs over the 5-year term of the plan. The expenses incurred in 2014 and 2015 are being managed within Hydro Ottawa's overall OM&A envelope for 2014 and 2015.

Response to Consumers Council of Canada Interrogatory Question #50

Reference:

(Ex. E/T1/S1)

Question #50:

Please provide the actual and Board approved ROE levels for the years 2010-2014.

Response:

Below are the actual Regulatory and Board approved Return on Equity ("ROE) levels from 2011 to 2014.

Year	Board Approved ROE	Actual Regulatory ROE
2011	8.57%	7.86%
2012	9.42%	9.41%
2013	9.42%	7.80%
2014	9.42%	8.05%

The Ontario Energy Board is completing a ROE sector review. The outcome of this initiative could result in an adjustment to the 2014 number.

Response to Consumers Council of Canada Interrogatory Question #51

Reference: (Ex. H/T1/S1/p. 2)

Question #51:

Did Hydro Ottawa survey/engage its residential customers regarding the fixed and variable split? If not, why not? If so, please present the customer research specifically related to this topic. Were customers specifically asked about the move from a residential fixed charge of $9.67 to $12.25?

Response:

Hydro Ottawa Limited ("Hydro Ottawa") did not include the fixed variable split in its customer engagement scope, as this is a policy decision being led by the Ontario Energy Board.

Response to Consumers Council of Canada Interrogatory Question #52

Reference: (Ex. H/T7/S1/p. 1)

Question #52:

Hydro Ottawa undertook a review of its service charges in 2014. Though that review did Hydro Ottawa did Hydro Ottawa review whether the charges were reflective of the costs for all of the service charges? If not, why not?

Response:

As noted in Exhibit H-7-1, pages 1 and 2, Hydro Ottawa did not undertake a review of six, currently existing specific service charges. Priority was given to those existing service charges that were expected to be most out of line with actual costs. Please refer to Interrogatory Response to SIA Question #30 for further details.

Response to Consumers Council of Canada Interrogatory Question #53

Reference: (Ex. H/T7/S1/p. 3)

Question #53:

How does Hydro Ottawa intend to inform its customers about the changes to the service charges proposed? How has Hydro Ottawa developed the forecasts (2016-2020) for the revenue from existing service charges and new service charges?

Response:

In accordance with the Ontario Energy Board's ("the Board") Letter of Direction, dated May 27, 2015, Hydro Ottawa proceeded to serve Notice of Application to Retailers, Pole Attachment Customers and Interveners on record. On June 5, 2015 Hydro Ottawa confirmed completion of service to the Board.

The revenue forecasts for 2016 through 2020 were primarily based upon historical trends. In the case of the Account Set Up Charge, a one percent increase was applied for customer volume increases.

Response to Consumers Council of Canada Interrogatory Question #54

Reference: (Ex. H/T12/S1/p. 2)

Question #54:

For the residential class please set out the distribution rate increases for the following monthly consumption levels – 400 kWh and 1000kWh.

Response:

Please see Original evidence Appendix 2-W for bill impacts for a residential customer with a monthly consumption of 1000 kWh.

Please refer to attachment Att-CCC-Q54-A of this response for bill impacts of a residential customer with a monthly consumption of 400 kWh.

Response to Consumers Council of Canada Interrogatory Question #55

Reference: (Ex. I/T1/S2/p. 4)

Question #55:

Please explain why Hydro Ottawa does not know the market value of the Albion Road, Merivale Road and Bank Street facilities. Would the value of these facilities not have been an important input in terms of making decisions regarding the Facilities Implementation Plan? If not, why not?

Response:

Hydro Ottawa has commissioned appraisals for the market value of the properties to be sold, however the market value of any property is tied to the economy and market conditions at the time of sale. Hydro Ottawa does will not know the precise market value of its existing facilities until the facilities are evaluated prior to being placed on the real estate market.

The value of the existing facilities was an important consideration that informed Hydro Ottawa's decision to invest in new facilities. However, it was not the primary driver leading to Hydro Ottawa's decision. The primary drivers included the company's existing facilities, which are at the end of their useful asset life, represent risks to public safety as well as the health and safety of company employees, and finally because the existing facilities have staff spread across the city which prevents the company from achieving operational efficiencies or otherwise capitalizing on the benefits of cross-functional collaboration and cultural and operational synergies.