Hydro One Brampton Networks Inc. 175 Sandalwood Pkwy West Brampton, Ontario L7A 1E8 Tel: (905) 840 6300 www.HydroOneBrampton.com



BY COURIER

November 1, 2010

Ms. Kirsten Walli Board Secretary Ontario Energy Board Suite 2700, 2300 Yonge Street Toronto, ON M4P 1E4

Dear Ms. Walli:

Hydro One Brampton Networks Inc. Filing of CDM Strategy and Application for Board-Approved CDM Programs

Please find attached two paper copies of the confidential version and redacted version of Hydro One Brampton Networks' CDM strategy and Application for Board-Approved CDM Programs. In order to uphold the integrity of the RFP process Hydro One Brampton Networks Inc. asks for confidential treatment of the unredacted version of the strategy and Application specifically Exhibit C, Tab 1 Schedule 2.

On September 16, 2010, the Ontario Energy Board ("OEB" or "Board") issued the final Conservation and Demand Management ("CDM") Code for Electricity Distributors under Section 70.2 of the *Ontario Energy Board Act*, 1998 ("the Act"). The Board developed the new CDM Code ("the Code") in accordance with the Minister of Energy and Infrastructure's directive dated March 31, 2010, that was issued to the Board under sections 27.1 and 27.2 of the Act.

Hydro One Brampton Networks Inc. ("Hydro One Brampton") understands that the Code is an important component of the Board's efforts to promote CDM consistent with the Government of Ontario's policies. The purpose of the Code is to set out the obligations and requirements with which licensed distributors must comply with in relation to the CDM targets to be set out in their licences, including the filing of a CDM Strategy. The Code also sets out the conditions and rules that licensed distributors are required to follow if they choose to use Board-Approved CDM Programs to meet the CDM Targets.

The attached Plan ("the Plan") combines Hydro One Brampton's CDM Strategy and Application for OEB-Approved CDM Programs. The Plan includes a description of how Hydro One Brampton intends to achieve its CDM Targets of 46 MW and 194 GWh over the period 2011-2014. The Plan includes all components required by the Code for submission of a CDM Strategy

and Board-Approved CDM programs. The Plan will help ensure that Hydro One Brampton meets its CDM targets in a cost-effective manner and provides value to ratepayers.

This redacted version of The Plan has been filed through the Board's Regulatory Electronic Submission System ("RESS"), with two copies being delivered to the Board by courier. After receiving an acknowledgment letter from the Board confirming that the CDM Strategy is complete, Hydro One Brampton will make its CDM Strategy available for public review at its main office at 175 Sandalwood Parkway West and on its website.

For more information please contact Scott Miller at 905-452-5504

Sincerely,

Scott Mulle

Scott Miller

Manager Regulatory Affairs

Hydro One Brampton Networks Inc.

FILING OF CDM STRATEGY AND APPLICATION FOR BOARD-APPROVED CDM PROGRAMS

EXHIBIT A: ADMINISTRATION

EXHIBIT A TAB 1

Filed: November 1, 2010 Exhibit A Tab 1 Schedule 1 Page 1 of 1

Exhibit List

Exhibit	Tab	Schedule	Contents
A			Administration
	1	1	Exhibit List
	1	2	Application
В			Evidence
	1	1	2011 to 2014 Conservation and Demand Management Plan Summary
	1	2	2011 to 2014 Conservation and Demand Management Strategy
	2	1	2011 to 2014 Conservation and Demand Management Budget for Board-Approved Programs and Cost Recovery
C			Supporting Material
	1	1	Detailed Description of OPA-Contracted CDM Programs
	1	2	Detailed Description of Board-Approved CDM Programs

Filed: November 1, 2010 Exhibit A Tab 1 Schedule 2 Page 1 of 3

ONTARIO ENERGY BOARD

- 2 IN THE MATTER OF the Ontario Energy Board Act, 1998; AND IN THE MATTER OF an
- 3 Application by Hydro One Brampton Networks Inc.
- 4 For an Order or Orders confirming the 2011 to 2014 Conservation and Demand Management
- 5 Strategy and approving funding for the 2011 to 2014 Board-Approved Conservation and
- 6 Demand Management Programs

APPLICATION

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- The Applicant is Hydro One Brampton Networks Inc. ("Hydro One Brampton"), a subsidiary of Hydro One Inc. The Applicant carries on the business as a local distribution company operating in Brampton Ontario.
- Hydro One Brampton hereby applies to the Ontario Energy Board (the "Board"), pursuant to section 78 of the *Ontario Energy Board Act, 1998* ("the *OEB Act"*), for confirmation of the 2011 to 2014 Conservation and Demand Management Strategy ("CDM Strategy"). A Board confirmation of Hydro One Brampton's CDM Strategy will endorse:
 - a. the suite of Conservation and Demand Management Programs that Hydro One Brampton put forward to achieve its 2011 to 2014 Conservation and Demand Management Targets; and
 - b. Hydro One Brampton's anticipated energy and peak demand savings achievements for OPA-Contracted and Board-Approved CDM Programs for the 2011 to 2014 period.
- 3. Hydro One Brampton also seeks approval of the 2011 to 2014 Board-Approved 22 Conservation and Demand Management Programs Application for 2011 to 2014 in 23 accordance with the Conservation and Demand Management Code for Electricity 24 Distributors. The six Board-Approved Conservation and Demand Management Programs 25 included in this application are Community Education Events, Neighbourhood 26 Benchmarking, Monitoring and Targeting, Small Commercial Energy Management and 27 Load Control, Municipal and Hospital Energy Efficiency Performance, and Double 28 Return Plus. 29
- Hydro One Brampton seeks approval of its Board-Approved Conservation and Demand
 Management Application which will provide \$7.9 million to fund the six BoardApproved CDM programs that are listed above during the 2011 to 2014 period. The
 Board's approval will enable payments from the Independent Electricity System Operator
 (the "IESO") in accordance with section 78.5(1) of the *OEB Act*.

Filed: November 1, 2010 Exhibit A Tab 1 Schedule 2 Page 2 of 3

- Hydro One Brampton also requests approval of a variance account that will be used to record the difference between the funding awarded for Board–Approved Conservation and Demand Management Programs and the actual spending incurred to carry out these programs.
- 5 6. Hydro One Brampton requests a written hearing on this application.
- 7. The written evidence filed with the Board may be amended from time to time prior to the Board's final decision on the Application. Further, the Applicant may seek meetings with Board Staff in an attempt to identify and reach agreements to settle issues arising out of this Application.
- Hydro One Brampton requests that a copy of all documents filed with the Board by each party to this Application be served on the Applicant and the Applicant's counsel as follows:
 - a) The Applicant:

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- Mr. Scott Miller
- 15 Regulatory Affairs Manager
- Hydro One Brampton Networks Inc.

Mailing Address: 175 Sandalwood Pkwy West

Brampton, ON L7A 1E8

20 Telephone: (905) 452-5504 21 Fax: (905) 840-1915

22 Electronic access: smiller@hydroonebrampton.com

b) The Applicant's counsel:

Mr. Michael Engelberg

25 Assistant General Counsel

26 Hydro One Networks Inc.

27 Address for personal service: 15th Floor, North Tower

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Filed: November 1, 2010 Exhibit A Tab 1 Schedule 2 Page 3 of 3

			Page 3 of		
1	Telephone:	(416) 345-6305			
2	Fax:	(416) 345-6972			
3	Electronic access: mengelberg@HydroOne.				
4	DATED at Toronto, Ontario, this 1st da	ay of November, 2010.			
5	HYDRO ONE NETWORKS INC.				
6	By its counsel,				
7					
8		Michael. Engelberg			

EXHIBIT B: EVIDENCE

EXHIBIT B TAB 1

Filed: November 1, 2010 Exhibit B Tab 1 Schedule 1 Page 1 of 3

2011 TO 2014 CONSERVATION AND DEMAND MANAGEMENT PLAN SUMMARY

- On September 16, 2010, the Ontario Energy Board ("OEB" or "Board") issued the final
- 4 Conservation and Demand Management ("CDM") Code for Electricity Distributors under
- 5 Section 70.2 of the Ontario Energy Board Act, 1998 ("the Act"). The Board developed the new
- 6 CDM Code ("the Code") in accordance with the Minister of Energy and Infrastructure's
- directive, dated March 31, 2010, that was issued to the Board under sections 27.1 and 27.2 of the
- 8 Act. The directive set out the total of the CDM Targets that the must be allocated to respective
- distributors. A reduction of 1,330 MW and 6,000 GWh is required on a Province-wide basis by
- the end of 2014.
- Hydro One Brampton Networks Inc. ("Hydro One Brampton") understands that the Code is an
- important component of the Board's efforts to promote CDM consistent with the Government of
- Ontario's policies. The purpose of the Code is to set out the obligations and requirements with
- which licensed distributors must comply in relation to the CDM targets to be set out in their
- licenses, including the filing of a CDM Strategy. The Code also sets out the conditions and rules
- that licensed distributors are required to follow if they choose to use Board-Approved CDM
- 17 Programs to meet the CDM Targets.
- 18 Hydro One Brampton's Plan ("the Plan") combines Hydro One Brampton's CDM Strategy and
- 19 Application for Board-Approved CDM Programs. It leverages Hydro One Brampton's
- 20 experience in implementing and managing CDM programs. The Plan includes a description of
- 21 how Hydro One Brampton intends to achieve its CDM Targets of 46 MW and 194 GWh over the
- period 2011-2014. The Plan includes all components required by the Code for submission of a
- 23 CDM Strategy and Application for Board-Approved CDM programs (More information on filing
- requirement is attached to this exhibit as Appendix A). The Plan provides a detailed roadmap to
- ensure that Hydro One Brampton meets its CDM targets in a cost-effective manner and provides
- value to ratepayers.

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- 27 Hydro One Brampton will take full advantage of the OPA-Contracted CDM Programs, which are
- expected to achieve approximately 83% of Hydro One Brampton's CDM targets. To achieve the
- remaining 17%, Hydro One Brampton will undertake Board-Approved CDM programs. Figure 1
- 30 summarizes Hydro One Brampton's anticipated peak savings, and energy savings achievements
- for OPA Contracted and Board-Approved CDM Programs for the 2011 to 2014 period.

Figure 1 - Annual Incremental Peak and Energy Savings from OPA Contracted and Board-Approved CDM Programs

Savings	2011	2012	2013	2014	Total (2011-2014)
Annual Incremental Peak (kW) savings	9,200	16,100	16,100	4,600	46,000
Annual Energy savings (MWh)	38,800	67,900	67,900	19,400	194,000

Filed: November 1, 2010 Exhibit B Tab 1 Schedule 1 Page 2 of 3

- Figure 2 summarizes annual milestones for the combination of OPA-Contracted and Board
- 2 Approved CDM Programs and shows that 100% of Hydro One Brampton's targets will be
- reached by the end of 2014.

Figure 2 – Annual Milestones

Milestone	2011	2012	2013	2014
Stage	Stage 1 - Program launch	Stage 2 - Programs settle/provide fine tuning	Stage 3 – Program matures	Stage 4 – Program full performance
% of target MW	20%	55%	90%	100.00%
% of target MWh	20%	55%	90%	100.00%

- 5 The stages that are identified include initiative launch, fine tuning, settling and full performance.
- 6 The forecasted budget requirement for OPA-Contracted and OEB- Approved programs is \$39.6
- 7 million and \$7.9 million respectively.
- 8 Currently, Hydro Brampton One has not included any CDM benefits that may result from the
- 9 implementation of Time-of-Use pricing. Hydro One Brampton may revise its forecast to reflect
- 10 CDM benefits in the future when more information is available on the CDM impacts of Time-of
- 11 Use pricing.
- 12 Hydro One Brampton is applying for six Board-Approved programs:
- Community Education Program
- Neighbourhood Benchmarking
- Monitoring & Targeting
- Small Commercial Energy Management and Demand Response ("DR") Initiative
- Municipal & Hospital Efficiency Performance
- Double Return Plus
- 19 The costs of the above programs are reflected in this Application. Detailed information on each
- 20 proposed Board-Approved Program can be found at Exhibit B, Tab 1, Schedule 2, Section 4 and
- Exhibit C, Tab 1, Schedule 2.
- 22 Hydro One Brampton views the proposed Board-Approved CDM Programs as a key element for
- 23 meeting its distributor license condition. These proposed programs are cost-effective as they

Filed: November 1, 2010 Exhibit B Tab 1 Schedule 1 Page 3 of 3

- have all passed both the Total Resource Cost ("TRC") Test and the Program Administration Cost ("PAC") Test. In addition to quantifiable energy and peak demand savings, they will provide
- additional benefits such as enhanced customer service, CDM sustainability, market
- 4 transformation and engagement of all customer types.

Filed: November 1, 2010 Exhibit B Tab 1 Schedule 2 Page 1 of 16

2011 TO 2014 CONSERVATION AND DEMAND MANAGEMENT STRATEGY

3 1.0 Introduction

- 4 The specific CDM energy and peak savings targets allocated by the Board to Hydro One
- 5 Brampton are 194 GWh and 46 MW respectively. The Hydro One Brampton Conservation and
- 6 Demand Management ("CDM") Strategy provides a description of how Hydro One Brampton
- 7 intends to achieve its CDM Targets over the 2011-2014 period. It provides a basis for the
- 8 activities required to achieve the Hydro One Brampton CDM targets, while also aligning with
- 9 the Company's strategic drivers of Innovation, Stewardship, Excellence and Safety. This
- Strategy is also consistent with the Ontario Government's vision of a conservation-oriented and
- more environmentally-conscious Province.
- The Strategy addresses the following:
 - Factors considered in developing the Hydro One Brampton CDM Strategy
- An overview of the OPA-Contracted Programs that Hydro One Brampton will undertake
- An overview of the proposed OEB-Approved Programs that have been developed
- How CDM programs will be offered to all customer types
- How Hydro One Brampton coordinated with other LDCs and Stakeholders
- How Hydro One Brampton plans to monitor and control the programs

19 2.0 Factors Considered in Developing the Hydro One Brampton CDM Strategy

- 20 Hydro One Brampton has taken into account a number of factors in developing the Hydro One
- 21 Brampton CDM Strategy. The following section discusses the key aspects that were considered
- by Hydro One Brampton to ensure that the CDM Strategy is comprehensive and prudent:

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Filed: November 1, 2010 Exhibit B Tab 1 Schedule 2 Page 2 of 16

Identify and Understand CDM Potential

- The first step in developing the CDM strategy was to examine Hydro One Brampton's customer
- base from a CDM perspective. A third party consultant assisted to prepare an analysis of CDM
- 4 potential for Hydro One Brampton. The consultant's analysis indicated that approximately 83%
- of Hydro One Brampton's CDM target can be achieved through OPA-Contracted Programs and
- 6 that the implementation of Board-Approved Programs is essential for Hydro One Brampton to
- 7 achieve its allocated CDM targets.

8 Develop Non-Duplicative Board-Approved Programs

- 9 The CDM code stipulates that distributors cannot apply for Board-Approved programs that
- duplicate existing OPA-Contracted CDM programs.
- All Board-Approved CDM programs proposed in this Application are designed to target
- untapped areas and they are not duplicative of the existing OPA-Contracted CDM programs.
- 13 The distinctions between these Board-Approved Programs and the existing OPA-Contracted
- 14 CDM Programs are further discussed in section 4 of this exhibit. Detailed descriptions of both
- the OPA-Contracted Programs and the requested Board-Approved Programs can be found at
- Exhibit C, Tab 1, Schedules 1 and 2, respectively.

17 Leverage Extensive Experience and Proven Success

- 18 Hydro One Brampton, in conjunction with Hydro One Networks, has extensive experience in
- developing, implementing and delivering CDM initiatives. Since 2005, Hydro One Brampton
- 20 has actively and effectively served its customer delivering a range of CDM programs and
- initiatives. These programs achieved annualized savings of 985 kW and resulted in over 31 MW
- in peak demand savings over the period to September 2007.

23 Achieving Cost Effectiveness

- 24 Cost effectiveness is an important element of Hydro One Brampton's CDM program portfolio,
- which consists of both OPA-Contracted Province-Wide and Board-Approved CDM Programs.

Filed: November 1, 2010

Exhibit B

Tab 1

Schedule 2

Page 3 of 16

- The cost effectiveness of all OPA-Contracted CDM Programs has been verified by the OPA.
- 2 Hydro One Brampton plans to take full advantage of all these cost effective OPA-Contracted
- 3 CDM programs, which are expected to help achieve approximately 83% of the Hydro One
- 4 Brampton CDM targets.
- 5 Hydro One Brampton plans to achieve the rest of the CDM target (approximately 17%) by
- 6 delivering Board-Approved CDM Programs. All requested Board-Approved CDM programs
- included in this Application are cost-effective, as required by the CDM Code. They have passed
- both the Total Resource Cost ("TRC") Test and the Program Administration Cost ("PAC") Test.
- 9 The results of the TRC and PAC tests for each Board-Approved Program can be found at Exhibit
- 10 C, Tab 1, Schedule 2. In addition, Hydro One Brampton will monitor and evaluate to help
- ensure that the cost-effectiveness results remain in line with estimates.

Maximize Administrative Efficiency

- 13 Hydro One Brampton has been working with Hydro One Networks Inc. leveraging their
- expertise on this current CDM Strategy.
- Working with Hydro One Networks Inc. has enabled Hydro One Brampton to capitalize on the
- 16 relationships that Hydro One Networks Inc. has developed to maximize administrative
- efficiencies and synergies (e.g. working with gas distributors, electricity distributors, social
- service agencies, joint RFP, deployment, delivery).
- All currently requested Board-Approved CDM Programs are economic as they have passed the
- 20 cost-effectiveness tests (TRC and PAC). To the extent that there is future uptake from other
- distributors, that future uptake will increase overall administrative efficiency and improve the
- cost-effectiveness measures for these programs. Any subsequent material reduction in future
- 23 program expenditures will be reported to the OEB as part of the annual CDM report submission.

24 Ensure CDM Program Coverage for All Customer Types

- Hydro One Brampton has ensured that CDM programs are offered for all customers types. In
- addition to the existing OPA-Contracted CDM programs, a suite of distinct Board-Approved

Filed: November 1, 2010

Exhibit B

Tab 1

Schedule 2

Page 4 of 16

CDM programs will address Hydro One Brampton's specific customer types and segments.

- 2 This mix of programs (both OPA-Contracted and Board-Approved) will ensure the needs of
- 3 Hydro One Brampton's customers are met. Please refer to Figure 6 in Section 5 of this Exhibit,
- 4 which shows the coverage for residential, commercial and industrial customers.

5 Ensure that Potential Risks can be Mitigated

- 6 Hydro One Brampton is fully committed to achieving its CDM target. Risk mitigation is
- 7 essential to ensuring success. Hydro One Brampton has identified the following activities that
- 8 are intended to mitigate potential risks:
- Hydro One Brampton has relied on its own experience in program implementation and
- delivery along with Hydro One Networks Inc.'s extensive experience and proven success to
- identify and design effective programs.
- Hydro One Brampton proposes a diverse CDM program portfolio that covers multiple
- customer segments to minimize the risk of differences between program plans and actual
- 14 experience.

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- Hydro One Brampton will monitor evaluate and promptly address any differences between
- program plans and actual experience.

3.0 OPA-Contracted Programs

- 18 Hydro One Brampton intends to take full advantage of the OPA-Contracted Programs which are
- expected to deliver approximately 83% of the Hydro One Brampton CDM target. This estimate
- was achieved through a customer-based analysis approach to ensure the integrity of the estimate.
- As mentioned in Section 2.0 of this document, Hydro One Brampton worked with a third party
- consultant to undertake a CDM potential analysis. The results of a consultant's study supported
- the Company's analysis indicating that, to achieve its target by 2014, Hydro One Brampton will
- need to rely on both OPA-Contracted and OEB Approved Programs.

Filed: November 1, 2010 Exhibit B

> Tab 1 Schedule 2 Page 5 of 16

Figure 3 provides an overview of the OPA-Contracted programs which Hydro One Brampton

- 2 intends to undertake. Included in the figure are estimates of the projected budget, estimates of
- 3 total projected reduction in peak demand and total projected reduction in electricity consumption
- 4 for each of the programs.
- The amounts for each OPA-Contracted initiative were derived by applying the estimated
- 6 percentage of Hydro One Brampton participation to the total OPA provincial budget. The OPA is
- 7 in the process of finalizing the funding mechanism. Any potential changes to the funding
- 8 mechanism are not expected to be material. As a result, any changes to the requested Board-
- 9 Approved CDM programs will not be significant and will be handled through the proposed
- variance account.

Figure 3: OPA-Contracted Province-Wide Programs to be Undertaken by Hydro One Brampton

Estimated Net MW - 2011 - 2014 Cumulative

Customer Segment	Net MW reduced*	Net GW.h saved*	Projected Budget**	
Mass Marketing (Total)	5.2	29.2		
Appliance Retirement	0.6	7.9		
Residential New Construction	3.3	6.7	5.0	
Res Demand Reduction	4.6	0.0	14.0	
Res Low Income				
Total Residential	13.8	43.7	19.0	
CI&I New Construction	0.3	1.7		
C&I ERIP	9.8	86.2	14.5	
Commercial DR	4.9		0.5	
Total Commercial	15.0		15.0	
		87.9		
Industrial both ERIP and Industrial Accelerator	2.1	46.4	4.4	
Industrial DR	7.1		1.2	
Total Industrial		46.4	5.6	
	9.2			
TOTAL	38	178	39.6	

Filed: November 1, 2010 Exhibit B Tab 1 Schedule 2 Page 6 of 16

- * Numbers may not add up due to rounding
- ** Estimated budgets are allocated as a percentage of estimated customer segment participation
- for each of the individual initiatives within the province-wide programs. They include costs and
- 4 incentives paid directly by the distributor.
- 5 The \$39.6 million is based on the OPA's projected budget for all these CDM programs. The
- total budget has been divided between the costs for which the LDCs are responsible (60%
- 7 Consumer, 88% Commercial, 88% Industrial) and those for which the OPA is responsible (40%
- 8 Consumer, 12% Commercial, 12% Industrial). The LDC portion is then expressed on a \$/kW
- 9 basis. These rates were then applied to the projected savings which Hydro One Brampton
- expects to achieve in all these programs.
- Please refer to Exhibit C, Tab 1, Schedule 1 for detailed program descriptions of the OPA-
- 12 Contracted Programs.

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13 4.0 Requested Board-Approved Programs

4.1 Need for Board-Approved Programs

- 15 The March 31, 2010, Directive by the Minister of Energy and Infrastructure allows distributors
- to meet their CDM targets through initiatives under the OPA-Contracted CDM Programs and
- OEB-Approved CDM Programs. The OPA has indicated that its Programs are expected to
- achieve 1,037 MW of the 1330 MW provincial target, leaving the difference to be addressed by
- other OEB-Approved programs.
- 20 Hydro One Brampton intends to take full advantage of initiatives under OPA-Contracted
- 21 Programs, which are expected to satisfy approximately 83% of the Hydro One Brampton CDM
- target. In addition to the OPA-Contracted programs, Hydro One Brampton requires a range of
- OEB-Approved Programs in order to satisfy the remainder of its allocated CDM target.
- 24 Hydro One Brampton has considered a series of programs as potential OEB-Approved Programs.
- 25 After review of these potential programs, Hydro One Brampton has selected the six programs
- that appear in Figure 4 for OEB approval.

Figure 4: Board-Approved CDM Programs

Initiative Name	Projected Budget (\$)	Total Projected	Total Projected	Cost Effectiveness Tests	
		Reduction in Peak Provincial Demand (MW)	Reduction in Electricity Consumption (GWh)	FRC Ratio	PAC Ratio
Community					
Education Events	177,000	0.020	1.394	1.4	1.1
Neighborhood Benchmarking	1,550,000	0.950	30.5	1.2	1.2
Monitoring & Targeting	1,435,000	1.623	3.533	1.4	1.2
Small Commercial Energy Management and Load Control	1,525,000	2.000	2.00	1.7	1.3
Municipal and Hospital Energy Efficiency					
Performance	794,000	.220	5.10	1.4	1.1
Double Return Plus	2,374,000	11.000	30	11	6
Total	7,855,000	15.813	72.43		

The MW and MWh estimates are based on Hydro One Networks Inc. past programs' and data

- 4 from third party consultants.
- 5 Hydro One Brampton plan on offering the 6 proposed OEB Approved Programs, that were
- 6 developed by Hydro One Networks Inc., Hydro One Networks Inc., has carried out cost
- 7 effectiveness tests, including Total Resource Cost ("TRC") and Program Administrative Cost
- 8 ("PAC") tests.
- 9 The Program mix of the proposed OEB Approved Programs is essential for Hydro One
- 10 Brampton to meet its CDM target. These programs offer a range of benefits including
- engagement of all customer sectors, CDM sustainability, and market transformation.

Filed: November 1, 2010 Exhibit B Tab 1 Schedule 2

Page 8 of 16

- The requested Board-Approved programs also address customer needs that are not currently met
- by the OPA-Contracted Programs. These programs are expected to help pave the way for a new
- level of CDM commitment for LDCs, as envisioned by the Green Energy and Green Economy
- 4 Act. OEB-Approved Programs are a key component for Hydro One Brampton to meet its CDM
- 5 requirements as set out by its distributor's license conditions.
- 6 The requested Board-Approved programs address all customer segments of residential,
- 7 commercial of various sized-businesses, and industrial. In addition to the cost-effectiveness and
- 8 demand and energy savings of the proposed programs, several other factors were also
- 9 considered. For example, the Neighborhood Benchmarking program is the only program that
- addresses behavioral changes based on peer comparisons and influence.
- Other programs, such as the Double Return Plus, empower customers to manage and reduce their
- own peak demand (as compared to other dispatchable demand response programs). This
- program will achieve reductions that stem from the customer's behavioral change, and promise
- persistent results that are expected to go beyond the life of the program. The Double Return Plus
- program will achieve high TRC and PAC ratios. It is intended to meet most of the untapped
- potential for customers to reduce their peak demand.
- The Small Commercial Energy Management and Load Control program will provide programs
- for small commercial customers. The small commercial customer group requires a robust
- 19 program to encourage them to participate in CDM initiatives. This program represents a
- threshold investment to engage this group of customers.
- A key feature of the requested Board-Approved programs is integrating conservation and
- demand management in customers' day-to-day operations as individuals and as businesses
- 23 irrespective of their size. These program features are expected to help transform the CDM
- market in general as well as assist Hydro One Brampton to better address its customers' CDM
- 25 needs and achieve its mandated CDM targets.
- 26 Figure 5 provides an overview of the annual MW and MWh savings and the projected cost
- budgets for the Board Approved Programs.

Filed: November 1, 2010 Exhibit B Tab 1 Schedule 2

Page 9 of 16

Figure 5: Board-Approved CDM Programs (Annual Results and Budget)

	2011	2012	2013	2014	Total
Annual MW by year end	4.739	8.750	12.207	15.813	15.813
Annual MWh	7,912	17,846	21,512	25,161	72,431
Total Budget (\$M)	1.79	2.07	2.08	1.92	7.86

Please refer to Exhibit C, Tab 1, Schedule 2 for the program descriptions for all of the OEB-

5 4.2 Non-duplication with OPA-Contracted Program Initiatives

- All Board-Approved CDM programs proposed in this Application were designed to target customer segments and/or customer needs that have not been addressed by the existing OPA programs and therefore they are not duplicative of the OPA CDM programs. Detailed descriptions of both the OPA Programs and the requested Board-Approved Programs can be found in Exhibit C, Tab 1, Schedule 1 and 2. As compared to OPA-Contracted Programs, Hydro
- One Brampton's proposed OEB-Approved Programs have the following distinct value
- proposition to Hydro One Brampton's customers.

13 Community Education

The OPA-Contracted programs do not provide an initiative similar to the Community Education
Program. This program focuses on customer education and promotes the exchange of
information between the utility and its customers at local community events. This program relies
on a face-to-face interaction with the customer building on the history of Hydro One Brampton's
customer outreach programs that have been in place since 2005. Hydro One Brampton has been

⁴ Approved Programs.

Filed: November 1, 2010

Exhibit B

Tab 1

Schedule 2

Page 10 of 16

very active in engaging its customers at many civic events and these have been integral in the

success of the residential programs that have been offered.

3 The OPA-Contracted Consumer Enabling Initiative offers online educational tools and does not

4 address face-to-face interaction. Hydro One Brampton has a large English as a second language

5 customer base where face-to-face interaction has had a history of being successful in delivery of

programs.

7 Neighbourhood Benchmarking (also known as Social Benchmarking)

8 Neighbourhood Benchmarking is non-duplicative from all OPA-Contracted Program as it is the

only program that addresses behavioural changes based on peer comparisons and influence. This

program provides customers with a customized home energy report that offers insights about their

individual energy use as well as a comparison with their neighbourhood energy use. Customer load

profile data collected from the smart meter will be used to help identify areas of opportunity for

conservation and recommendations will be specifically tailored to meet the needs of the specific

14 customer.

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Neighbourhood Benchmarking has proven successful in other jurisdictions, where pilots/programs

have shown that significant savings can be achieved from "benchmarking" individuals'

17 consumption relative to that of their neighbours.

Monitoring and Targeting (M&T)

19 This program is non-duplicative of OPA-Contracted Programs, as it provides a monitoring and

targeting system to customers with less than 15 GWh consumption. This customer segment has

been excluded from participating in the Industrial Accelerator Program. The M&T offers

software which measures energy efficiency per unit of production. This provides a baseline

23 against which improvements are measured. By continually monitoring energy efficiency,

24 customers are enabled to track and adjust their consumption.

25 The proposed M&T program provides funding for the adoption of a monitoring and targeting

26 system that helps medium-sized commercial and industrial customers to better understand their

Filed: November 1, 2010

Exhibit B

Tab 1

Schedule 2

Page 11 of 16

energy performance, to benchmark their consumption against other similar businesses for best

2 practices, and to achieve sustainable proactive behavioural and process changes. Under the

3 Industrial Accelerator OPA Program, M&T equipment is provided only to industrial customers

with energy consumption of at least 15 GWh and with average peak load of 200 kW and above.

5 This program extends the sustainable behavioural change to industrial customers who would not

6 have access to M&T systems under the Industrial Accelerator Program. The M&T is expected to

7 provide sustainable behavioural and process changes to the target customer group. M&T

8 educational and coaching approach aims at influencing the leaders and the middle management

9 of the respective organizations to support CDM, an approach that is only provided by this

program to achieve sustainable results.

Small Commercial Energy Management and Load Control

12 The Small Commercial Demand Response Program is distinct from other OPA-Contracted

programs, as it targets small commercial customers (between 50kW and 200KW) that are not

currently provided with load control and energy management offerings from other programs.

This program will also be extended to smaller commercial customers (below 50 kW). The needs

of this distinct customer segment will not be met under the enhanced OPA Province-Wide program

(which is designed to meet residential needs) as supported by the projected uptake of just 1% by

the small commercial customer segment.

Under this program, customers are offered Energy Management System ("EMS") devices that are

activated with a programmable feature that meets their business needs during business hours.

The business needs of the small business customer are sensitive to time-of-use ("TOU") rates.

Accordingly, this program allows the customer to shift and/or reduce their load from on-peak to

off-peak periods to take advantage of the TOU rate structure.

24 Municipal and Hospital Energy Efficiency Performance

25 The Municipal and Hospital Energy Efficiency Performance Program provides financial rewards

to the Municipality and the Hospital for overall electrical energy efficiency reductions within

Filed: November 1, 2010 Exhibit B Tab 1 Schedule 2 Page 12 of 16

- facilities and across their portfolio of accounts. This program is not duplicative of the OPA
- 2 Commercial CDM Programs because it focuses on overall energy efficiency performance
- whereas the OPA Commercial CDM Programs focus on savings achieved solely by technology
- 4 efficiency or equipment replacement. The program will offer the key elements required to assist
- 5 this financially constrained sector in the pursuit of sustained and deeper energy savings beyond
- 6 traditional or proposed Province-wide CDM programs.
- As a program participant, the customer is committed to, and incented for continuous energy
- 8 efficiency actions and improvements year over year. Participants will be required to sign a
- 9 Memorandum of Understanding ("MoU") committing to the development of a comprehensive
- 10 Energy Conservation Action Plan and are asked to commit to participation in the program until
- December 31, 2014. The program will assist participants to develop and implement energy
- management processes that include ongoing electrical consumption benchmarking, as well as
- employee engagement and training, behavioral changes and commitment from all levels of the
- organization. The focus on continuous energy management process is expected to produce
- sustainable behavioral change with persistent energy and demand savings. The comprehensive
- approach of this program is expected to transform these segments of the broader public sector by
- going beyond technology based incentives to embed energy efficiency and conservation as a core
- best practice amongst management, operations and employees.
- This program could be further extended to the other public sector institutions.

20 Double Return Plus

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The Double Return Plus Program is not duplicative of the OPA Demand Response Programs because it is based on non-dispatchable load control and it also aims at reducing energy consumption. By contrast, the OPA Province-wide Demand Response programs are based on

dispatchable load control and, as a result, have minimal energy savings. Non-dispatchable load

control means that it is left to the customer's discretion whether they wish to reduce their peak

demand and the time at which they reduce demand given the customers business needs and

production cycles. Dispatchable load control, on the other hand, means that the customer must

respond to the IESO's request that they curtail a contracted amount of their load or face penalties

Filed: November 1, 2010 Exhibit B Tab 1 Schedule 2

Page 13 of 16

(e.g., under Demand Response 3) for not doing so. Another difference between the two

2 programs is that the Double Return Plus initiative provides an incentive to customers for

3 reducing their own peak demand which may occur at a different time than the system peak

demand. The OPA Demand Response programs specifically target system peak demand. Further,

a key requirement of the Double Return Plus program is that it excludes those customers who

6 have signed up for either, the OPA Demand Response or Demand Response 3 programs.

7 The proposed Double Return program is a commercial and industrial (C/I customers with

average demand above 200 kW) demand response and energy efficiency initiative that attempts

o to reduce the system peak load and energy consumption through behavioural changes and/or a

load balancing system. This program also provides participants with a range of behind-the-meter

customer services, including energy efficiency education, site-specific technical assistance,

employee engagement tools, and customer specific online load tracking information. The

objective of this program is to allow the customer to reduce their own peak demand which may

occur at a different time than the system peak demand. This approach provides the customers

with more flexibility and options to manage their facilities and therefore it is expected to

improve energy efficiency, encourage behaviour changes, produce more sustainable and

persistent energy and demand savings, and lower the overall system peak demand.

18 It should be noted the OPA had already approved the Double Return Program as a Custom

Program distinct from the OPA's Demand Response 1/Demand Response 3 programs, and all

three programs coexisted in the marketplace in 2008 and 2009.

5.0 Program Mix

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22 Hydro One Brampton currently serves approximately 133,000 customers. Hydro One Brampton

23 is a summer peaking utility with a typical customer mix. Hydro One Brampton have

24 approximately 123,600 residential customers and 9,400 general service customers

25 (approximately 7,800 below 50 kW and 1,600 above 50 kW).

Hydro One Brampton's Diverse CDM Program Portfolio

Filed: November 1, 2010 Exhibit B Tab 1 Schedule 2 Page 14 of 16

- Hydro One Brampton's CDM program portfolio provides offerings to all customer types. In
- addition to the existing OPA-Contracted CDM programs, the Board-Approved CDM programs
- will address Hydro One Brampton's customer types and segments. This mix of programs (both
- 4 OPA-Contracted and Board-Approved) will help ensure that the needs of all Hydro One
- 5 Brampton's customers are met.
- 6 Hydro One Brampton's portfolio of 2011-2014 Residential Programs encourages customers,
- 7 including low-income customers, to purchase and install energy efficient products and empowers
- 8 them with the tools they need to reduce energy and save money. These programs will help drive
- 9 the homes of the future toward being smart, integrated and efficient.
- 10 Hydro One Brampton's portfolio of CDM programs also cater to the needs of its business
- customers. For example, the OPA "Commercial Program" is directed at Hydro One Brampton's
- small business customers. In addition, Hydro One Brampton's portfolio includes an innovative
- program for the institutional sector, based on energy performance that rewards the municipality
- and hospital for their energy efficiency efforts.
- 15 Hydro One Brampton's industrial programs provide operational improvements for energy
- efficiency, as well as peak demand reductions.
- As part of the tracking and review process, all CDM programs will be monitored closely on an
- ongoing basis. Performance issues related to specific customer types or segments will be
- orrected by adjusting current programs and/or implementing additional programs or delivery
- strategies. This will ensure complete coverage of all Hydro One Brampton's customer base.
- Figure 6 provides a summary of Hydro One Brampton's CDM Program Portfolio coverage by
- 22 customer type:

Filed: November 1, 2010 Exhibit B Tab 1 Schedule 2 Page 15 of 16

Figure 6: CDM Program Coverage by Customer Type

CDM Programs / Customer Types		idential	Commercial	Industrial
W MS	Regular	Low Income		
OPA Programs				
1 Year Round Instant Rebates (Conservation Card / Coupon Booklet)	√	√		
2 Bi-Annual Instant Rebate Event (Retailer Event)	1	1		
3 Appliance Retirement Program	V	√		
4 Bi-annual Appliance Exchange Events	V	√		
5 HVAC On-line Rebates Program	√	V		
6 New Construction Program	√	√		
7 Midstream Incentives Program	√	V		
8 Customer Enabling Initiatives*	V	√		
9 Low Income Program		√		
10 Residential Demand Response Initiative	√	√		
11 Commercial program (ERIP and PSB)			√	
12 Demand Response 1 - Commercial			√	
13 Demand Response 3 - Commercial			√ .	
14 Demand Response 1 - Industrial		1		√
15 Demand Response 3 - Industrial				√
16 Industrial Accelerator				√
17 ERIP Industrial				√
Board-Approved Programs				
1 Community Education Program	V	√		
2 Neighbourhood Benchmarking	√	√		
3 Monitoring & Targeting			√	V
4 Small Commercial Energy Management and Demand Response (DR)			√	
5 Municipal & Hospital Efficiency Performance (M-HEEP)			V	
6 Double Return Plus			V	V

6.0 Coordination

4 Hydro One Brampton's Past CDM Involvement

- 5 Over the past years, Hydro One Brampton has played a key role in driving conservation activities
- 6 and initiatives in Brampton.
- In 2004/2005, Hydro One Brampton embarked on the design of its CDM initiatives which
- 8 formed a portfolio of programs funded under Market Adjustment Revenue Requirement
- 9 ("MARR"). The portfolio consisted of a mix of CDM programs across all sectors and some
- were considered as leading-edge. For example, Hydro One Brampton in conjunction with Hydro
- One Networks Inc. implemented an innovative demand response technology consisting of a web-
- enabled residential setback thermostat. This technologically innovative concept (SmartStat) was
- subsequently adopted by the OPA and was offered across the Province, as part of the Province-
- wide PeakSaver initiative.

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Filed: November 1, 2010 Exhibit B Tab 1 Schedule 2

Page 16 of 16

- Hydro One Brampton has worked with other LDCs in the past to more effectively and efficiently
- 2 deliver CDM programs and initiatives. An example is the delivery of the Powerhouse -
- Renewable Energy Technologies Funding Program which was a joint cooperative effort by the
- 4 Ministry of Energy, Enersource, and Hydro One Networks Inc. where interest free loans were
- offered to customers who installed renewable energy technologies in their homes.

6 7.0 Monitor and Control

- 7 Hydro One Brampton plans to closely monitor ongoing and projected CDM expenditures and
- 8 accomplishments. Deviations from plans will be identified and corrective action will be taken.
- 9 Program variances will be reviewed on a regular basis. Any significant change in circumstances
- will be reported to the OEB as part of the annual CDM report submission. In the event that fund
- transfers in excess of 30% are required, Hydro One Brampton will make an application to the
- Board as required by section 3.2 of the CDM Code.

EXHIBIT B TAB 2

1

Filed: November 1, 2010

Exhibit B Tab 2 Schedule 1

Page 1 of 2

2011 TO 2014 CONSERVATION AND DEMAND MANAGEMENT

2 BUDGET FOR BOARD-APPROVED PROGRAMS AND COST

3 RECOVERY

4 1.0 Board Approval of Funding and Variance account

- 5 Hydro One Brampton seeks approval of CDM funding for Board-Approved CDM Programs of
- 6 \$1.79 million for 2011, \$2.07 million for 2012, \$2.08 million for 2013 and \$1.92 million for
- 7 2014.
- 8 In accordance with the CDM Code, Hydro One Brampton follows all of the Board's accounting
- 9 policies and procedures specified for CDM activities. A fully-allocated costing methodology
- will be followed, in accordance with Appendix A of the CDM Code, for all CDM programs.
- Program funding and program expenditures from all Board-Approved CDM Programs will be
- kept separate from Hydro One Brampton's distribution operations.
- After Board approval, payments from the Independent Electricity System Operator (the "IESO")
- in accordance with section 78.5(1) of the Ontario Energy Board Act, 1998 will provide \$7.86
- million to fund Board-Approved CDM programs during the 2011 to 2014 period.
- Hydro One Brampton also seeks approval for a Board-Approved CDM Program Variance
- Account which will be used to record any differences between the funding awarded for Board-
- Approved CDM Programs and the actual spending for these programs.

19 2.0 Proposed Funding Process

- In order to enable the completion of the Board Approved Programs, Hydro One Brampton
- requires funding. To achieve the required funding, Hydro One Brampton proposes that the
- funding for 2011 2014 Board-Approved CDM Programs be provided at the beginning of each
- month, over a four-year period starting January 1, 2011.
- 24 The following table provides the breakdown of Hydro One Brampton's CDM funding
- requirement for Board-Approved CDM Programs, by year:

Figure 7: Hydro One Brampton's Funding Requirement for Board-Approved CDM

27 Programs

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Funding to be provided annually	\$1,788,000	\$2,067,000	\$2,084,000	\$1,916,000	\$7,855,000
Corresponding monthly payments	\$149,000	\$172,000	\$174,000	\$160,000	

The proposed monthly payments are determined by dividing the projected annual budget requirement by 12.

Filed: November 1, 2010 Exhibit B Tab 2 Schedule 1 Page 2 of 2

- The Board-Approved CDM Program Variance Account will be used to record the difference between the funding awarded and the actual spending incurred. Hydro One Brampton proposes
- that the disposition of any balance in this variance account be dealt with at the end of 2014.
- 4 This variance account will be managed in the same manner as existing Hydro One Brampton
- variance accounts. It will be updated monthly and interest will be applied at the Board-approved
- 6 rate.

EXHIBIT C SUPPORTING MATERIAL

EXHIBIT C TAB 1

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 1 of 43

DETAILED DESCRIPTION OF OPA-CONTRACTED CDM PROGRAMS

2 Hydro One Initiatives Under OPA – Contracted Province-Wide CDM Programs

-	Residential	Dans
5	Kesineniiai	Programs

- Year Round Instant Rebates
- 5 2. Bi-Annual Instant Rebate Events
- 3. Appliance Retirement Initiative
 - Bi-Annual Appliance Exchange Events
- HVAC On-line Rebates Initiative
- New Construction Initiative
- 7. Midstream Incentives Initiative
- 8. Consumer Enabling Initiatives
- 9. Low Income Initiative

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13 10. Residential and Small Commercial Demand Response Initiative

Commercial and Institutional Programs

- 15 11. Commercial and Institutional Province Wide Initiative
- o Electricity Retrofit Incentive Program ("ERIP") Commercial
- o Direct Install
- 12. Demand Response 1 ("DR1") Commercial
- 19 13. Demand Response 3 ("DR3") Commercial

20 Industrial Programs

- 21 14. DR1 Industrial
- 22 15. DR3 Industrial
- 23 16. Industrial Accelerator
- 17. Industrial ERIP

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 2 of 43

OPA - Contracted Province-Wide CDM Program

2 RESIDENTIAL PROGRAM

- 3 Initiative Number: 1
- 4 Initiative Name: YEAR ROUND INSTANT REBATES
- 5 Conservation Card / Coupon Booklet
- 6 Year(s) of Operation for the Initiative: 2011-2014
- 7 Initiative Frequency: Year round
- 8 Target Customer Type(s): Residential Customers
- 9 Initiative Description:
- This is an energy efficiency initiative that provides customers with year round instant rebates at participating retailers for a variety of low cost, easy to install measures.
- 12 Background:
- This is a year round initiative that offers instant rebates to customers towards the purchase of low
- 14 cost, easy to install measures. The distribution of a series of product rebate coupons directly to
- each home presents the opportunity for customers to redeem these rebates at any time throughout
- 16 the year.
- Note: There will also be an opportunity for customers to take advantage of instant rebates during bi-annual retailer promotions (see *Bi-Annual Retailer Events Initiative*).

19 Initiative Elements:

- Consumers are eligible for year round instant rebates at participating retailers for a variety of
 low cost, easy to install measures
- Measures purchased are traceable to the customer and the LDC service territory via a coding
 mechanism
- Initially the initiative will be launched using a coupon booklet and then there are plans to transition to a Conservation Discount Card
- OPA RFP process to support the transition from coupons to Conservation Discount Card
 (process pending)
- The following incentives will be offered under this initiative:

Year Round Measures	Incentives 2011 - 2014	
ENERGY STAR qualified Standard CFLs	\$1.00 (packages of 3 or less)	
(2011 only)	\$3.00 (packages of 4 or more)	
	\$3.00 (packages of 2 or less)	
ENERGY STAR qualified Specialty CFLs	\$5.00 (packages of 3 or more)	
ENERGY STAR qualified Fixtures (including	\$10.00 (3+ sockets, ceiling fan)	
ENERGY STAR ceiling fans)	\$3.00 (less than 3 sockets)	
Lighting Control Products (Hard wired)	\$3.00	
Hot Water Pipe Wrap	\$0.50 for three	
Electric Water Heater Blanket	\$4.00	
Weatherstripping	\$2.00 (V Strip or Foam Tape)	
	\$3.00 (Door Kit)	
Heavy Duty Plug In Timer	\$4.00	
Advanced Powerstrips	\$4.00	
Clotheslines	\$5.00	
	\$10.00 (packages of 2 or less)	
Baseboard Programmable Thermostats	\$30.00 (packages of 3 or more)	

Purpose of the Initiative:

- Maximize participation ease of transaction for consumer, accepted at a wide range of
 retailers, year-round availability of rebates
- Maximize LDC goodwill and profile with consumer multiple touch points/uses that connect
 the offer with the LDC for the consumer
- Optimize cost effectiveness processing costs, rebates payable (i.e. to those consumers who
 have been influenced by the marketing and promotion)
- Track savings and allocate appropriately to each LDC product purchases are traceable back
 to the LDC customer (traceable to the LDC) rather than where they are purchased (location of retail store)
- Data benefits of Conservation Card each consumer's energy efficient purchasing behavior can be tracked enabling cross-promotion of additional initiatives in which the consumer might be interested based on past purchases and participation.
- Development of a loyalty initiative to reward consumers who participate in multiple initiatives (based on data collected from Conservation Card).

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 4 of 43

OPA – Contracted Province-Wide CDM Program

2 RESIDENTIAL PROGRAM

- 3 Initiative Number: 2
- 4 Initiative Name: BI-ANNUAL INSTANT REBATE EVENTS
- 5 Retailer Events
- 6 Year(s) of Operation for the Initiative: 2011-2014
- 7 Initiative Frequency: Bi-annual events (Spring & Fall)
- 8 Target Customer Type(s): Residential Customers
- 9 Initiative Description:
- Utilities and retailers will work together to promote the *Instant Rebates Program* by holding bi-
- annual retailer events (Spring and Fall). Twice a year, participating retailers will host month-
- long rebate events. The events are intended to promote instant rebates for low cost measures and
- capture the attention of the "impulse shopper".

14 Background:

- 15 This offer is a carry forward of the Every Kilowatt Counts, Power Savings Events. The initiative
- has been enhanced to include local marketing and engagement by LDC's. The bi-annual retailer
- events are intended to capture the attention of the "impulse buyer" who is already engaged in the
- sales cycle. The events will highlight the value of the instant rebates and prompt the customer to
- 19 take action and use in-store coupons (or the Conservation Card when available) to purchase
- 20 eligible products. The bi-annual retailer events will now provide an opportunity for LDCs to
- have an in-store presence at retailer locations throughout their community(s).

Initiative Elements:

- Bi-annual promotion of instant rebates at local retailer sites (during months of April &
 October)
- Each promotion will be a month long event
- Customers are encouraged to take advantage of the instant rebates through in-store coupons
 available for a variety of low cost, easy to install measures
- The product list for the bi-annual events and the year-round rebates will be the same, as will the rebate amounts

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 5 of 43

- This initiative is targeted to the impulse buyer who is already engaged in the sales cycle (shopping at retailer location)
- In-store customers will be encouraged to take advantage of the instant rebates which are also
 available year round (using in-store coupons or Conservation Card)
 - The following incentives will be offered (please note that from within this product list there
 will be different products promoted in the Spring vs. Fall events, in cases where product
 usage is seasonal in nature):

Year Round Measures	Incentives 2011 - 2014	
ENERGY STAR qualified Standard CFLs	\$1.00 (packages of 3 or less)	
(2011 only)	\$3.00 (packages of 4 or more)	
	\$3.00 (packages of 2 or less)	
ENERGY STAR qualified Specialty CFLs	\$5.00 (packages of 3 or more)	
ENERGY STAR qualified Fixtures (including	\$10.00 (3+ sockets, ceiling fan)	
ENERGY STAR ceiling fans)	\$3.00 (less than 3 sockets)	
Lighting Control Products (Hard wired)	\$3.00	
Hot Water Pipe Wrap	\$0.50 for three	
Electric Water Heater Blanket	\$4.00	
Weatherstripping	\$2.00 (V Strip or Foam Tape)	
	\$3.00 (Door Kit)	
Heavy Duty Plug In Timer	\$4.00	
Advanced Powerstrips	\$4.00	
Clotheslines	\$5.00	
	\$10.00 (packages of 2 or less)	
Baseboard Programmable Thermostats	\$30.00 (packages of 3 or more)	

8 Purpose of the Initiative:

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- Capture the attention of consumers who are shopping at their local retailer and encourage them to purchase energy efficient products that they wouldn't otherwise have intended to purchase
- Encourage retailers to change their product assortment and promotional strategies to place increased emphasis on energy efficient product alternatives
- Encourage retailers to allocate resources to undertake additional promotional activities that encourage consumers to purchase and install the energy efficient products featured in the instant-rebate initiative (as well as any other energy saving products that the retailer may wish to promote)
- Educate retail staff on the features and benefits of energy efficient products so they can increase consumers' understanding of these products and their energy efficiency potential

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 6 of 43

• Encourage retailers to work with their LDCs to educate consumers on the features and benefits of energy efficient products

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 7 of 43

OPA - Contracted Province-Wide CDM Program

2 RESIDENTIAL PROGRAM

- 3 Initiative Number: 3
- 4 Initiative Name: APPLIANCE RETIREMENT INITIATIVE
- 5 Year(s) of Operation for the Initiative: 2011-2014
- 6 Initiative Frequency: Year round
- 7 Target Customer Type(s): Residential Customers
- 8 Initiative Description:
- This is an energy efficiency initiative that offers FREE pick up and decommissioning of old refrigerators, freezers, room air conditioners and dehumidifiers.
- 11 Background:
- This initiative was originally launched in 2007 by the OPA as a province-wide initiative (aka.
- 13 Appliance Retirement Program or Great Refrigerator Round-Up Program). The initiative has
- been enhanced to include a municipal pick-up element, where applicable, and a retail channel for
- 15 pick-up upon replacement.

16 Initiative Elements:

- Customers are offered FREE pick-up and decommissioning of old appliances (old refrigerators, freezers, room air conditioners and dehumidifiers)
- Customers can book appointment on-line (electronically) or by phone
- Centralized call centre operated by OPA for scheduling of appointments (toll-free line)
- OPA contracted third-party handles pick-up and decommissioning process
- Secondary appliances must be 15 yrs old, capacity of 10 27 cubic feet and msut be in good working condition
- Coordination with local municipal appliance pickup is encouraged, where feasible, at the
 LDC's initiative
- Coordination of pickup of old fridge/freezer by retailers will be undertaken at time when
 retailer delivers a new appliance to customer
- OPA provides report of initiative results specific to LDC territory

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 8 of 43

• The following is an outline of the customer incentives:

Appliance Retirement Measures	Incentives 2011 - 2014
Refrigerator	Free Pickup and Decommissioning
Freezer	Free Pickup and Decommissioning
Room Air Conditioner (secondary)	Free Pickup and Decommissioning
Dehumidifier (secondary)	Free Pickup and Decommissioning

2 Purpose of the Initiative:

- Achieve energy and demand savings through the retirement and/or replacement of old,
 inefficient refrigerators, freezers, window/room air conditioners and dehumidifiers
- Discourage the use of old, inefficient appliances
- Facilitate environmental benefits through proper decommissioning and recycling of old appliances.

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 9 of 43

OPA - Contracted Province-Wide CDM Program

2 RESIDENTIAL PROGRAM

3 Initiative Number: 4

4 Initiative Name: BI-ANNUAL APPLIANCE EXCHANGE EVENTS

5 Year(s) of Operation for the Initiative: 2011-2014

6 Initiative Frequency: Bi-annual events

7 Target Customer Type(s): Residential Customers

8 Initiative Description:

- 9 This initiative involves bi-annual, appliance exchange events. Exchange events are held at local
- retail locations and customers are encouraged to bring in their old room air conditioners and
- dehumidifiers in exchange for coupons/discounts towards the purchase of new energy efficient
- 12 equipment.

13 Background:

- 14 This initiative was originally launched in 2007 (aka. Keep Cool Program) and the exchange
- 15 events were managed primarily by the OPA. Customers were encouraged to visit participating
- retailers on pre-scheduled dates and "trade-in" or exchange their old appliances. Customers who
- 17 participated received an incentive (coupon or discount) towards the purchase of new, energy
- efficient equipment. The initiative has been enhanced to include local marketing and provides an
- opportunity for LDC's to become more involved by having an in-store presence at retailer
- 20 locations within their respective communities.

21 Initiative Elements:

- Bi-annual exchange events will be held at local retailers (Spring & Fall)
- Retailers solicited at the head office level by the OPA
- Customers encouraged to bring in their old room air conditioners and dehumidifiers to
 participating retailer locations in exchange for rebates
- For the Spring Event, the rebate will be a coupon towards the purchase of a high efficiency replacement unit (\$50 Replacement Coupon)
- For the Fall Event, the rebate will be in the form of a gift card (\$25 Gift Card)

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 10 of 43

- A gift card will be offered during the Fall event, as replacement units are typically not stocked during this time of the year
- Appliances are decommissioned in an environmentally friendly manner; decommissioning process is centrally managed by the OPA
- The following incentives will be offered:

Exchange Event Measures	Incentives 2011 - 2014
	\$50 Replacement Coupon (Spring)
Room Air Conditioner	\$25 Gift Card (Fall)
	\$50 Replacement Coupon (Spring)
Dehumidifier	\$25 Gift Card (Fall)

Purpose of the Initiative:

- Achieve energy and demand savings through the retirement and/or replacement of old,
 inefficient window /room air conditioners and dehumidifiers.
- Discourage the re-use of old, inefficient appliances.
- Facilitate environmental benefits through proper decommissioning and recycling of old appliances.

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 11 of 43

OPA - Contracted Province-Wide CDM Program

2 RESIDENTIAL PROGRAM

3 Initiative Number: 5

4 Initiative Name: HVAC ON-LINE REBATES INITIATIVE

5 Year(s) of Operation for the Initiative: 2011-2014

6 Initiative Frequency: Year round

7 Target Customer Type(s): Residential Customers

8 Initiative Description:

- 9 This is an energy efficiency initiative that provides rebates for the replacement of old heating or
- cooling systems with high efficiency furnaces (equipped with electronically commutated motors)
- and Energy Star qualified central air conditioners.

12 Background:

- The HVAC rebates initiative has been in market since 2006 (aka. Cool Savings Program). The
- initiative has been enhanced to include LDC's in the delivery of the initiative and there is also a
- new contractor training element. As part of this initiative, consumers will be eligible for rebates
- on replacement of qualifying furnaces with electronically commutated motors and central air
- conditioners. Training will be available for contractors to educate them on quality installation
- principles. LDC's will be involved in the recruitment of contractors; this will be supported by
- 19 OPA recruitment efforts. The HVAC rebates will be delivered to consumers through
- participating contractors and will be centrally fulfilled by the OPA, as in the past.

21 Initiative Elements:

- Customers will be eligible for rebates on qualifying HVAC equipment
- Rebates available for replacement of central air conditioners and furnaces with electronically
 commutated motors
- Customers can book appointment on-line or by phone
- Rebates will be available through on-line process which will be centrally managed and fulfilled by the OPA
- Contractor training will be available to support quality installation (including initial assessment to ensure right-sizing of equipment)

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 12 of 43

- OPA will provide a report of the initiative results specific to the LDC territory
- The following is an outline of the customer incentives:

	HVAC Measures	Incentives 2011 - 2014
3	High Efficiency Furnaces equipped with ECM	\$250
4	ENERGY STAR qualified Central Air Conditioner	\$250 (SEER 14.5) \$400 (SEER 15)

6 Purpose of the Initiative:

- Resource acquisition will be achieved by encouraging consumers to purchase and install energy efficient HVAC equipment when replacing existing equipment.
- The new energy efficient HVAC equipment will generate both energy and peak demand savings.
- Capability building will be achieved by training contractors on quality installation principles.

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 13 of 43

OPA - Contracted Province-Wide CDM Program

2 RESIDENTIAL PROGRAM

3 Initiative Number: 6

4 Initiative Name: NEW CONSTRUCTION INITIATIVE

5 Year(s) of Operation for the Initiative: 2011-2014

6 Initiative Frequency: Year round

7 Target Customer Type(s): Residential Customers

8 Initiative Description:

This is an energy efficiency initiative that provides incentives to homebuilders for constructing new homes that are efficient, smart and integrated (applicable to new single family dwellings).

11 Background:

- This is a new initiative under the Consumer Program and will be offered for the first time in the
- market, beginning January 2011. The objective of this initiative is to ensure that single family
- homes of the future are constructed to be efficient, smart and integrated. The initiative
- encourages and rewards homebuilders for constructing efficient, smart and integrated single
- family homes. Consumers are also informed through education about the value of purchasing an
- energy efficient, smart and integrated home (including increased comfort, lower energy costs and
- 18 environmental benefits).

19 Initiative Elements:

23

- Homebuilders are offered incentives to promote the construction of new homes that are
 "efficient, smart and integrated"
- Incentives are provided in four key categories, as follows:
 - Incentives to install electricity efficiency measures as determined by a prescriptive list and via a custom option;
- 25 2. Incentives for installing devices for demand response (phased implementation anticipated);
- 3. Incentives for homebuilders who meet or exceed aggressive efficiency standards using the EnerGuide performance rating system;
- Incentives for training on energy efficiency building techniques and practices.

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 14 of 43

- Measures target end uses with the highest potential for electricity savings and demand
 reduction including lighting, cooling coupled with electronically commutated furnace motor,
 as well as plug loads.
- The initiative will capture and fund fossil fuel savings (i.e. natural gas, oil, propane) to encourage market transformation through improving the building envelope to achieve higher EnerGuide performance ratings.
- The initiative will be delivered by LDCs throughout the province.
- Local engagement of builders will be the responsibility of the LDC and will be supported by
 OPA air cover driving builders to their LDC for additional information.
- LDC's will be responsible for reviewing and approving applications and conducting site verifications.
- Data collection and reporting will also be the responsibility of the LDC.
- OPA will be responsible for rebate fulfillment.
- The following is a list of the measures which will be incentivized for builders:

New Construction Measures	Incentives 2011 - 2014
All-off Switch	\$50.00
ECM Motors	\$50.00
SEER 15 CAC	\$30.00
Lighting Control Products	\$3.00
Fixtures (single socket, multi-socket, niche)	\$15.00 (niche) \$10.00 (3+ sockets) \$3.00 (less than 3 sockets)
Custom Project	TBD
EnerGuide 83 Whole Home	\$500/Home
EnerGuide 85 Whole Home	\$1,000/Home
Residential Demand Response Devices	TBD
Training	TBD

15 Purpose of the Initiative:

- To motivate builders to incorporate electric energy efficient technologies in the design and construction of new homes
- To drive market awareness through advertising and other mediums
- To educate the builder and consumer on the benefits of energy efficiency in the home

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 15 of 43

- To increase consumer awareness and trigger increased consumer demand
- To overcome builder's concerns about trained and available trades to install the technologies and to overcome the trades concerns about liability with the installation of the technologies (training programs to be developed and offered to both).

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 16 of 43

OPA - Contracted Province-Wide CDM Program

2 RESIDENTIAL PROGRAM

3 Initiative Number: 7

4 Initiative Name: MIDSTREAM INCENTIVES INITIATIVE

Retailers, Cable & Satellite TV Providers & Pool Contractors

7 Year(s) of Operation for the Initiative: 2011-2014

8 Initiative Frequency: Year round

9 Target Customer Type(s): Retailers, Cable & Satellite TV Providers & Pool Contractors

10 Initiative Description:

- This is an incentive program for midstream channel partners who can directly influence the
- consumers' product selection. Midstream incentives will be provided to retailers, cable and
- satellite providers and pool contractors to encourage them to stock and promote energy efficient
- 14 equipment.

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15 Background:

- This is an incentive initiative for midstream electronics retailers, cable and satellite providers and
- pool contractors. The initiative is meant to encourage midstream providers to change their
- product selection, assortment and promotional strategies to place increased emphasis on energy
- efficient product alternatives. Incentives for retailers will encourage them to stock and promote
- 20 high-efficiency televisions. Incentives for cable and satellite television service providers will
- encourage the adoption of set-top boxes and network configurations that deliver energy-
- 22 efficiency gains. Incentives for pool contractors will encourage proper selection and right-sizing
- 23 of pool equipment.

24

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Initiative Elements:

- Retailers will be encouraged to gear their offerings and promotions to feature the most energy efficient alternatives to consumers who have already decided to purchase new equipment.
- OPA will be responsible for developing relationships with retailers, cable and satellite TV providers
 - OPA will also be responsible for hiring a Program Manager for this initiative

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 17 of 43

- OPA will be responsible for contractor training, i.e. pool contractors
- OPA will be responsible for providing incentives to retailers, cable and satellite TV providers
- LDC's will be responsible for educating consumers about the benefits of purchasing energy
 efficient equipment
 - The midstream incentives will include:

Midstream Measures	Incentives 2011 - 2014	
	\$50 (2011 – 2012)	
Pool measures	\$30 (2013 – 2014)	
Televisions	\$20	
Set-top boxes	\$12	

6 Purpose of the Initiative:

- A midstream rather than downstream consumer incentive will be employed to avoid creating additional demand for and proliferation of televisions in households.
- Encourage retailers and cable/satellite distributors to change their product assortment and
 promotional strategies to place increased emphasis on efficient product alternatives
- Educate pool contractors on the benefits to their customers of right sizing a pool pump to maximize energy efficiency
- Increase awareness of energy consumption of devices among consumers at point of sale
 through staff knowledge and signage
- Increase retailer/service provider promotion of energy efficient product alternatives

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 18 of 43

- OPA Contracted Province-Wide CDM Program (Tier 1)
- 2 RESIDENTIAL PROGRAM
- 3 Initiative Number: 8
- 4 Initiative Name: CONSUMER ENABLING INITIATIVES
- Online Energy Audit Tool / Online Customer Education Program
- 6 Year(s) of Operation for the Initiative: 2011-2014
- 7 Initiative Frequency: Year round
- 8 Target Customer Type(s): Residential Customers
- 9 Initiative Description:
- 10 Consumer enabling initiatives will provide the consumer with the web-based information they
- need to make informed decisions. The online tools will help educate consumers about the
- benefits of conservation and help promote the Consumer Conservation Programs. The consumer
- enabling initiatives include:
 - a) Online home energy audit
 - b) On-line consumer education
- 16 Background:

14

- 17 The enabling initiatives are intended to provide the residential consumer with the information
- and the tools that they need to "get started" and help them make informed decisions. These
- online tools will be accessible to customers via the local utility website.
- 20 Initiative Elements
- An On-line energy audit tool (examining both gas and electricity usage) will be made available to consumers. An online calculator will enable the consumer to rapidly assess their home's energy usage/performance and direct them to energy efficiency initiatives that will be of most benefit to them.
- LDCs will be able to host the audit tool on their website through an interface.
- The data entered by the consumer will be saved and the information will be available for market research purposes for each LDC to enhance their understanding of their customer base and their behaviours.

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 19 of 43

A robust online education component will be produced and will be integrated into all
 applicable elements of the marketing materials and on-line audit tool

3 Purpose of the Initiative:

- To provide consumers with the information they need to make informed choices.
- To move to a *customer centric model* (i.e. move the focus from the end-use to the *end-user*).
- To introduce a holistic approach to energy management.
- To ensure that consumers are empowered to take steps towards energy efficiency and influence behavioural change.
- To build a consistent thread that brings together the conservation efforts at home, at work, and in the community, to further the Culture of Conservation in Ontario.

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 20 of 43

- OPA Contracted Province-Wide CDM Program
- 2 RESIDENTIAL PROGRAM
- 3 Initiative Number: 9
- 4 Initiative Name: LOW INCOME INITIATIVE
- 5 Year(s) of Operation for the Initiative: 2011-2014
- 6 Initiative Frequency: Year round
- 7 Target Customer Type(s): Residential Customers
- 8 Initiative Description:
- 9 This is a turn-key initiative for low income customers. It offers residents the opportunity to take
- advantage of FREE, TURN-KEY installation of energy efficient measures that improve the
- comfort of their home, increase efficiency and help them save money.
- 12 Background:
- This is a new initiative that has been specifically developed to meet the needs of the low income
- 14 consumer. This is a comprehensive initiative that involves a variety of activities intended to
- improve the energy efficiency of low income homes. The initiative is intended to reduce
- electricity demand, provide consumers with the information they need to manage their energy
- use and influence behaviour change that will support these outcomes. The initiative will pay
- 18 100% of costs for the purchase and installation of the electricity saving products.
- 19 The process begins with an in-home audit which will identify the opportunities within the home.
- The installation measures range from basic measures (CFL's, weather-stripping, water heater
- blanket and more) to a full list of extended measures (light fixtures, air conditioning units,
- freezers, refrigerators, dehumidifiers, draft-proofing and insulation).
- 23 Initiative Elements:
- 24 OUTREACH
- The initiative leverages five customer outreach channels, as follows:
- 1. **Blitz Participants**. Households come into the initiative via a *neighbourhood blitz*; whereby, neighbourhoods are targeted by income and/or propensity for electric heat. Households who agree to participate via the *neighbourhood blitz* move to the basic audit process.
- 29 2. **Self-Initiated Respondent.** Households responding to air coverage, print media, or via word-of-mouth referrals may opt-in to the initiative. Households opting into the initiative

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 21 of 43

- will contact an intake center, flow through the outbound pre-screening protocol, and be scheduled for a referral audit.
- 3 3. Community Partner Referral. Households receiving social assistance via a government agency, community-based organization, or non-profit who pass through the initiative referral screen are queued for outbound pre-screening. Examples of community referral partners include: social service providers, local housing agencies, food banks, etc.
- 4. LDC Priority Referral. Households struggling with utility bill affordability, at-risk for utility service disconnect, and/or have pending high-bill complaints may be considered an LDC Priority account. When LDC Priority accounts pass through the initiative referral screen, these households are queued for outbound pre-screening.
- 5. **Extended Measures Referral.** In 2012, a gas initiative linkage is envisioned (independent of desired integration). This linkage promotes a Gas Audit Extension; whereby, qualifying low-income households are screened for electric savings. *Qualifying households* that pass an extended measures selection protocol are scheduled for an extended measures visit. Examples include: referrals from Enbridge's TAPS program and Union Gas Helping Homes Conserve Program.

17 GAS COMPANY ENGAGEMENT

- The initiative design includes coordinating efforts with gas utilities, as follows:
- Gas Audit Extension. An extension to the gas utility DSM audit allowing for the installation of basic measures II in homes that participate in the gas utility initiatives.
- Electric Audit Extension. An extension to the basic audit delivered by the LISFH program to allow for the installation of basic measures III (gas utility measures).
- 23 IN HOME AUDITS
- Three types of energy audits will be offered to low income consumers, as follows:
- 1. Basic Audit. An in-home consultation offered to households passing the health and safety 25 protocol. The in-home consultation uses basic measure screening protocols to determine 26 which basic measures will be installed and facilitates eligibility verification. For homes with 27 natural gas service, basic measures III will be installed in program years 2012 forward 28 (pending coordination of Low Income Single Family Home (LISFH) program with gas utility 29 initiatives). For qualifying households the in-home consultation continues with extended 30 measures selection and a weatherization opportunity screening. Customers are advised of the 31 pending work orders for an extended measures visit and a weatherization audit. As part of 32 the basic audit, each home will be screened for eligibility in the gas-utility weatherization 33 program and utility-led DR and Home Energy Management Systems programs. If the home 34 is eligible for these programs, a DSM program referral and/or LDC program referral will be 35 made with customer consent as provided for within the energy education. 36

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 22 of 43

- 2. **Weatherization Audit.** An in-home consultation proceeds with air infiltration_measure installation and envelope measures selection. In homes requiring envelope treatment, a home weatherization visit work order is created and the customer is advised of a pending weatherization visit.
- Referral Audit. An in-home consultation offered to households passing the health and safety protocol. The in-home consultation provides basic measures and facilitates eligibility verification. For qualifying households the in-home consultation continues with extended measures selection and a weatherization audit. Where opportunities have been identified, customers are advised of the pending work orders associated with a pending extended measures visit and/or home weatherization visit.

II INSTALLATION MEASURES

- The initiative will offer consumers several energy efficiency and demand reduction measures.

 Different packages of measures will be offered based on eligibility determined during the audit.

 These packages include:
- 15 1. Basic Measures I. A prescriptive set of measures that include energy education and information (how to use measures, conservation behaviours, energy management vis a vis time-of-use rates), low-cost weatherization measures, and the installation of the following energy efficiency measures: CFLs, DWH pipe wrap, DWH blanket, low flow faucet aerators, low flow showerheads, engine block timers, and powerbars with integrated timers.
- 20 2. **Basic Measures II.** An incremental set of electric measures that compliment the electric measures provided within the gas DSM audit. The anticipated measures include powerbars with integrated timers, CFLs, and engine block timers.
- Basic Measures III. The installation of programmable thermostats for gas furnaces (would be funded by gas utilities).
- 4. Extended Measures Visit. Delivery agents responding to an extended measures work order 25 will schedule appointments with the customers, deliver the specified measures, remove 26 existing equipment/appliances, and install the specified measures. 27 The current list of extended measures includes the following set of Energy Star qualified measures: light 28 fixtures, air conditioning units, freezers, refrigerators, and dehumidifiers. Programmable 29 thermostats will be reviewed as a potential measure for inclusion in 2012 for baseboard 30 systems. At the end of the visit, customers will be notified of a possible quality assurance 31 visit that would be scheduled within the next 30 days. 32
- 5. Home Weatherization Visit. Delivery agents responding to a home weatherization work order will follow the air infiltration measure installation protocol to provide draft proofing along with the requested attic, wall, and basement insulation. Following the completion of home weatherization, customers will be notified of the need for a quality assurance visit to be scheduled within the next 30 days.

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 23 of 43

HEALTH & SAFETY MEASURES

- There are two aspects to health and safety which will be addressed in this initiative
- 1) the safety of initiative delivery staff working in the home and
- 2) the state of repair of the home itself and the impact of this state of repair on opportunities for conservation retrofits

6 QUALITY ASSURANCE / MONITIORING & VERIFICATION

Once the installation of measures has been completed in a participating home, the
participant will receive a follow-up call or visit to a) confirm their satisfaction with the
initiative and b) gather information for initiative EMV.

DEMAND RESPONSE

The initiative will also consider the feasibility and potential savings that could be
achieved by funding the cost of In Home Display measures for low-income customers
who want to participate in the Residential Demand Response initiative but a) do not
qualify for a device at no-cost and b) cannot afford to pay the incremental cost of the
device themselves.

Purpose of the Initiative:

- Assist low income customers in managing electricity costs
- The initiative employs a "house as a system" approach, providing opportunities for electric energy efficiency in each area of the home
- Install energy efficiency measures in low income homes that will produce long-term, sustainable energy savings i.e. Reduce provincial electricity demand and consumption
- Physical installation of energy efficiency measures provide long-term sustained financial
 savings to consumers and this will help reduce the reliance on financial assistance programs
- Enhance the social safety net for low income consumers

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Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1

Page 24 of 43

OPA - Contracted Province-Wide CDM Program

2 RESIDENTIAL PROGRAM

- 3 Initiative Number: 10
- 4 Initiative Name: RESIDENTIAL AND SMALL COMMERCIAL DEMAND
- 5 RESPONSE INITIATIVE
- 6 Year(s) of Operation for the Initiative: July 2011- December 2014
- 7 Initiative Frequency: Year round
- 8 Target Customer Type(s): Residential customers
- 9 Initiative Description:
- This is an initiative that provides residential customers the tools they need to actively manage
- their energy use in a time-of-use (TOU) environment. The initiative provides customers with
- access to price and real-time consumption data and offers an option to participate in demand
- response load control.

14 Background:

- This initiative offers a free programmable thermostat (or load control switch) and offers a
- financial incentive for allowing load control of central air conditioners and electric water heaters
- during peak times. This program has been enhanced to include window air conditioners and pool
- 18 pumps.

24

- 19 The initiative has been further enhanced for 2011 2014 to take advantage of recent policy
- 20 changes, market developments and technology advancements. The new demand response
- devices will be able to accommodate the use of smart plugs, smart strips, smart appliances and
- 22 more emerging technologies.
- 23 The initiative will now offer residential customers two participation options, as follows:
 - 1. Participation with demand response
 - 2. Participation without demand response
- 26 While general service customers under 50kW are eligible to participate in the PeakSaver
- 27 Program; so far less than one percent of this customer group has participated in the program.
- 28 This is primarily due to the fact that PeakSaver Program is designed to respond to the needs of
- 29 residential customers
- The above mentioned enhancements were designed for the residential sector, accordingly,
- penetration of small commercial sector continues to be at an assumed 1% only.

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 25 of 43

Initiative Elements:

- Participation with demand response will offer higher incentives, higher levels of subsidization and more participation options (due to fact that demand response yield higher avoided costs)
 - All participants will receive access to price and real-time consumption info
- 6 CUSTOMER OPTIONS:
- The following is an outline of options available for customers who choose to participate in the initiative but with NO demand response:

9 Non-Demand Response Offers

Device(s)	Charge / Incentive to Participant
HEI	
HEI + IHD	

- (Note: Definitions: HEI = Home Energy Interface, IHD = In Home Display)
- The following is an outline of the options available for residential customers who choose to participate in the initiative WITH demand response:

13 Demand Response Offers

Device(s)	Charge / Incentive to Participant
HEI + Switch	Without IHD -
	With IHD –
HEI + Thermostat	Without IHD -
	With IHD –
Dashboard	

- (Note: Definitions: HEI = Home Energy Interface, IHD = In Home Display)
- 15 Purpose of the Initiative:

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 26 of 43

- To build demand response capacity in the residential sector to achieve maximum cost effective peak demand reduction
- To empower residential participants by providing them with price and real-time electricity consumption information and equip them with tools to actively manage their energy use in a TOU environment
 - To increase conservation and demand response awareness in the residential sector through improved education on the benefits of peak demand reduction, reduced energy consumption, TOU pricing and energy management tools
- This program has not been redesigned to address the business needs of business customers

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 27 of 43

- OPA Contracted Province-Wide CDM Program
- 2 COMMERCIAL AND INSTITUTIONAL PROGRAM
- 3 Initiative Number: 11
- 4 Initiative Name: COMMERCIAL AND INSTITUTIONAL INITIATIVE
- 5 Year(s) of Operation for the Initiative: 2011-2014
- 6 Initiative Frequency: Year round
- 7 Target Customer Type(s): Commercial, Institutional, and Agricultural Customers
- 8 Initiative Description:
- 9 The C&I Initiative offers financial incentives to customers for the upgrade of existing equipment
- to energy efficient equipment. The program also promotes the inclusion of energy efficient
- measures in new buildings through the New Construction element included with this initiative.
- This initiative builds on the success of the current Electricity Retrofit Incentive Program (ERIP)
- being offered to Commercial, Industrial, Institutional and Agricultural customers. Financial
- incentive payments of up to \$400/kW or \$0.05/kWh for lighting measures, \$800/kW or
- \$0.10/kWh for all other measures; to maximum of 50% of project costs are available to
- 16 customers.
- 17 The direct install initiative, marketed as Power Savings Blitz (PSB) under this program is offered
- to small commercial customers with less than 50kW of average monthly demand. This initiative
- will offer turn-key lighting and electric hot water heater measures with a value up to \$1,000 at no
- 20 cost to qualifying small businesses. Small businesses are also able to take advantage of a turn-
- 21 key cooling maintenance offering as well as ERIP incentives for measures not covered by the
- 22 standard direct install initiative.

23 Background:

- The Electricity Retrofit Incentive Program (ERIP), initially developed for the business markets,
- promoted energy efficiency measures such as lighting, HVAC, high efficiency motors and agri-
- business measures. The 2011-2014 initiative has been enhanced to include initiative elements
- such as energy audits and roving Energy Managers in order to increase customer participation.
- The PSB program addresses many of the barriers small business owners have, such as lack of
- 29 conservation knowledge and access to capital. An opportunity exists to assist in a market
- transformation by advancing the change from T12 to T8 fluorescent lighting.
- Initiatives directed medium to large facilities will include design and delivery elements such as
- account management, and application administration support.

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 28 of 43

- Initiatives directed at smaller facilities, on the other hand, will be based on prescriptive approaches to measures and incentives, typically featuring standardized application forms.
- 3 Specific initiative elements include:

4 Equipment Replacement (ERIP)

- 5 The ERIP initiative primarily focuses on equipment replacements. Equipment replacement
- 6 projects have traditionally been categorized in ERIP as either Prescriptive or Custom. The
- 7 Prescriptive approach utilizes a list of specific measures for which the incentive is prescribed.
- 8 The Custom approach requires a more sophisticated, and in some cases complex, process to
- 9 determine the potential for demand reductions or energy savings.
- The Program will continue these two approaches, but will also include an Engineered approach.
- The Engineered approach will provide the customer with potential for additional incentives for the equipment to be installed and will provide a more straight-forward process than the Custom approach, with simplified calculations of energy and demand savings. The incentives available under the Engineered approach are the same as for the Custom approach, but the actual amount would be based on data provided by the customer.
- Incentives for Engineered and Custom projects are:
- \$400/kW or \$0.05/kWh for lighting measures (whichever is higher) to a maximum of 50% of the project costs.
- \$800/kW or \$0.10/kWh for non-lighting measures (whichever is higher) including lighting controls to a maximum of 50% of the project costs.
- 21 Participant incentives for Prescriptive projects are as per the Prescriptive forms/worksheets
- 22 which specify the dollar amount per unit installed, with no maximum amount payable for the
- 23 project.

24 Direct Installed Lighting – Power Savings Blitz (PSB)

- 25 The Direct Installed Lighting initiative targets customers in the General Service <50kW account
- 26 category. Participation for the existing version of this initiative, the Power Savings Blitz, has
- been very high. In addition to offering eligible customers up to \$1,000 in equipment upgrades at
- no charge, standard prescriptive incentives will now be available for eligible equipment beyond
- 29 the initial \$1,000 limit. There will also be a similar initiative for servicing of space cooling
- 30 equipment, as described below.
- Customers can participate in this initiative one of three ways:
- i. Door-to-door approach: An LDC representative, Assessor or Lighting Contractor would visit potential participants and, where the customer is determined to be eligible for the

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 29 of 43

- component, the assessment would proceed directly or be scheduled. This is the approach commonly used for the Power Savings Blitz.
- ii. Self-selection approach: Through the new on-line registration system (iCon), by creating a user profile for this Program and choosing to apply for this initiative. Upon submission the application would be forwarded to the LDC that services the customer's business location as determined by postal code. The LDC would instruct a service provider (i.e., an Assessor or Lighting Contractor) to contact the customer to schedule an on-site assessment.
- Referral approach: In connection with the Direct Serviced Space Cooling initiative, an LDC representative, Assessor, or HVAC Contractor may identify an opportunity for a customer to participate in the Direct Installed Lighting initiative. Should the customer desire to participate, the customer would proceed as per either the self-selection approach or the door-to-door approach.

Direct Serviced Space Cooling

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- The Direct Serviced Space Cooling initiative is available to customers with roof-top or groundmounted air conditioning systems with a capacity of 25 tons or less. The initiative is intended to
 target the same customer base as the Direct Installed Lighting initiative, although in some cases
 customers in the General Service >50 kW account category will also be eligible. Basing the
 eligibility criteria on air conditioner size is intended to simplify the determination of possible
 participants by HVAC Contractors. This initiative provides for up to
 of services and labour
 to service the customer's air-conditioning unit(s).
- Customers participate in this initiative as per the Direct Installed Lighting initiative.
- To be eligible, customers must confirm that they do not have an existing service agreement for the air-conditioning unit and that the unit was not serviced during the previous calendar year.

24 Existing Building Commissioning

- 25 Any customer in the General Service >50 kW or Large User account categories with single
- buildings/premises greater than 50,000 square feet in size and with chilled water plants will be
- 27 eligible to participate in the Existing Building Commissioning initiative of the Program. The
- services that would qualify include (i) the development of a plan for commissioning activities,
- 29 (ii) the procurement of devices and/or software associated with commissioning activities and (iii)
- third party services for building commissioning.
- A building owner participates in this initiative by hiring a Commissioning Agent, who must provide two references from past projects OR be certified (by the AEE, ASHRAE or BCA).

New Construction – All Buildings and Customer Types

- The New Construction initiative of the C&I Program will provide incentives for new buildings to
- 35 exceed existing codes and standards for energy efficiency. Similar to the Equipment

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 30 of 43

- Replacement initiative, the New Construction initiative utilizes both Prescriptive and Custom approaches.
- Participant incentives for Prescriptive projects are as per the Prescriptive forms/worksheets.
- 4 which specify the kW and KWh assumption per unit installed, and determine the resulting
- 5 incentive at a rate of \$250/ kW. For new multi-family buildings, incentives for appliances are
- 6 determined on a dollar amount per unit installed. Incentives for Custom will depend on the level
- of savings achieved, to a maximum of 50% of the project cost. In addition, there are incentives
- 8 for building modeling to maximum of as well as incentives for Design Decision-
- Makers (e.g. designers, architects and engineers) that were involved in the building design.

Pre-Project Assessments

- For this initiative, eligible participants will receive incentives to complete energy audits or
- 12 studies of potential energy and demand savings from equipment replacement projects.
- operational practices and procedures, and participation in demand response initiatives. The
- incentives are intended to cover up to 50% of the cost of the energy audit, based on requirements
- 15 commensurate with the size and complexity of the buildings. The energy audits must be
- 16 completed by a professional engineer, a certified engineering technologist, an architect, or a
- 17 Certified Energy Manager; customers can select their own Energy Auditor meeting these criteria.

18 Capability Building

The C&I Program will offer CDM market capability building activities for CDM service providers such as training and certification.

Purpose of the Initiative:

- The objectives of the Program are to:
- Assist owners and operators of C&I buildings, farms, and multi-family residences
 achieve reduced demand and energy savings through the purchase and operation of
 energy efficient equipment.
 - Provide education to tenants and occupants, particularly with respect to multi-family buildings, regarding in-suite energy efficiency and demand response opportunities; and
- Facilitate a culture of conservation among these communities and the equipment supply chains that serve them.

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Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 31 of 43

OPA - Contracted Province-Wide CDM Program

2 COMMERCIAL PROGRAM

- 3 Initiative Number: 12
- 4 Initiative Name: DEMAND RESPONSE 1 COMMERCIAL
- *Please note Initiative 12 and Initiative 14 describe the same program but have been outlined separately as the program is offered to multiple sectors*
- Years(s) of Operation for the Initiative: Jan. 1, 2011 Dec. 31, 2014
- 8 Initiative Frequency: Year Round
- 9 Target Customer Type(s): Industrial and Commercial customers of 50 kW or greater with interval meter

Initiative Description:

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- DR1 is a demand response initiative for industrial and commercial customers, of 50 kW or greater to reduce the amount of power being used during certain periods of the year. This initiative has a schedule of 1600 hours per year where activations of up to 100 hours may occur with no obligation on customers to participate. This initiative makes payments for actual load reduction only. There are no payments or set-offs associated with a participant deciding not to participate, or where a participant has indicated willingness to perform and then not followed through.
- The initiative is managed by third party program administrators procured by the OPA or the 19 LDCs. Marketing of the initiative and customer registration may be done by both Demand 20 Response Providers and the LDC. The LDC will be responsible for promotion of the DR1 21 initiative and for registering customers. LDC's may see registering of DR1 customers as a means 22 for growing potential customers for the DR3 Initiative. Once a potential customer has expressed 23 interest in participation, the LDC will register the customer with the Third Party Initiative 24 Operator by completing a customer form containing the basic information about the customer, 25 the contracted MW amount to which the customer believes has the ability to offer during any one 26 activation, along with a confirmation by the LDC that the customer can provide such demand 27 response capability. 28

Background:

29

The DR1 Initiative, a voluntary initiative, was launched in 2007 and grew to a peak capability of 417 MW. Its intent was to encourage participation by providing customer payments for reduction in the use of electricity relative to a baseline, whenever the 3-hour pre-dispatch market price, as published hourly by the IESO, exceeds a Floor Price agreed to by the OPA and initiative participant. The initiative participant was entitled to be paid the strike price for the

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 32 of 43

- MWh reduction for a minimum 3 hour period. With the advent of the DR3 Initiative, the DR1 Initiative underwent a change that sought to set initiative rates that better reflect its voluntary nature relative to the firm commitment required of DR3 Initiative participants. As such, a significant portion of DR1 participants have transitioned to either the DR2 (now discontinued) or
- 5 DR3 Initiative.
- Development of the DR1 and DR3 Initiatives was done in consultation with industry and through advice obtained from neighbouring markets. The demand response initiatives that will be the focus of the LDC customer base will be DR1 and DR3. While these initiatives were reviewed for potential changes, these initiative designs and potential changes were stakeholdered in April 2010. In addition, an Industrial Program Change Management Committee has been established to manage change to the DR initiatives in an organised and ongoing manner.

12 Initiative Elements:

- The DR1 Initiative is delivered by Demand Response Providers, under contract to the OPA. The OPA administers contracts with all Demand Response Providers and Direct Participants that provide in excess of 5MW of demand response capacity.
- OPA to provide administration including settlement, measurement and verification and dispatch.
- Awareness Education
- Marketing and promotion carried out by LDCs (Demand Response Providers may choose to co-promote with LDC's)
- Direct Selling and Promotional Materials to improve awareness

22 Purpose of the Initiative:

- The objective of the DR1 Industrial Initiative is to achieve maximum cost effective peak demand reduction and energy savings, increase conservation awareness and contribute to the creation of a
- culture of conservation in Ontario.

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 33 of 43

OPA - Contracted Province-Wide CDM Program

2 COMMERCIAL PROGRAM

- 3 Initiative Number: 13
- 4 Initiative Name: DEMAND RESPONSE 3 COMMERCIAL
- *Please note Initiative 13 and Initiative 15 describe the same program but have been outlined separately as the program is offered to multiple sectors*
- Years(s) of Operation for the Initiative: Jan. 1, 2011 and Dec. 31, 2014
- 8 Initiative Frequency: Year Round
- 9 Target Customer Type(s): Industrial and Commercial customers with a peak demand greater than 50 kW

11 Initiative Description

- The DR3 initiative is open to commercial and industrial customers with a peak demand greater than 50 kW. In comparison to the DR1, which is a voluntary initiative, the DR3 initiative is a contractual resource that provides significant financial benefits for participants, reliability and operational benefits for the electricity system, and financial benefits for all electricity customers as it is an economic alternative to procurement of new generation capacity.
- 17 The DR3 Initiative comes with specific contractual obligations requiring commercial and
- industrial participants to reduce their use of electricity relative to a baseline when called upon.
- 19 This initiative makes payments for participants to be on standby and energy payments for the
- actual energy reduction provided during a demand response event. Participants are scheduled to
- be on standby approximately 1,600 hours per calendar year for possible dispatch of up to 100
- 22 hours or 200 hours within that year.
- The initiative is delivered by Demand Response Providers, under contract to the OPA or the
- LDCs. The LDCs will provide important marketing and customer outreach support in a
- 25 collaborative approach with Demand Response Providers.

Background

- The DR3 Initiative, introduced to Ontario in 2008, has produced a significant level of interest
- among both industrial and commercial loads. The initiative is delivered to market primarily
- 29 through OPA contracts with Demand Response Providers. These providers, also known as
- "Aggregators", aggregate multiple customers willing to provide demand response. The initiative
- requires participants to make a firm commitment to provide demand response capability upon
- demand. Large participants who can provide greater than 5 MW of demand response capability
- have the option to contract directly with the OPA. Participants are asked to place themselves on

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 34 of 43

- standby 1,600 hours per year, of which they may be required to provide demand response for up 1 to 100 or 200 hours each year. Each demand response call is for a four hour period. While this 2
- initiative continues to grow, it remains flexible to change, in order to accommodate learning's 3
- from the market. 4

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Initiative Elements

- Initiative is delivered by Demand Response Providers, under contract to the OPA. The OPA 6
- administers contracts with all Demand Response Providers and Direct Participants that provide 7
- in excess of 5 MW of demand response capacity. 8
 - Marketing and promotional activities carried out by LDCs.
- 10 OPA to provide administration including procurement operational services such as settlement, measurement and verification and dispatch.
 - Direct Participants and Demand Response Providers receive a standby notice. Participants are scheduled to be on standby approximately 1,600 hours per calendar year for possible dispatch of up to 100 hours or 200 hours within that year.
- Large participants who can provide greater than 5 MW of demand response 15 capability have the option to contract directly with the OPA. 16
- Participant to confirm within one hour when it is anticipated that they will 17 under perform compared to their contractual commitment. 18
 - Participants must register a measurement and verification plan as part of their initial application for a contract and with every subsequent update to the overall project.

Purpose of the Initiative

- The purpose of the DR3 initiative is to provide significant financial benefits for participants, 22 reliability and operational benefits for the electricity system and financial benefits for all 23
- electricity customers. Emphasis is to achieve maximum cost effective peak demand reduction 24
- and energy savings, increase conservation awareness and contribute to the creation of a culture 25
- of conservation in Ontario. 26

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 35 of 43

OPA - Contracted Province-Wide CDM Program

2 INDUSTRIAL PROGRAM

- Initiative Number: 14 3
- Initiative Name: DEMAND RESPONSE 1 INDUSTRIAL 4
- *Please note Initiative 12 and Initiative 14 describe the same program but have 5 been outlined separately as the program is offered to multiple sectors* 6
- Years(s) of Operation for the Initiative: Jan. 1, 2011 and Dec. 31, 2014 7
- Initiative Frequency: Year Round
- Target Customer Type(s): Industrial and Commercial customers of 50 kW or greater with 9 interval meter 10

Initiative Description:

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- DR1 is a demand response initiative for industrial and commercial customers, of 50 kW or 12 greater to reduce the amount of power being used during certain periods of the year. This 13 initiative has a schedule of 1600 hours per year where activations of up to 100 hours may occur 14 with no obligation on customers to participate. This initiative makes payments for actual load 15 reduction only. There are no payments or set-offs associated with a participant deciding not to 16 participate, or where a participant has indicated willingness to perform and then not followed 17 through. 18
- 19 The initiative is managed by third party program administrators procured by the OPA or the LDCs. Marketing of the initiative and customer registration may be done by both Demand 20 Response Providers and the LDC. The LDC will be responsible for promotion of the DR1 21 initiative and for registering customers. LDC's may see registering of DR1 customers as a means 22 for growing potential customers for the DR3 Initiative. Once a potential customer has expressed 23 interest in participation, the LDC will register the customer with the Third Party Initiative 24 Operator by completing a customer form containing the basic information about the customer. 25 the contracted MW amount to which the customer believes has the ability to offer during any one 26 27 activation, along with a confirmation by the LDC that the customer can provide such demand response capability.

- Background: 29
- The DR1 Initiative, a voluntary initiative, was launched in 2007 and grew to a peak 30
- capability of 417 MW. It's intent was to encourage participation by providing customer 31
- payments for reduction in the use of electricity relative to a baseline, whenever the 32

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 36 of 43

- 3-hour pre-dispatch market price, as published hourly by the IESO, exceeds a Floor
- 2 Price agreed to by the OPA and initiative participant. The initiative participant was
- entitled to be paid the strike price for the MWh reduction for a minimum 3 hour period.
- With the advent of the DR3 Initiative, the DR1 Initiative underwent a change that sought
- to set initiative rates that better reflect its voluntary nature relative to the firm
- 6 commitment required of DR3 Initiative participants. As such, a significant portion of DR1
- 7 participants have transitioned to either the DR2 (now discontinued) or DR3 Initiative.
- Development of the DR1 and DR3 Initiatives was done in consultation with industry and through advice obtained from neighbouring markets. The demand response initiatives that will be the focus of the LDC customer base will be DR1 and DR3. While these initiatives were reviewed for potential changes, these initiative designs and potential changes were stakeholdered in April 2010. This Business Case addresses all of the issues raised. In addition, an Industrial Program Change Management Committee has been established to manage change to the DR initiatives in an organised and ongoing manner.

Initiative Elements:

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- The DR1 Initiative is delivered by Demand Response Providers, under contract to the OPA. The OPA administers contracts with all Demand Response Providers and Direct Participants that provide in excess of 5MW of demand response capacity.
 - OPA to provide administration including settlement, measurement and verification and dispatch.
 - Awareness Education
 - Marketing and promotion carried out by LDCs (Demand Response Providers may choose to co-promote with LDC's)
 - Direct Selling and Promotional Materials to improve awareness

25 Purpose of the Initiative:

- The objective of the DR1 Industrial Initiative is to achieve maximum cost effective peak
- demand reduction and energy savings, increase conservation awareness and contribute
- to the creation of a culture of conservation in Ontario.

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 37 of 43

OPA - Contracted Province-Wide CDM Program

2 INDUSTRIAL PROGRAM

- 3 Initiative Number: 15
- 4 Initiative Name: DEMAND RESPONSE 3 INDUSTRIAL
- *Please note Initiative 13 and Initiative 15 describe the same program but have been outlined separately as the program is offered to multiple sectors*
- Years(s) of Operation for the Initiative: Jan. 1, 2011 and Dec. 31, 2014
- 8 Initiative Frequency: Year Round
- 9 Target Customer Type(s): Industrial and Commercial customers with a peak demand greater than 50 kW.

Initiative Description

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- The DR3 initiative is open to commercial and industrial customers with a peak demand greater than 50 kW. In comparison to the DR1, which is a voluntary initiative, the DR3 initiative is a contractual resource that provides significant financial benefits for participants, reliability and operational benefits for the electricity system, and financial benefits for all electricity customers as it is an economic alternative to procurement of new generation capacity.
- 17 The DR3 Initiative comes with specific contractual obligations requiring commercial and
- industrial participants to reduce their use of electricity relative to a baseline when called upon.

 This initiative makes payments for participants to be on standby and energy payments for the
- This initiative makes payments for participants to be on standby and energy payments for the actual energy reduction provided during a demand response event. Participants are scheduled to
- be on standby approximately 1,600 hours per calendar year for possible dispatch of up to 100
- 22 hours or 200 hours within that year.
- 23 The initiative is delivered by Demand Response Providers, under contract to the OPA or the
- 24 LDCs. The LDCs will provide important marketing and customer outreach support in a
- collaborative approach with Demand Response Providers.

Background

- 27 The DR3 Initiative, introduced to Ontario in 2008, has produced a significant level of interest
- among both industrial and commercial loads. The initiative is delivered to market primarily
- 29 through OPA contracts with Demand Response Providers. These providers, also known as
- 30 "Aggregators", aggregate multiple customers willing to provide demand response. The initiative
- requires participants to make a firm commitment to provide demand response capability upon
- demand. Large participants who can provide greater than 5 MW of demand response capability
- have the option to contract directly with the OPA. Participants are asked to place themselves on

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 38 of 43

- standby 1,600 hours per year, of which they may be required to provide demand response for up
- to 100 or 200 hours each year. Each demand response call is for a four hour period. While this
- initiative continues to grow, it remains flexible to change, in order to accommodate learning's
- 4 from the market.

5 Initiative Elements

- Initiative is delivered by Demand Response Providers, under contract to the OPA. The OPA administers contracts with all Demand Response Providers and Direct Participants that provide
- 8 in excess of 5 MW of demand response capacity.
- Marketing and promotional activities carried out by LDCs.
- OPA to provide administration including procurement operational services such as settlement, measurement and verification and dispatch.
- Direct Participants and Demand Response Providers receive a standby notice.

 Participants are scheduled to be on standby approximately 1,600 hours per calendar year for possible dispatch of up to 100 hours or 200 hours within that year.
- Large participants who can provide greater than 5 MW of demand response capability have
 the option to contract directly with the OPA.
- Participant to confirm within one hour when it is anticipated that they will under perform compared to their contractual commitment.
- Participants must register a measurement and verification plan as part of their initial
 application for a contract and with every subsequent update to the overall project.

21 Purpose of the Initiative

- The purpose of the DR3 initiative is to provide significant financial benefits for participants,
- 23 reliability and operational benefits for the electricity system and financial benefits for all
- 24 electricity customers. Emphasis is to achieve maximum cost effective peak demand reduction
 - and energy savings, increase conservation awareness and contribute to the creation of a culture
- of conservation in Ontario.

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 39 of 43

- OPA Contracted Province-Wide CDM Program
- 2 INDUSTRIAL PROGRAM
- 3 Initiative Number: 16
- 4 Initiative Name: THE INDUSTRIAL ACCELERATOR
- 5 Years(s) of Operation for the Initiative: Jan. 1, 2011 and Dec. 31, 2014
- 6 Initiative Frequency: Year Round
- 7 Target Customer Type(s): Industrial Customers
- 8 Initiative Description
- 9 The Industrial Accelerator Initiative is an energy management initiative that includes both
- financial incentives for capital projects and enabling initiatives. It is open to industrial companies
- that are customers of an Ontario electric LDC and are not insolvent.
- This initiative offers industrial customers the opportunity to access capital incentives to assist
- with the implementation of system optimization projects. The incentives are available through
- the LDC. The initiative is open to distribution connected industrial and commercial customers
- with projects or portfolio projects that are expected to generate at least 350 MWh of annualized
- electricity savings or, in the case of Micro-Projects, 100 MWh of annualized electricity savings.
- 17 The capital incentive for this initiative is up to \$200/MWh for eligible costs with a
- cap of 70% of projects costs or a one year pay back. This level is based on an
- analysis of typical capital costs for large system optimizations and the propensity for industry to
- 20 pursue projects with a one year simple payback.
- This initiative will be delivered by the LDCs with technical support provided by a centrally
- 22 procured technical resource.

Background

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• Ontario has not had a fully functioning energy management initiative for industrial customers, other than the ability to receive incentives for high efficiency motors and efficiency lighting under the ERIP Initiative. To build on this gap and address the needs of the larger industrial businesses, the Industrial Accelerator Initiative, will be delivered by the OPA to large transmission connected industrial loads. To support this initiative, the OPA has hired a number of account managers to proactively pursue energy management opportunities within the industrial segment. Development of long term relationships with industrial customers is considered necessary to ensure a sustainable momentum in moving projects forward considering

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 40 of 43

the long timelines normally associated with project approvals, not to mention that energy efficiency initiatives must compete against production related initiatives for capital dollars.

3 Initiative Elements:

- This initiative is up to \$200/MWh for eligible costs with a cap of 70% of projects costs or a one year pay back.
- Funding for Pre-Feasibility and Feasibility Studies
- Funding for Energy Managers (Industrial Employed Energy Managers and Roving Energy
 Managers)
- Funding for Monitoring & Targeting systems
- Meter lending library
- End Use Training
- Energy Manager Training
- Employee Awareness & Senior Management Leadership
- LDC Key Account Managers

15 Purpose of the Initiative

- Implementing system optimization projects in systems which are intrinsically complex and capital intensive
- 2. Increasing the capability of companies to implement energy management and system optimization projects
- 3. Increasing the capability of technical, financial and other consultants and the supply chain to deliver energy efficiency and energy management services in Ontario

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 41 of 43

- OPA Contracted Province-Wide CDM Program
- 2 INDUSTRIAL PROGRAM
- 3 Initiative Number: 17
- 4 Initiative Name: ELECTRICITY RETROFIT INCENTIVE PROGRAM INDUSTRIAL
- 5 ERIP
- 6 Years(s) of Operation for the Initiative: Jan. 1, 2011 and Dec. 31, 2014
- 7 Initiative Frequency: Year Round
- 8 Target Customer Type(s): Industrial,
- 9 Initiative Description:
- The industrial initiative is designed to offer financial incentives to customers for upgrades of
- existing equipment to energy efficient equipment. The program also promotes the inclusion of
- energy efficient measures in new buildings through the New Construction element included with
- 13 this initiative.
- The equipment replacement initiative (ERIP) is offered to industrial facilities, however, given the
- 15 Industrial Accelerator (IA) program is best suited to evaluate complex industrial energy
- efficiency applications, industrial projects with an annual savings exceeding 100MWh per year
- must apply to the Industrial Accelerator Program. ERIP custom applications that exceed the
- 18 100MWh limit, will be referred to the IA program, unless approval is received from the LDC to
- 19 proceed under ERIP.
- 20 Background:
- The Electricity Retrofit Incentive Program (ERIP), initially developed for the business markets,
- 22 contained energy efficiency measures for lighting and high efficiency motors. The initiative has
- been enhanced to include initiative elements such as feasibility studies and roving Energy
- 24 Managers to maximize energy savings potential.
- 25 Initiative Elements:
- Initiatives directed medium to large facilities will include design and delivery elements such as
- account management, and application administration support.
- 28 Initiatives directed at smaller facilities, on the other hand, will be based on prescriptive
- approaches to measures and incentives, typically featuring standardized application forms.
- 30 Equipment Replacement (ERIP)

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 1 Page 42 of 43

- The ERIP initiative primarily focuses on equipment replacement. Equipment replacement projects have traditionally been categorized in ERIP and other similar programs as either
- Prescriptive or Custom. The Prescriptive approach utilizes a list of specific measures for which
- the incentive is prescribed. The Custom approach requires a more sophisticated, and in some
- cases complex, process to determine the potential for demand reductions or energy savings. The
- 6 Program will continue these two approaches, but will also include an Engineered approach.
- The Engineered approach will provide the customer with potential for additional incentives for the equipment to be installed and will provide a more straight-forward process than the Custom approach, with simplified calculations of energy and demand savings. The incentives available under the Engineered approach are the same as for the Custom approach, but the actual amount would be based on data provided by the customer.
- 12 Incentives for Engineered and Custom projects are:
- \$400/kW or \$0.05/kWh for lighting measures (whichever is higher) to a maximum of 50% of the project costs.
- \$800/kW or \$0.10/kWh for non-lighting measures (whichever is higher) including lighting controls to a maximum of 50% of the project costs.
- Participant incentives for Prescriptive projects are as per the Prescriptive forms/worksheets which specify the dollar amount per unit installed, with no maximum amount payable for the project.

20 New Construction – All Buildings and Customer Types

- 21 The New Construction initiative of the Industrial Program will provide incentives for new
- buildings to exceed existing codes and standards for energy efficiency. Similar to the Equipment
- 23 Replacement initiative, the New Construction initiative utilizes both Prescriptive and Custom
- 24 approaches.

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- 25 Participant incentives for Prescriptive projects are as per the Prescriptive forms/worksheets,
- which specify the kW and KWh assumption per unit installed, and determine the resulting
- 27 incentive at a rate of \$250/kW. Incentives for Custom will depend on the level of savings
- achieved, to a maximum of of the project cost. In addition, there are incentives for building
- 29 modeling to maximum of \$ as well as incentives for Design Decision-Makers (e.g.
- designers, architects and engineers) that were involved in the building design.
- A building owner participates in this initiative by hiring a Commissioning Agent, who must provide two references from past projects OR be certified (by the AEE, ASHRAE or BCA).

Capability Building

The C&I Program will offer CDM market capability building activities for CDM service providers such as training and certification.

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 1 of 55

HYDRO ONE BRAMPTON PROPOSED BOARD-APPROVED CDM PROGRAMS

- 3 Residential Programs
- 4 1. Community Education Initiative
- 5 2. Neighborhood Benchmarking
- 6 Commercial and Industrial Programs
- 7 3. Monitoring and Targeting Initiative
- 8 4. Small Commercial Energy Management and Load Control Initiative
- 5. Municipal Hospital Efficiency Performance
- 10 6. Double Return Plus Initiative

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 2 of 55

Board-Approved CDM Programs

2 RESIDENTIAL PROGRAM

- 3 Initiative Number: 1
- 4 Initiative Name: Community Education Initiative
- 5 Year(s) of Operation for the Initiative: 2011-2014
- 6 Initiative Frequency: Year Round Initiative
- 7 Target Customer Type(s): Residential Customers

8 1. Initiative Description

- 9 This initiative focuses on customer education and promotes the exchange of information between
- 10 Hydro One Brampton and its consumers at local community events.
- 11 Hydro One Brampton projects attendance at these local community events to reach
- approximately 20,000 people per year for the duration of the initiative. The delivery of the
- initiative will rely on a community events partner to help represent Hydro One Brampton and its
- 14 conservation programs at such events with personnel, displays and promotional collateral.

15 2. Non Duplicative Features of the Initiative

- 16 The OPA Contracted programs do not provide an initiative similar to the Community Education
- 17 Program. This program focuses on customer education and promotes the exchange of
- information between the electricity distributor and its customers at local community events. This
- program relies on a face-to-face interaction with the customer which has proven to be successful
- in changing social norms and influencing customer behaviour for Hydro One Brampton
- 21 customers.

22 3. Background

- 23 Hydro One Brampton is committed to promoting a culture of conservation in Ontario. It plays
- an active role as "Leaders in the Community" and participates in a variety of annual community
- events, which provide the Company the opportunity to educate residential customers on the
- importance of conservation and provide them with the tools they need to help them save energy.
- 27 Hydro One Brampton serves over 133,000 customers, 123,975 of which are residential
- 28 customers. Promoting a culture of conservation to Hydro One Brampton's customers using
- 29 typical mass marketing techniques can be expensive and not have the desired uptake. By
- attending local community events, Hydro One Brampton gets an opportunity to engage in "face-
- to-face" discussions. These discussions allow the Company to educate its consumers on the
- 32 topic of conservation and promote its CDM programs. Previous experience has proven this

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 3 of 55

- approach to be an effective way to promote conservation and reach a deeper level of discussion
- with Hydro One Brampton's customers (beyond the bill insert). Face-to-face engagement allows
- 3 the Company to educate consumers, answer questions, remove barriers and drive participation
- 4 for other CDM programs.

5 4. Initiative Elements

- 6 Initiative elements are:
- Plan to participate in up to 8-12 community events each year across Brampton
- Educate consumers on the topic of conservation using various techniques (including brochures, banners, promotional items, etc.)
- Actively promote and market Hydro One Brampton's conservation programs
- Distribute energy efficient products which will encourage customers to "get started" with low cost no cost measures (eg. Compact fluorescent lamp giveaways, power bars, etc.)
- Distribute conservation literature and tips on ways to save energy and save money
- Incorporate Time-of-Use messages and promote conservation actions that will help customers better manage their energy bill

16 5. Purpose of the Initiative

- Customer education (on both Conservation and Time-of-Use)
- Build strong customer relationships that promote conservation culture
- Deliver face-to-face conservation messages
- Drive participation for all Conservation Programs
- Remove barriers which have prevented customers from participating in conservation programs in the past
- Influence social norms in local communities social change strategy to promote a culture of conservation
- Distribute low cost energy efficient measures which provide energy savings results
- 6. Projected reduction in Peak Electricity Demand (MW)

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 4 of 55

- Hydro One Brampton has used the OPA's Measures and Assumptions Lists to calculate the peak
- demand reduction for the 2011 to 2014 period. Coincident peak demand reduction by the end of
- 2014 is projected to be 20kW.

Total Peak Reduction	(MW)	2011-201	14		
	2011	2012			Total Coincident Peak Demand Reduction by the end of 2014 (MW)
Community Education Initiative (MW)	0.004	0.009	0.015	0.02	0.02

4 7. Projected Reduction in Electricity Consumption (MWh):

- 5 Hydro One Brampton has used the OPA's Measures and Assumptions Lists to calculate the
- 6 energy consumption reduction for the 2011 to 2014 period. Projected energy consumption
- reduction by 2014 is projected to be 760MWh

Total Energy Reduction (MWh) 2011-2014						
	2011	2012	2013	2014	Total Energy Reduction Cumulative (2011-2014)	
Community Education Initiative (kW)	116	271	426	581	1,394	

8 8. Projected Budget

The total projected budget for the four year initiative is \$176,880 inclusive of sefficient giveaways.

Filed: November 1, 2010
Exhibit C
Tab 1
Schedule 2
Page 5 of 55

							Page 5
Community Ede	ucation	nInitiative	- Budget (\$) 2011-2014			a de la
		2011	2012	2013	2014	То	tal 2011- 2014
Marginal costs							
Fixed costs							
Event Planning and Administration Post-Event Reporting (Events Evaluation)	\$						
Total Fixed costs	\$			1 11111	1 1		
Allocable costs							
Fixed Costs							
Overhead	\$			1 1100	1 1000		
Total Fixed Costs	\$				1 1880		
Total Program Costs	\$	BILL SER	-		1 100001		-
Incentives (promotional giveaways)	\$	1000			1 100000		
Total Budget**	\$	44,220	\$ 44,220	\$ 44,220	\$ 44,220	\$	176,880

2 9. Cost-Effectiveness Tests Results

3 • TRC: 1.9

4 • PAC: 1.1

10. Draft Evaluation plan

- Hydro One Brampton will ensure that the Community Events initiative will be evaluated in accordance with the OPA's EM&V Protocol guidelines. A Draft Evaluation Plan is attached.
- 8 The initiative Final Evaluation plan will be prepared by an independent third party. The
- 9 selection of the evaluation criteria and detailed elements of the Evaluation Plan will be
- determined by the independent third party. Measurement and verification of initiative peak
- determined by the independent time party. Wedsterment and vertification of initiative peak
- demand savings (kW) and electricity savings (kWh) results will be conducted by a third party
- 12 review contractor selected through an RFP process from the OPA's "Third Party Vendor of
- 13 Record" list once the initiative is approved.
- The following is a DRAFT EVALUATION PLAN TEMPLATE:

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 6 of 55

COMMUNITY EVENTS INITIATIVE

2 OPA DRAFT EVALUATION PLAN TEMPLATE

	Description (see section 1 & 4)						
	Key Program Elements (see section 4)						
	Goals and Objectives (see section 2 & 5)						
	Program Theory (see section 3)						
	Program Timing Program Launch Date: January 1st, 2011						
Program	All program elements are expected to be deliverable commencing immediately after the program launch date.						
Description	Program end date: December 31, 2014						
	Estimated Participation and Results (see sections 6, 7 & 9)						
	Draft Budget (see Section 8)						
Conservation Measures	Equipment based Measures: Assumptions for measures considered eligible under the initiative that are included in the OPA's Measures and Assumptions List.						
Evaluation Goals and Objectives	 i) Process Design Effectiveness ii) Program Administration Effectiveness iii) Measures and Assumptions Review iv) Establish gross and net energy savings and demand reductions achieved 						

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 7 of 55

	Page 7 of 55
	v) Estimate Program Cost Effectiveness
	vi) Special Provisions
Evaluation Deliverables	Evaluation Deliverables
	Final Program Evaluation Plan
	Annual Report – elements
	Final Report
Evaluation	The elements of the Evaluation Goals and Objectives are anticipated to
Description	include (but are not limited to) those listed in the corresponding sections below. It is expected that these elements will be reviewed, discussed, evaluated or analyzed as appropriate and according to the OPA's EM&V Protocols to ensure that they meet the Program Evaluation Goals and Objectives during the Draft Evaluation Plan development phase . Review of these elements will assist Hydro One Brampton in determining and/or validating the appropriateness of the program design, administration and measures assumption elements and whether adjustments are necessary in order to successfully deliver the Initiative and to achieve the anticipated Goals and Objectives and estimated participation and results.
Evaluation	i) Program Process Design Effectiveness - Evaluation criteria:
Elements	Goals of program
	Staffing and training
	Program timing and timelines
	Use of new procedures and best practices
	Eligibility and participants – original assumptions vs. actual
	• Events implementation – results of program participation from
	event
	Incentives and motivation for participation
	Customer satisfaction feedback – participant satisfaction
	Non participant feedback
	Monitoring and tracking procedures
	Roles and responsibilities of team members and stakeholders
	Reporting procedures
	ii) Program Administration Effectiveness - Evaluation Criteria:
	Program statistics – including participants, calculations of energy
	and demand reductions etc.
	Program Impact Evaluation
	Market Effects Assessment
	Pre and post Project Analysis Assessment
	Marketing Effectiveness Assessment

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2

	Page 8 of 55
	Expense Reporting
	Market Participant review
	iii) Measures and Performance Assumptions Review:
	Prescriptive Measures Assumptions Review
	Custom Measures Assumptions Review
	Behavioural and Performance Assumptions Review
	iv) Gross and Net Energy Savings and Demand Reductions Achieved: **To be performed by a 3 rd party based on the OPA's EM&V protocols
	Measurement and verification of program energy and demand savings achieved
	Net to Gross ratio (including free rider rate)
	Audit and Verification of project completion
	v) Program Cost Effectiveness:
	Verification of program expenditures
	Verification of program funding and payments
	Cost benefit Analysis – funding vs. program performance
Special Provisions	Special Provisions: N/A
Data Collection Responsibilities to Support Program Evaluation	This area is still under development and will be completed with the assistance of a third party EM&V expert to ensure complete and appropriate collection of data to support Program evaluation. List of Planned Events (Dates, Locations, Contacts, Nature of Event, Anticipated Attendance)
	 List of Completed Events (Dates, Locations, Contacts, Nature of Event & Actual Attendance Numbers) List of Planned Giveaways (Descriptions & Anticipated Numbers) List of Actual Giveaways Distributed (Descriptions & Final Numbers)

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 9 of 55

Evaluation	
Schedule	8
Budget	

Evaluation Deliverable	Budget	Date
Draft Evaluation Plan	TBD	TBD
Final Evaluation Plan	TBD	TBD
Verification of Projects	TBD	TBD
Verification of Energy Reductions	TBD	TBD
Verification of Program Costs	TBD	TBD
Draft Final Evaluation Report	TBD	TBD
Final Evaluation Report	TBD	TBD
Total Evaluation Budget	TBD	

Evaluation Team

Organization	Name	Title/Accountability
Hydro One Brampton	TBD	Program Manager
Hydro One Brampton	TBD	Energy Services Supervisor
3 rd Party (Final Evaluation Plan Development)	TBD	TBD
3 rd Party Measurement and verification Contractor (selected from OPA "Third Party Vendor of Record" list	TBD	TBD

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 10 of 55

- Board-Approved CDM Program
- 2 RESIDENTIAL PROGRAM
- 3 Initiative Number: 2
- 4 Initiative Name: Neighbourhood Benchmarking
- 5 Year(s) of Operation for the Initiative: 2011 to 2014
- 6 Initiative Frequency: Year round
- 7 Target Customer Type(s): Residential
- 8 1. Initiative Description:
- 9 Customers will receive a paper-based "Home Energy Report" that offers insights about their
- individual energy use as well as a comparison with their neighbourhood energy use. Hydro One
- Brampton plans to distribute 25,000 reports to targeted Residential customers, who will receive a
- paper-based report as well as password protected, web-access to the data.

2. Non Duplicative Features of the Initiative

- Neighbourhood Benchmarking is non-duplicative from all OPA Contracted Initiatives as it is the
- only program that addresses behavioural changes based on peer comparison and influence. This
- program provides customers with a customized Home Energy Report that offers insights about
- their individual energy use as well as a comparison with their neighbourhood energy use.
- Neighbourhood Benchmarking has been proven successful in other jurisdictions, where
- pilots/programs have show that significant savings can be achieved by benchmarking household
- energy usage and comparing it to the neighbours (ie. peer group with similar attributes).

3. Background

- This program is centred on a paper-based "Home Energy Report" which is mailed to consumers
- that offers insights about their individual energy use and offers a comparison with their
- 24 neighbourhood energy use. The neighbourhood comparison data helps consumers understand
- 25 "how they are doing" in comparison to their neighbours. The information motivates them to take
- action and reduce their household energy use.
- 27 The information shown on the report is customized to meet the needs of each individual
- household. In each case, customer load profile data collected from the smart meter will be used
- 29 to help identify the areas of opportunity (i.e. to improve energy efficiency and promote
- 30 conservation). The "Home Energy Report" will translate the individual energy usage patterns
- into meaningful insights coupled with targeted action steps. The report will offer energy
- recommendations that are specifically tailored to meet the needs of the customer.

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 11 of 55

This Initiative is organized around two concepts - motivating behaviour change and providing 1 relevant, targeted information to the consumer. The Initiative is based on proven behavioural 2 science which indicates that an effective way to motivate people is to provide peer context for 3 their energy use. This is accomplished by dynamically creating a 100 home comparison group 4 for each home that only compares homes with similar characteristics (square footage, heating 5 type, billing cycle, geographic proximity, etc.). This behavioural science driven model has 6 proven results with over 20 U.S. utilities which indicate that people will take action to conserve energy when they are made aware of how their energy usage pattern compares with their 8 neighbours (or peers). It is important to note that this Initiative is based on a similar social 9 marketing concept which contributed to the success of our provincial recycling Initiative, ie. 10

11 Blue Box Program.

The software platform required to support this Initiative will incorporate these behavioural 12 science techniques along with detailed statistical analysis and intelligent customer segmentation 13 modeling. The results of the Home Energy Reporting system will be measured using a simple 14 test and control group methodology. By using test and control groups, Hydro One Brampton 15 will be able to isolate and cleanly evaluate the impact of the program. This test and control 16 methodology has already been endorsed in the California Evaluators Protocols and the guidelines 17 for the National Action Plan for Energy Efficiency, which was jointly produced by the US 18 Department of Energy and the Environmental Protection Agency. 19

Hydro One Brampton plans to distribute the "Home Energy Reports" to 25,000 customers who will also be provided web access to their data. This same number of customers will be represented in both the "test" and "control" groups. This represents a conservative implementation approach which will allow Hydro One Brampton to monitor and manage customer feedback and mitigate any potential risks associated with a new program.

4. Initiative Elements

- The key initiative elements are:
- A *Home Energy Report* (paper-based report card) is mailed to customers on a regular basis throughout the year (typically several days after bill mailing)
- The mailing schedule is pre-determined and intended to serve as reminders to help influence behaviour change
- The information provided to the customer in the report card includes:
- 32 Comparison of current, individual usage to approximately 100 closest "neighbours" or "peers"
- Comparison of current individual usage to the top 20% most "efficient neighbours"
- 34 Comparison of historical usage pattern (last 12 months) to historical "neighbourhood" usage
- 35 Comparison of current individual usage to historical usage, i.e. "same time last year"

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 12 of 55

- Helpful information regarding "typical household energy use" broken down into categories -
- 2 heating (or cooling), water heating, other appliances and electronics
- 3 Recommendations and promotion of LDC conservation programs
- 4 The specific, personalized insights provided allow customers to make informed decisions
- 5 regarding their energy use and prompts them to take action and conserve energy
- The software platform delivers messages to the customer using three communication channels:
- 7 Comparative Home Energy Reports mailed to customers several times a year, simple to
- 8 understand, designed to reach and engage customers
- 9 Consumer Energy Web Portal available to those customers who are receiving the Home
- 10 Energy Report Card. Customers will receive password protected access to web-based info
- which allows them to learn more about their energy use, share best practises and gain insight
- into efficiency tips
- 13 Call Centre Support provided by Hydro One Brampton staff

14 5. Purpose of the Initiative

- The objective is to provide customers with peer group information. This information is intended
- to motivate them to take action, conserve energy and encourage new behaviours. The initiative
- has both a measurable energy efficiency component as well as a customer education component.
- At a higher level, the purpose of this initiative is to:
- achieve measurable energy conservation results (kW & kWh savings)
- support market transformation by encouraging behaviour change
- educate residential customers about the benefits conservation and provide helpful
- 22 household hints
- promote participation in provincial conservation programs
- 24 6. Projected Reduction in Peak Electricity Demand (MW):
- 25 Hydro One Brampton projects the coincident peak demand reduction by the end of 2014 to
- 26 be 0.95 MW.

Total Peak Reduction	n (MW)	2011-20	14		
	2011	2012	2013	2014	Total Coincident Peak Demand Reduction by the end of 2014 (MW)
Neighbourhood benchmarking (MW)	0.295	0.95	0.95	0.95	0.95

7. Projected Reduction in Electricity Consumption (MWh)

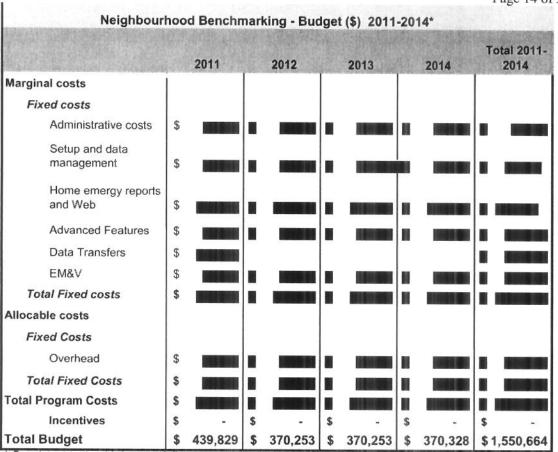
Projected energy consumption reduction by 2014 is projected to be 30,407 MWh

Total Energy Reduction (MWh) 2011-2014						
	2011	2012	2013	2014	Total Energy Reduction Cumulative (2011-2014)	
Neighbourhood benchmarking (MWh)	3,041	9,122	9,122	9,122	30,407	

3 8. Projected Budget

- 4 The estimated total initiative cost is approximately \$ 1.5 million, which includes administrative
- 5 costs, marketing costs, and behind the meter services.

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 14 of 55



Consistent to the third- party delivery model of this staged initiative, all program costs are fixed

9. Cost Effectiveness Tests Results: 2

TRC: 1.2

PAC: 1.2

10. Draft Evaluation Plan:

- Hydro One Brampton will ensure that the Neighbourhood Benchmarking initiative will be 6 evaluated in accordance with the OPA's EM&V Protocol guidelines . A Draft Evaluation Plan is 7 8 attached. The initiative Final Evaluation Plan will be prepared by an independent third party. The selection of the evaluation criteria and detailed elements of the Evaluation Plan will be 9 determined by the independent third party. Measurement and verification of initiative peak 10 demand savings (kW) and electricity savings (kWh) results will be conducted by a third party 11
- review contractor selected through an RFP process from the OPA's "Third Party Vendor of 12
- Record" list once the initiative is approved. 13
- The following is a DRAFT EVALUATION PLAN TEMPLATE: 14

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 15 of 55

NEIGHBOURHOOD BENCHMARKING INITIATIVE

2 OPA DRAFT EVALUATION PLAN TEMPLATE

	Description (see section 1)							
	Key Program Elements (see section 4)							
	Goals and Objectives (see sections 5, 6 and 7)							
	Program Theory (see section 3)							
	Program Timing Program Launch Date: July 1, 2011							
Program	All program elements are expected to be deliverable commencing immediately after the program launch date.							
Description	Program end date: December 31, 2014							
	Estimated Participation and Results (see sections 4, 6, 7 & 9)							
	Draft Budget (see Section 8)							
Conservation Measures	Equipment based Measures: N/A Non Equipment based Measures may include: Behavioural Change.							
Evaluation Goals and Objectives	Evaluation Goals and Objectives i) Process Design Effectiveness ii) Program Administration Effectiveness iii) Establish gross and net energy savings and demand reductions achieved							

	 iv) Estimate Program Cost Effectiveness v) Special Provisions
Evaluation Deliverables	Evaluation Deliverables • Final Program Evaluation Plan
	 Annual Report – elements Final Report
Evaluation Description	The evaluation elements of the Evaluation Goals and Objectives are anticipated to include (but are not limited to) those listed in the corresponding sections below. It is expected that these elements will be reviewed, discussed, evaluated or analyzed as appropriate and according to the OPA's EM&V Protocols to ensure that they meet the Program Evaluation Goals and Objectives during the Draft Evaluation Plan development phase . Review of these elements will assist Hydro One Brampton in determining and/or validating the appropriateness of the program design, administration and measures assumption elements and whether adjustments are necessary in order to successfully deliver the Initiative and to achieve the anticipated Goals and Objectives and estimated participation and results.

Evaluation						
Elements	i) Program Process Design Effectiveness - Evaluation criteria:					
	Goals of program					
	Program timing and timelines					
	Use of new procedures and best practices					
	original assumptions vs. actual					
	Customer satisfaction feedback – participant satisfaction					
	Non participant feedback					
	Monitoring and tracking procedures					
	Roles and responsibilities of team members and stakeholders					
	Reporting procedures					
	ii) Program Administration Effectiveness - Evaluation Criteria:					
	 Program statistics – including participants, calculations of energy and 					
	demand reductions etc.					
	Marketing Effectiveness Assessment					
	Budget versus Actual Reporting					

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 17 of 55

Market Participant review
iii) Measures and Performance Assumptions Review:
Behavioural and Performance Assumptions Review
 iv) Gross and Net Energy Savings and Demand Reductions Achieved: **To be performed by a 3rd party based on the OPA's EM&V protocols Measurement and verification of program energy and demand savings achieved
 Net to Gross ratio (including free rider rate) Audit and Verification as required by Code
v) Program Cost Effectiveness:
Verification of program expenditures versus budget
Special Provisions: N/A

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 18 of 55

Collection
onsibilities
Support
am
ation

This area is still under development and will be completed with the assistance of a third party EM&V expert to ensure complete and appropriate collection of data to support Program evaluation.

- Data collection on the following elements may be included:
- Historical energy data related to TEST GROUP & CONTROL GROUP (to support Baseline)
- Total Number of Reports Sent to Customer
- Total Number of Recommended Measures
- Measured Impacts on Demand & Energy Consumption

Evaluation Schedule & Budget

Evaluation Deliverable	Budget	Date
Draft Evaluation Plan	TBD	TBD
Final Evaluation Plan	TBD	TBD
Verification of Projects	TBD	TBD
erification of Energy Reductions	TBD	TBD
Verification of Program Costs	TBD	TBD
Draft Final Evaluation Report	TBD	TBD
Final Evaluation Report	TBD	TBD
Total Evaluation Budget	TBD	

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2

Page	10	of	5
rage	17	OI	0.

Evaluation	Organization	Name	Title/Accountability
Team	Hydro One Brampton	TBD	Program Manager
	Hydro One Brampton	TBD	Energy Services Supervisor
	3 rd Party (Final Evaluation Plan Development)	TBD	TBD
	3 rd Party Measurement and verification Contractor (selected from OPA "Third Party Vendor of Record" list	TBD	TBD
	Tarty vendor of Record Tist		

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 20 of 55

- Board-Approved CDM Program
- 2 COMMERCIAL PROGRAM
- 3 Initiative Number: 3
- 4 Initiative Name: Mid and Large Commercial and Industrial Monitoring and Targeting Initiative
- 5 Year(s) of Operation for the Initiative: 2011-2014
- 6 Initiative Frequency: Year round
- 7 Target Customer Type(s): Medium and large commercial businesses with average demand
- 8 above 200 kW; industrial customers with average demand over 200 kW and annual energy
- 9 consumption of up to 15 GWh

10 1. Initiative Description

- The proposed Monitoring & Targeting (M&T) initiative is offered to industrial customers with
- annual energy consumption of up to 15GWh and to commercial businesses with average demand
- above 200kW. Potential participants will be offered financial incentive to install a monitoring
- and targeting system that assesses the energy use against key performance indicators such as
- productivity. M&T will assist these customers to better understand their energy performance. It
- will also give the participants an opportunity to benchmark their consumption against best
- practices by other similar businesses. The initiative is intended to enable customers to achieve
- sustainable behavioural and continuous improvements. The initiative will be offered between
- 19 2011 and 2014.

28

- This initiative offers financial incentives toward an M&T system up to a maximum of
- per M&T installation as well as performance incentives up to MWh for achieved energy
- savings. In addition, the participants will receive a full range of behind-the-meter services to
- assist customers to implement energy efficiency improvements.
- The initiative delivery will be carried out by various third party vendors, although Hydro One
- 25 Brampton will be the primary point of contact for participants and interested customers. M&T
- system providers as well as energy managers will also play a key role in the delivery of the
- 27 initiative by providing on-going assistance to customers throughout the project cycles.

2. Non Duplicative Features of the Initiative

- The distinct elements of the initiative are:
- In the OPA's Industrial Accelerator (IA) initiative, M&T is offered merely as an
- enabler to assist with capital projects. The proposed M&T initiative, by contrast, is a

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 21 of 55

comprehensive, all-encompassing initiative that will assist participants to undertake M&T as the main project and not merely as an enabler.

3

• This initiative will also provide a full range of behind-the meter services (e.g. customized website with specific customer consumption information, on-site visits and M&T workshops), not offered in the OPA-contracted initiatives.

7 3. Initiative Elements

- 8 The key initiative offerings include:
- M&T system funding: the proposed initiative offers financial assistance of per expected kW savings, up to a maximum of towards the purchase of an M&T system. Customers that agree to install an M&T system will be required to commit contractually to a minimum term of four years.
- Performance Incentives: this initiative offers the participants a performance incentive of based on four year annualized verified energy savings, which will be paid out in annual instalments.
- Behind-the-meter services: this initiative will offer on-going technical services including:
- customized on-line information
- expert site visits
- project management assistance
- employee engagement kits
- M&T workshops
- 22 Additional initiative offerings include:
- Operational and process driven improvements: the proposed initiative will help customers understand the impact of operational and process improvements to achieve energy savings and
- 25 help identify low-cost or no-cost opportunities.
- 26 Educational component: the proposed initiative will provide training sessions and workshops to
- 27 educate customers on energy efficiency drivers and their energy usage.
- Buy-in from senior management: The initiative will ensure that customer's senior management
- ²⁹ fully support the M&T project to establish it as a continuous improvement process.

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 22 of 55

4. Purpose of the Initiative

- The M&T initiative will offer the key elements required to assist the medium to large C&I
- 3 sectors in the successful pursuit of continuous and deeper energy savings beyond the traditional
- 4 C/I CDM programs that focus only on technology or equipment replacement.

5. Projected Reduction in Peak Provincial Electricity Demand (MW):

6 Projected coincident peak demand reduction by end of 2014 is 1.6MW.

Total Peak Reduction (MW) 2011-2014							
	2011	2012	2013	2014	Total Coincident Peak Demand Reduction by end of 2014 (MW)		
M&T Peak Demand reduction (MW)	0	0.541	1.082	1.623	1.623		

*Savings are assumed to begin 2012 because of the nature of the initiative and business cycle

8 6. Projected Reduction in Electricity Consumption (MWh):

9 Projected energy consumption reduction by 2014 is estimated at 3,533 MWh.

Total Energy Conservation Reduction (MWh) 2011-2014							
	2011	2012	2013	2014	Total Reduction Cumulative 2014)	Energy (2011-	
M&T Energy Consumption reduction (MWh)	0	592	1,183	1,758	3,533		

*Savings are assumed to begin 2012 because of the nature of the initiative and business cycle

7. Projected budget

The total cost of the initiative will be \$1.4 million, inclusive of approximate \$ incentives

13 to customers.

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 23 of 55

		Prog	ram	Budget (\$) 20	11- 2014				Page 23
Pogram costs		2011		2012		2013		2014	Tot	al 2011-2014
Marginal costs										
Fixed										
Administrative costs	\$									
Marketing & Site visits	\$									
EM&V	\$			\$ 17.10		100100				
Total Fixed	\$									2011
Variable										
M&T System*	\$									
Total variable	\$						0.	1		
Total Marginal costs	\$									
Allocable costs										
Fixed Allocable	\$	NAME OF TAXABLE PARTY.		1000						
Variable Allocable	\$	PAGE 1						- 1		DESCRIPTION OF THE PERSON NAMED IN
Total Allocable costs	\$	W. T. 124				100011		EN ITS		
Total Program Cost	\$	40012								
Incentives 20 cents per kWh	\$	- 1		-	•				•	
Total Program Budget	\$	314,152	\$	434,074	\$	434,074	\$	252,906	\$	1,435,206

8. Cost Effectiveness Tests Results:

3 • TRC: 1.6

1

11

14

• PAC: 2.0

9. Draft Evaluation Plan:

Hydro One Brampton will ensure that the Monitoring and Targeting Initiative will be evaluated in accordance with the OPA's EM&V Protocol guidelines. A Draft Evaluation Plan is attached. The initiative Final Evaluation Plan will be prepared by an independent third party. The selection of the evaluation criteria and detailed elements of the Evaluation Plan will be determined by the independent third party. Measurement and verification of initiative peak

demand savings (kW) and electricity savings (kWh) results will be conducted by a third party

review contractor selected through an RFP process from the OPA's "Third Party Vendor of

13 Record" list once the initiative is approved.

The following is a DRAFT EVALUATION PLAN TEMPLATE:

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 24 of 55

- MID AND LARGE COMMERCIAL & INDUSTRIAL MONITORING AND
- 2 TARGETING INITIATIVE

OPA DRAFT EVALUATION PLAN TEMPLATE

	Description: See Section 1
	Key Program Elements: See Sections 2 and 3
	Goals and Objectives: See Section 4
	Program Theory: See Sections 3 and 4
	Program Timing Program Launch Date: January 1, 2011
	Program End Date: December 31, 2014
Program	Estimated Participation and Results: See Sections 3,4,5,6 and 8
Description	Draft Budget: See Section 7
	Non Equipment based measures may include:
Conservation Measures	Process driven changes
	Equipment based measures include: N/A
	17/1
Evaluation	Evaluation Goals and Objectives
Goals and	i) Process Design Effectiveness
Objectives	ii) Program Administration Effectiveness iii) Measures and Assumptions Pavious
	 iii) Measures and Assumptions Review iv) Establish gross and net energy savings and demand reductions
	- 11/ Litabilish gross and net onergy savings and demand reductions

	Page 25 of 55
	achieved
	v) Estimate Program Cost Effectiveness
	vi) Ensure Level of Customer Satisfaction
Evaluation Deliverables	Evaluation Deliverables
	Draft Evaluation Plan
	Final Program Evaluation Plan
	Annual Report – Elements
	Final Report
Evaluation Description	The evaluation elements of the Evaluation Goals and Objectives are anticipated to include (but are not limited to) those listed in the corresponding sections below. It is expected that these elements will be reviewed, discussed, evaluated or analyzed as appropriate and according to the OPA's EM&V Protocols to ensure that they meet the Program Evaluation Goals and Objectives during the Draft Evaluation Plan development phase . Review of these elements will assist Hydro One in determining and/or validating the appropriateness of the program design, administration and measures assumption elements and whether adjustments are necessary in order to successfully deliver the Initiative and to achieve the anticipated goals and objectives and estimated participation and results.

Evalua								
tion	Program Process Design Effectiveness - Evaluation criteria:							
Eleme	Goals of program							
nts	Staffing and training							
	Program timing and timelines							
	Incentives and motivation for participation							
	Participant satisfaction feedback							
	Non participant feedback back – participant satisfaction							
	Monitoring and tracking procedures							
	Reporting procedures							
	ii) Program Administration Effectiveness - Evaluation Criteria:							
	Program statistics – including participants, calculations of energy and							
	demand reductions etc.							
	Program Impact Evaluation							
	Pre and post Project Analysis Assessment							
	Marketing Effectiveness Assessment							

	Actual versus Budget Reporting
	Market Participant review
	iii) Measures and Performance Assumptions Review:
	Custom Measures Assumptions Review
	Behavioural and Performance Assumptions Review
	iv) Gross and Net Energy Savings and Demand Reductions Achieved: **To be performed by a 3 rd party based on the OPA's EM&V protocols • Measurement and verification of program energy and demand savings achieved
	Net to Gross ratio (including free rider rate) A Vivin A Vivin Continue of project completion
	Audit and Verification of project completion
	v) Program Cost Effectiveness:
	Verification of program expenditures versus budget
	Verification of incurred payments
Special	Negopia J
Provisio ns	N/A
Data Collectio n Responsi bilities to	This area is still under development and will be completed with the assistance of a third party EM&V expert to ensure complete and appropriate collection of data to support Program evaluation. Data collection on the following elements may be included:
Data Collection Responsibilities to Support	This area is still under development and will be completed with the assistance of a third party EM&V expert to ensure complete and appropriate collection of data to support Program evaluation. Data collection on the following elements may be included:
Data Collectio n Responsi bilities to	This area is still under development and will be completed with the assistance of a third party EM&V expert to ensure complete and appropriate collection of data to support Program evaluation. Data collection on the following elements may be included: Historical account consumption data
Data Collection Responsibilities to Support Program	This area is still under development and will be completed with the assistance of a third party EM&V expert to ensure complete and appropriate collection of data to support Program evaluation. Data collection on the following elements may be included: Historical account consumption data Number of participants
Data Collection Responsibilities to Support Program Evaluati	This area is still under development and will be completed with the assistance of a third party EM&V expert to ensure complete and appropriate collection of data to support Program evaluation. Data collection on the following elements may be included: Historical account consumption data
Data Collection Responsibilities to Support Program Evaluati	This area is still under development and will be completed with the assistance of a third party EM&V expert to ensure complete and appropriate collection of data to support Program evaluation. Data collection on the following elements may be included: Historical account consumption data Number of participants Program incentives
Data Collection Responsibilities to Support Program Evaluati	This area is still under development and will be completed with the assistance of a third party EM&V expert to ensure complete and appropriate collection of data to support Program evaluation. Data collection on the following elements may be included: Historical account consumption data Number of participants Program incentives Customer site attributes
Data Collection Responsibilities to Support Program Evaluati	This area is still under development and will be completed with the assistance of a third party EM&V expert to ensure complete and appropriate collection of data to support Program evaluation. Data collection on the following elements may be included: Historical account consumption data Number of participants Program incentives Customer site attributes Program delivery metrics
Data Collection Responsi bilities to Support Program Evaluati	This area is still under development and will be completed with the assistance of a third party EM&V expert to ensure complete and appropriate collection of data to support Program evaluation. Data collection on the following elements may be included: Historical account consumption data Number of participants Program incentives Customer site attributes Program delivery metrics Interviews with Initiative designers, delivery agents administrators

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 27 of 55

Evaluati on Schedule & Budget

Evaluation Deliverable	Budget	Date
Draft Evaluation Plan	TBD	TBD
Final Evaluation Plan	TBD	TBD
Verification of Projects	TBD	TBD
Verification of Energy Reductions	TBD	TBD
Verification of Program Costs	TBD	TBD
Draft Final Evaluation Report	TBD	TBD
Final Evaluation Report	TBD	TBD
Total Evaluation Budget	TBD	

Evaluati on Team

Organization	Name	Title/Accountability	
Hydro One Brampton	TBD	Program Manager	
Hydro One Brampton	TBD	Energy Services Supervisor	
3 rd Party (Final Evaluation Plan Development)	TBD	TBD	
3 rd Party Measurement and verification Contractor (selected from OPA "Third Party Vendor of Record" list	TBD	TBD	

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 28 of 55

- Board-Approved CDM Program
- 2 COMMERCIAL PROGRAM
- 3 Initiative Number: 4
- 4 Initiative Name: Small & Mid Size Commercial Energy Management and Load Control
- 5 Initiative ("CEMLC")
- 6 Year(s) of Operation for the Initiative: July 2011- December 2014
- 7 Initiative Frequency: Year round
- 8 Target Customer Type(s): Small and medium size General Service customers with average
- 9 monthly peak demand of up to 200kW

10 1. Initiative Description:

- 11 This is an Energy Management and Demand Response Initiative that aims at helping
- approximately 8516 small and medium size General Service customers with average monthly
- peak demand of up to 200kW to reduce their energy consumption by 2GWh and peak system
- demand by 2MW over the term of the initiative. Hydro One Brampton expects to enrol
- approximately 550 customers by the end of 2014.
- The program will offer an Energy Management System as well as load control devices (e.g.,
- switches) for end-use control. The Energy Management System (EMS) included in this initiative
- will assist in initiating load control events as well as help customers to achieve energy savings.
- 19 This initiative will be delivered through a third-party vendor selected through a competitive
- bidding process. The implementation vendor will be responsible for marketing, installing and
- maintaining all equipment, and tracking and reporting results. Hydro One Brampton staff will
- 22 coordinate the initiative deployment and provide assistance to the vendors, as needed, while
- ensuring that the program delivery milestones, targets and timelines are met.
- 24 Hydro One Brampton will issue an RFP to select a viable demand response system with the
- 25 required energy management functions for the participating customers to use. The selected EMS
- system will meet the functional and technical requirements of both Hydro One Brampton and the
- 27 program participants. Rigorous system acceptance testing will be performed on the selected
- system based on well-defined test conditions to ensure the suitability of the system for program
- 29 deployment.

30 2. Non Duplicative Features of the Initiative

The distinct elements of the initiative are:

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 29 of 55

- a. The proposed initiative is solely designed to meet the needs of small commercial customers with up to 200kW load. This initiative stands in contrast to the OPA-contracted Residential Demand Response initiative which is primarily intended to meet the needs of residential customers. Although the OPA initiative has been offered to small commercial customers (under 50kW load), over the last three years the participation rate has remained very limited.
- b. Another distinct feature of the proposed initiative is the targeting of a broader commercial customer group compared to the OPA Residential Demand Response initiative. The proposed initiative is offered to customers below 50kW and is extended to customers with peak load greater than 50kW and up to 200kW.
- The proposed initiative is distinct from the OPA residential Demand Response as it provides customers with an EMS system that can assist them to take full advantage of TOU rates. Unlike the OPA Residential Demand Response, the proposed initiative covers the monthly fee required to allow the customers to have access to the full use of the EMS system that is installed in their premises. As a result, the system is used for both demand response and the customers' energy efficiency/TOU purposes.
- d. One of the distinct features of this program is the offering of technical assistance to the participants on an on-going basis. At the point of installation customers will receive training from the EMS installers for programming the EMS system to save energy and take advantage of TOU rates. The program will also provide online technical support to customers throughout the year.

3. Initiative Elements

22

35

- 23 The key initiative offerings include:
- The program offers an Energy Management system plus installation including end-use load control devices such as a switch. The value of this offering including installation cost is estimated at approximately
- To allow the customer to exploit the full potential of the EMS system Hydro One
 Brampton will cover the monthly EMS access fee on behalf of the customer valued at
 over four years.
- Participants in the load control events will receive a incentive per event up to 15 events in a year.
- At the point of installation customers will receive training from the EMS installers for programming the EMS system to save energy and take advantage of TOU rates. The program will also provide online technical support to assist the customers to program the EMS system.

4. Background

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 30 of 55

- While general service customers under 50kW are eligible to participate in the PeakSaver
- 2 Program, so far less than one percent of this customer group has participated in the program.
- This is primarily due to the fact that the PeakSaver Program is designed to respond to the needs
- of residential customers. This is the foundation of the need for the proposed initiative i.e., to
- 5 specifically address the needs of the small commercial customers.

5. Purpose of the Initiative

- 7 The purpose of this initiative is two fold:
- Provide Customer Benefits: provide business customers with an Energy Management System (EMS) that would help them monitor and control their energy consumption and/or bills in a time-of-use (TOU) environment. This will help customers manage their energy consumption and change their behaviour in a sustainable manner.
- 2. Provide System Benefits: enable the utility to install a load control device in customers' businesses which, when activated, will reduce system peak load and increase the reliability of the electricity grid.

6. Projected Reduction in Peak Provincial Electricity Demand (MW):

16 Projected coincident peak demand reduction by the end of 2014 is 19.6MW.

Total Peak Reduction	(MW) 2 2011	2012	2013	2014	Total coincident peak demand reduction by end of 2014 (MW)
Small Commercial Energy Management System Load Control (MW)	0.28	0.85	1.40	2.00	2.00

6

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 31 of 55

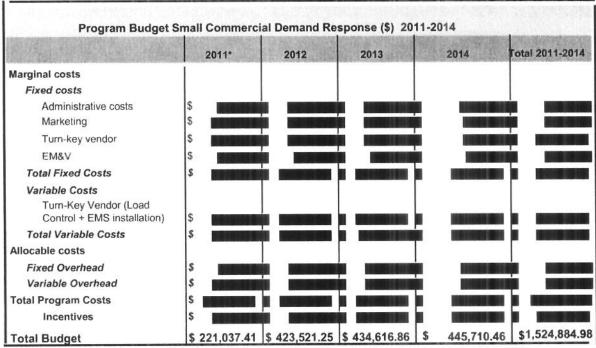
7. Projected Reduction in Electricity Consumption (MWh):

Projected energy consumption reduction by 2014 is estimated at 2,000MWh.

Total Energy Consumption Reduction (MWh) 2011-2014					
	2011	2012	2013	2014	Total Cumulati ve (2011- 2014)
Small Commercial					
Demand Response (MWh)	123	381	633	863	2,000

3 8. Projected Budget

- 4 The total projected budget for this initiative is \$1.52 million, inclusive of million in
- 5 customer incentives



^{*} The program is expected to start July 2011 to be in line with the evaluation of the OPA Pilot on EMS /Load Cotrol technologies

9. Cost Effectiveness Tests Results

• TRC: 1.7

• PAC: 1.9

5 10. Draft Evaluation Plan:

- Hydro One Brampton will ensure that the Commercial Energy Management and Load Control Initiative will be evaluated in accordance with the OPA's EM&V Protocol guidelines. A Draft Evaluation Plan is attached. The initiative Final Evaluation Plan will be prepared by an independent third party. The selection of the evaluation criteria and detailed elements of the Evaluation Plan will be determined by the independent third party. Measurement and verification of initiative peak demand savings (kW) and electricity savings (kWh) results will be conducted by a third party review contractor selected through an RFP process from the OPA's
- "Third Party Vendor of Record" list once the initiative is approved.
- The following is a DRAFT EVALUATION PLAN TEMPLATE:

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 33 of 55

SMALL AND MID SIZE COMMERCIAL ENERGY MANAGEMENT AND LOAD CONTROL

3 OPA DRAFT EVALUATION PLAN TEMPLATE

Program Description	Description: See Sections 1 and 2 Key Program Elements: See Section 2 Goals and Objectives: See Sections 1 and 3 Program Theory: See Sections 2,3 and 4 Program Timing Program Launch Date: July 1st, 2011 All program elements are expected to be deliverable commencing immediately after the program launch date. Program end date: December 31, 2014 Estimated Participation and Results: See Sections 1,6,7 and 9 Draft Budget: See Section 8
Conservation Measures	Behavioural Changes Energy Management System Load control service (included in the EMS system)
Evaluation Goals and Objectives	 i) Process Design Effectiveness ii) Program Administration Effectiveness iii) Establish gross and net energy savings and demand reductions achieved iv) Estimate Program Cost Effectiveness

Evaluation Deliverables	 Evaluation Deliverables Draft Evaluation Plan Final Program Evaluation Plan Annual Report – elements Final Report
Evaluation Description	The evaluation elements of the Evaluation Goals and Objectives are anticipated to include (but are not limited to) those listed in the corresponding sections below. It is expected that these elements will be reviewed, discussed, evaluated or analyzed as appropriate and according to the OPA's EM&V Protocols to ensure that they meet the Program Evaluation Goals and Objectives during the Draft Evaluation Plan development phase . Review of these elements will assist Hydro One Brampton in determining and/or validating the appropriateness of the program design, administration and measures assumption elements and whether adjustments are necessary in order to successfully deliver the Initiative and to achieve the anticipated Goals and Objectives and estimated participation and results.

Evaluation	
Elements	i) Program Process Design Effectiveness - Evaluation criteria:
	Staffing and training
	Program timing and timelines
	Use of new procedures and best practices
	 Eligibility and participants – original assumptions vs. actual
	• Procedure for load control event implementation - results of
	program participation from event
	Motivation for participation and incentive level
	 Customer satisfaction feedback – participant satisfaction
	Non participant feedback
	Program management monitoring procedures
	Roles and responsibilities of team members and stakeholders
	Reporting procedures
	ii) Program Administration Effectiveness - Evaluation Criteria:
	 Program statistics – including participants, calculations of energy
	and demand reductions etc.
	Marketing Effectiveness
	Actual versus Budget Reporting

	Page 35 of 5.
	Market Participant review
	iii) Measures and Performance Assumptions Review:
	 Custom Measures Assumptions Review
	Behavioural and Performance Assumptions Review
	 iv) Gross and Net Energy Savings and Demand Reductions Achieved: **To be performed by a 3rd party based on the OPA's EM&V protocols Measurement and verification of program energy and demand savings achieved Net to Gross ratio (including free rider rate) Audit and Verification of project completion
	v) Program Cost Effectiveness:
	Verification of program expenditures versus budget
	Verification of program funding and payments
	Cost benefit Analysis – funding vs. program performance
Special Provisions	N/A
Data Collection Responsibilities to Support Program Evaluation	This area is still under development and will be completed with the assistance of a third party EM&V expert to ensure complete and appropriate collection of data to support Program evaluation. Data collection on the following elements may be included: Historical account consumption data Number of participants Program incentives Customer site attributes Program delivery metrics Interviews with Initiative designers, delivery agents administrators Interviews with market allies and market channel reps Interviews with participants and non-participants
Evaluation	

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 36 of 55

Schedule Budget	& Evaluation Deliverable	Budget	Date
Duuget	Draft Evaluation Plan	TBD	TBD
	Final Evaluation Plan	TBD	TBD
	Verification of Projects	TBD	TBD
	Verification of Energy Reducti	ons TBD	TBD
	Verification of Program Cos	ts TBD	TBD
	Draft Final Evaluation Repo	rt TBD	TBD
	Final Evaluation Report	TBD	TBD
	Total Evaluation Budget	TBD	

Evaluation	
Team	

Organization	Name	Title/Accountability
Hydro One Brampton	TBD	Program Manager
Hydro One Brampton	TBD	Energy Services Supervisor
3 rd Party (Final Evaluation Plan Development)	TBD	TBD
3 rd Party Measurement and verification Contractor (selected from OPA "Third Party Vendor of Record" list	TBD	TBD

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 37 of 55

- Board-Approved CDM Program
- 2 COMMERCIAL PROGRAM
- 3 Initiative Number: 5
- 4 Initiative Name: Municipal Hospital Energy Efficiency Performance
- 5 Year(s) of Operation for the Initiative: 2011-2014
- 6 Initiative Frequency: Year round
- 7 Target Customer Type(s): All Municipal facilities and the Williams Osler Heath Center in
- 8 Brampton

9 1. Initiative Description:

- 10 The Municipal and Hospital Energy Efficiency Performance Program provides monetary
- incentives to municipal and hospital customers for overall electrical energy efficiency reductions
- within facilities and across their portfolio of accounts. By requiring participants to commit to
- continuous electrical energy management and efficiency actions and improvements year over
- 14 year, Hydro One Brampton expects that the unique offerings of the Initiative will assist in
- transforming this segment of the broader public sector to entrench energy efficiency and energy
- conservation as a core best practice within their organizations.
- 17 The key elements and comprehensive approach of the Initiatives seek to assist this historically
- hard to reach sector in the pursuit of sustained and deeper energy savings by going beyond
- technology based incentives offered in traditional or proposed province wide commercial CDM
- 20 programs.
- The initiative is expected to be made available to the City of
- 22 Brampton and the William Osler Health Centre
- Delivery of the initiative will be carried out by Hydro One Brampton and contracted resources
- 24 and experts in the field of energy Conservation and Demand Management (CDM).
- 25 Incentives available to participating customers for each year of participation include:
- 1. toward tools, training and/or memberships offering energy and demand consumption benchmarking, tracking and targeting; Conservation Action Plan development
- assistance, technical training and energy management best practices.
- 29 2. Up to of the cost (to a maximum of pre-assessment and/or audit of energy
- intense facilities within a portfolio. Participating facilities are eligible for one pre-assessment
- and audit incentive within the initiative delivery period (2011 to 2014).

3. Participating facilities will be eligible to receive a financial incentive at 1

overall energy performance improvements. 2

This initiative could be further extended to the other public sector institutions. 3

2. Non Duplicative Features of the Initiative 4

This multi phase initiative is non duplicative as it goes beyond technology specific incentives to 5

help remove barriers to continuous energy efficiency practices and allow participants to realize 6

deeper savings. The unique Initiative benefits and incentive structure are designed to encourage 7

the sector to focus on whole buildings, systems and processes within their account portfolio, and 8

to adopt energy efficiency technical, management, and organizational best practices. Offering

monetary incentives for overall energy efficiency and peak demand performance rather than 10

technology alone, allows flexibility for this budget constrained sector to implement corporate

initiatives and processes that may realize efficiencies with less capital investment. 12

The initiative will include unique value-added elements or participation requirements not offered 13

in any other commercial CDM program in Ontario. As a participant in the Initiative, the 14

customer commits to, and is incented for, continuous energy efficiency actions and 15

improvements year over year. Participants will be required to sign a Memorandum of 16

Understanding (MoU) committing to: The assembly of a cross functional team; the development 17

of a comprehensive Energy Conservation Action Plan; ongoing electrical energy consumption 18

and demand benchmarking, tracking and target setting; employee engagement and training; and 19

commitment from top levels of the organization. A commitment to re-invest incentives realized 20

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from energy and peak demand reductions in to further energy efficiency actions will also be

encouraged. 22

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3. Initiative Elements

- The value proposition to customers participating in the Municipal and Hospital Energy 24
- Efficiency Performance Initiative includes the following unique elements: 25
- Compile and provide useful historical energy consumption data for eligible accounts within 26
- the hospital or municipal portfolio 27
- A signed Memorandum of Understanding ("MoU") committing to: 28
- assembly of a cross functional team including top level management 29
- development of an Energy Conservation Action Plan 30 0
- annual benchmarking and monitoring of electrical energy usage 31 0
- set annual reduction targets 32
- continuous action and implementation of energy efficient initiatives 0 33

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 39 of 55

- o participation in the Initiative to December 31, 2014
- to direct any incentive monies related to energy efficiency actions back in to Energy Efficiency initiatives within the organization (encouraged)
- toward tools, training and/or memberships that help achieve energy and demand consumption benchmarking, tracking and targeting; Conservation Action Plan development assistance, technical training and energy management best practices.
- CDM Specialist including consultation and review of current vs. best practices for management, operations and technology
- Up to of the cost (to a maximum of for pre-assessment and/or audit of energy intensive facilities within a portfolio. Participants are eligible for one pre-assessment and audit incentive within the Initiative delivery period (2011 to 2014).

12 4. Background:

- The unique elements of the municipal and hospital initiative seek to remove the barriers faced by this sector by enabling and encouraging the pursuit of ongoing energy and peak demand reduction opportunities.
- For many, facility management and electricity bill payment and accountabilities are decentralized, and equipment upgrade projects are often reactive. Energy efficient projects also compete with non-discretionary projects and budget constraints. These barriers are thought to have impacted the limited participation from this sector in technology based provincial CDM programs to date. This Initiative seeks to remove these barriers.

5. Purpose of the Initiative:

- The Municipal Efficiency Performance initiative will offer the key elements required to assist this broader public sector in the successful pursuit of continuous and deeper energy savings
- this broader public sector in the successful pursuit of continuous and deeper energy savings beyond the traditional commercial CDM programs that focus only on technology or equipment
- beyond the traditional commercial CDM programs that focus only on technology of equipment replacement. Using a comprehensive delivery model and performance based incentive approach;
- the sector will be enabled to make appropriate technology, process, management and
- organizational decisions that best fit their business, community and facility needs.

6. Projected Reduction in Peak Electricity Demand (MW)

- 29 The Initiative is expected to achieve approximately 0.22 MW of peak reduction by the end of
- 30 2014.

21

Total Peak Reduction	(MW)	IW) 2011-20	14		Total Coincident Peak Demand Reduction by end of		
	2011	2012	2013	2014	2014 (MW)		
Municipal - Hospital Energy Performance (MW)	0.06	0.10	0.16	0.22	0.22		

7. Projected Reduction in Electricity Consumption (MWh):

The Initiative is expected to achieve 5,097 MWh cumulative energy reduction by the end of

3 2014.

Total Energy Reduction (MWh) 2011-2014								
Total Divis	2011	2012	2013	2014	Total Energy Reduction Cumulative (2011- 2014)			
Municipal - Hospital								
Energy Performance								
(MWh)	407	955	1,557	2,178	5,097			

4 8. Projected Budget

5 The estimated budget to deliver the Municipal and Hospital Efficiency Performance Initiative is

6 \$0.8M including \$ in incentives. Administrative, marketing and 3rd party delivery and

7 EM&V costs are included in the estimated budget.

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 41 of 55

Municipal - Hospital	Ener	gy Emiciend	y Pe	errormance	(2)	2011-2014				
		2011*		2012		2013		2014		otal 2011- 2014
Marginal costs										
Fixed costs	1									
Administrative costs	\$	1000	-	10000			10			
Marketing (includes tools			100			(111-1111)	_	-	_	
and Employee										
Engagement)	\$			EST COL		0.00	III.	114 2		
CDM specialist	\$	653 648					-	ALC: U		
EM&V	\$	1980				11110				
Total Fixed Costs	\$						ı		ı	
Variable Costs			2000							
Third Party Project										
Review	\$					1000	- 18			
Membership/			-	3. Table 1	15750		-		-	
Tools/Training	\$	0.000		1000		10000	10			8000
Performance Review /			8400		_		-		_	
Audits	\$					100000	111	1000		-
Total Variable Costs	\$			RESE		NAME OF TAXABLE PARTY.	Ī			-
Allocable costs					-		_		_	
Fixed Overhead	\$			1000	-		l III	1000		
Variable Overhead	\$					1000	i ii	1000		
Total Program Costs	\$		F	021101						
Incentives	\$	aren .					ī			BESIS
otal Budget	s	175,655	s	201,171		06,932		09,790		93,548

9.Cost Effectiveness Test Results

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PAC: 1.1

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10. Draft Evaluation Plan

This initiative focuses on reducing Municipal and Hospital peak demand and energy consumption through behavioural changes and equipment upgrades. The equipment upgrade component falls under the measures included in the OPA's M&A List, while other component assumptions are based on consultations with industry experts. Consequently, Hydro One Brampton has partially varied from the OPA Measures and Assumptions Lists.

Hydro One Brampton will ensure that the Municipal – Hospital Energy Efficiency Performance Initiative will be evaluated in accordance with the OPA's EM&V Protocols. A Draft Evaluation Plan is attached based on the most current version available on the Power Authority website as of Oct. 15, 2010. A Final Evaluation Plan will be prepared by an independent third party after OEB approval of the Initiative. The selection of the evaluation criteria and detailed elements of the Evaluation Plan will be determined by the independent third party. Measurement and verification of initiative peak demand savings (kW) and electricity savings (kWh) results will be

- conducted by a third party review contractor selected through an RFP process from the OPA's
- 2 "Third Party Vendor of Record" list.
- The following is a DRAFT EVALUATION PLAN TEMPLATE:
- 4 OPA DRAFT EVALUATION PLAN
- 5 MUNICIPAL HOSPITAL EFFICIENCY PERFORMANCE
- 6 DRAFT EVALUATION PLAN TEMPLATE

	Description (see Section 1)
	Key Program Elements ((see sections 2, and 3)
	Goals and Objectives (see sections 1 and 5)
	Program Theory (see section 1 and 3)
	Program Timing Program Launch Date: January 1st, 2011
Program Description	All program elements are expected to be deliverable commencing immediately after the program launch date. Roving Energy Manager consultation, membership in sector specific Energy performance or monitoring programs or associations, participating account identification and benchmarking will be the key elements offered early in program delivery and throughout the four years of the program for as long as the customer(s) accounts are still eligible or participating.
	Customer enrolment end date: June 30th, 2012.
	Program end date: December 31, 2014
	Estimated Participation and Results (see sections 1,6, 7 & 9)
	Draft Budget (see Section 9)
Conservation Measures	Equipment based Measures: The Initiative will focus on energy efficient lighting, controls, motors pumps and HVAC systems, however, will allow for and financially incentretrofitting of other proven energy efficient technologies. Assumptions for measures considered eligible under the initiative that are not included under the OPA's Measures and Assumptions List have been, or will be, developed by a 3 rd party based on the OPA's EM&V Protocols.

	Page 43 of 55
	Non Equipment based Measures may include: Retro commissioning Continuous Optimization (Maintenance) Employee awareness Historical energy usage benchmarking Comparison to best in class and peer buildings (social benchmarking), Energy efficiency best practices (management, operations, technical etc) Monitoring and target setting Training and capability building Building or system auditing Ongoing membership with organizations offering tools, resources, capacity building and peer consultation focusing on energy use benchmarking, monitoring, tracking, target setting and reductions.
Evaluation Goals and Objectives	 i) Process Design Effectiveness ii) Program Administration Effectiveness iii) Measures and Assumptions Review iv) Establish gross and net energy savings and demand reductions achieved v) Estimate Program Cost Effectiveness vi) Special Provisions
Evaluation Deliverables	 Evaluation Deliverables Final Program Evaluation Plan Annual Report – elements Final Report
Evaluation Description	The evaluation elements of the Evaluation Goals and Objectives are anticipated to include (but are not limited to) those listed in the corresponding sections below. It is expected that these elements will be reviewed, discussed, evaluated or analyzed as appropriate and according to the OPA's EM&V Protocols to ensure that they meet the Program Evaluation Goals and Objectives during the Draft Evaluation Plan development phase . Review of these elements will assist Hydro One in determining and/or validating the appropriateness of the program design, administration and measures assumption elements and whether adjustments are necessary in order to successfully deliver the Initiative and to achieve

the anticipated Goals and Objectives and estimated participation and results.

Evaluation Elements

i) Program Process Design Effectiveness - Evaluation criteria:

- Goals of program
- Staffing and training
- Program timing and timelines
- Marketing Plan
- Use of new procedures and best practices
- Original assumptions vs. actual
- Incentives and motivation for participation
- Customer satisfaction feedback participant satisfaction
- Non participant feedback
- Monitoring and tracking procedures
- Roles and responsibilities of team members and stakeholders
- Reporting procedures

ii) Program Administration Effectiveness - Evaluation Criteria:

- Program statistics including participants, calculations of energy and demand reductions etc.
- Program Impact Evaluation
- Market Effects Assessment
- Pre and post Project Analysis Assessment
- Marketing Effectiveness Assessment
- Actual versus Budget Reporting
- Market Participant review

iii) Measures and Performance Assumptions Review:

- Custom Measures Assumptions Review
- Behavioural and Performance Assumptions Review

iv) Gross and Net Energy Savings and Demand Reductions Achieved*: *To be performed by a 3rd party based on the OPA's EM&V protocols

- Measurement and verification of program energy and demand savings achieved
- Net to Gross ratio (including free rider rate)
- Audit and Verification of project completion

v) Program Cost Effectiveness:

	Page 45 of 55
	Verification of program expenditures versus budget
	Verification of program funding and payments
	Cost benefit Analysis – funding vs. program performance
Special Provisions	Special Provisions: N/A
Data Collection Responsibilities to Support Program Evaluation	This area is still under development and will be completed with the assistance of a third party EM&V expert to ensure complete and appropriate collection of data and evaluation activities to support Initiative evaluation.
	Data collection and evaluation activities anticipated to support the evaluation of the initiative may include the following. :
	Historical account consumption data
	Gross number of participants
	Program Costs
	Program incentives
	Number of and types of measures installed
	Actual values of participant inputs (i.e. hrs of operation) used to generate kWh and kW savings estimates
	Building or account attributes
	 Program delivery metrics (i.e. web hits, marketing materials delivered)
	 Interviews with Initiative designers, delivery agents, administrators Interviews with market allies and market channel reps
	Interviews with market affice and market channel reps Interviews with participants and non-participants
	Observation of field efforts and operation
	Base case technology or process data
	Project and equipment costs (supported by invoices)
	Post project (new measure) data
	On site inspection / verification of implemented measures
	Copy of customer draft Energy Conservation Action Plan
	Energy Efficiency Activities and Actions Report from participants

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 46 of 55

Evaluation	
Schedule	&
Budget	

Evaluation Deliverable	Budget	Date
Draft Evaluation Plan	TBD	TBD
Final Evaluation Plan	TBD	TBD
Verification of Projects	TBD	TBD
Verification of Energy Reductions	TBD	TBD
Verification of Program Costs	TBD	TBD
Draft Final Evaluation Report	TBD	TBD
Final Evaluation Report	TBD	TBD
Budget	TBD	

Evaluation Team

Organization	Name	Title/Accountability
Hydro One Brampton	TBD	Program Manager
Hydro One Brampton	TBD	Energy Services Supervisor
3 rd Party (Final Evaluation Plan Development)	TBD	TBD
3 rd Party Measurement and verification Contractor (selected from OPA "Third Party Vendor of Record" list	TBD	TBD

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 47 of 55

- Board-Approved CDM Program
- 2 COMMERCIAL PROGRAM
- 3 Initiative Number: 6
- 4 Initiative Name: Double Return Plus Initiative (DRP)
- 5 Initiative Frequency: Year round
- 6 Target Customer Type(s): Commercial and industrial interval metered customers with
- average peak load of 200 kW or above.
- 8 Years of Operation for the Initiative:
- 9 2011 to 2014, subject to annual reviews and approvals.
- 1. Initiative Description
- The Double Return Plus Initiative (DRP) targets approximately 523 interval-metered commercial
- and industrial (C/I) customers with an average monthly peak load in excess of 200 kW. The
- objective of this Initiative is to reduce the customers' peak demand which, in turn, is expected to
- reduce the total system peak demand by up to 11 MW. This initiative has an expected program
- cost of \$200/kW inclusive of incentives.
- 16 The Double Return initiative has two components: a peak demand reduction and an energy
- efficiency component. This initiative encourages the customers to reduce their summer peak
- demand relative to their summer demand in the previous year by at least 5%. The energy
- efficiency savings will be achieved through the installation of a load management system. The
- proposed initiative will fund of the cost of a load management system, up to a maximum of
- This initiative will enable customers to control and reduce their summer peak demand
- as well as achieve sustainable energy savings.
- 23 The performance incentive payments will be set equal to double the amount of reduction in
- distribution charges on the customer's bill resulting from achieving a 5-10% reduction in their
- peak load. For every dollar the customer saves in reduced distribution charges, the program will
- 26 provide two dollars in incentive payments.
- In addition to performance incentives, this initiative will offer a range of behind-the meter
- services including online technical services, on-site visits, energy efficiency and demand
- 29 response workshops, and employee engagement kits.
- 30 The program will primarily be delivered directly by Hydro One Brampton with the help of a
- number of third party vendors to assist with the promotion and delivery of the technical services
- to the customers.

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 48 of 55

2. Non Duplicative Features of the Initiative

- The unique elements of the initiative are:
- Non-Dispatchable versus Dispatchable Demand Response: The DRP initiative is not 3 duplicative of the OPA Demand Response Programs because it is based on non-dispatchable 4 load control and it also aims at reducing energy consumption. By contrast, the OPA Province-5 wide Demand Response programs are based on dispatchable load control and, as a result, have 6 minimal energy savings. Non-dispatchable load control means that it is left to the customer's 7 discretion whether they wish to reduce their peak demand and the time at which they reduce 8 demand given the customers business needs and production cycles. Dispatchable load control, 9 on the other hand, means that the customer must respond to the IESO's request that they curtail a 10 contracted amount of their load or face penalties (e.g., under Demand Response 3) for not doing 11 so. Further, the OPA had already approved the DRP program as a Custom Program distinct from 12 the OPA's Demand Response 1/Demand Response 3 programs, and all three programs coexisted 13 in the marketplace in 2008 and 2009. 14
- Bring demand response and energy efficiency together: The Initiative equips the 15 customer with the information and tools to meet demand reduction as well as energy savings, all 16 in one initiative. Hydro One Brampton will hire third party vendor(s) so that participants will 17 have access to a range of technical and information services that would help them better 18 understand their energy usage and assist them in identifying areas where they can reduce their 19 energy consumption and shift or shave their peak load. Several tools including workshops, on-20 line assistance, and written information material would be used to assist customers to reach this 21 goal. The initiative will also offer free expert on-site visits to identify specific opportunities in 22 customers' facilities focusing on loads associated with industrial processes, motors, lighting, 23 compressed air, and electro-technologies. Bringing together demand response and energy 24 efficiency is a unique feature compared to OPA-contracted Demand Response initiatives 25 available in the market 26
 - No cost low cost opportunities: DRP helps identify savings potential at limited and/or
 no cost to the customer. For example, a change in the customer's behaviour will come at no
 cost, whereas an installation of a control device would come at low cost. The focus on
 operational and behavioural changes brings about a culture of conservation in the business
 markets.

3. Background

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The initial Double Return Initiative was designed by Hydro One and offered under Market
Adjusted Rate of Return (MARR) funding in 2006/2007. This Initiative was very successful and
became popular among Hydro One customers as well as other stakeholders. Further, the OPA
approved the Double Return program as a Custom Initiative in 2008/2009 where the program
coexisted with the OPA's Demand Response 1/Demand Response 3 programs. The proposed
Double Return Plus is a new generation of the original Initiative with enhanced features for the
2011-2014 period.

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 49 of 55

4. Initiative Elements

- While the key success factor for the Double Return has been its design simplicity, three additional components have been added to the original program:
- Reply Card: A requirement to submit a "Reply Card" by participating customers. The Reply Card ensures that the customer is interested and committed to the Initiative.
- Action Plan: A requirement to complete a multiple choice two-paged "Action Plan" The
 Action Plan identifies the steps which the customer plans to take to meet the minimum peak load
 reduction (of at least 5% of the average summer June-August peak load as compared to the
 previous year) to qualify for the financial incentive.
- Load Management System: The availability of financial incentives to enable participants to purchase a Load Management System. The financial incentives will cover the cost of the system up to a maximum of the cost of the system up to a maximum of the cost of the system up to a maximum of the cost of the system up to a maximum of the cost of the system up to a maximum of the cost of the system up to a maximum of the cost of the system up to a maximum of the cost of the system up to a maximum of the cost of the system up to a maximum of the cost of the system up to a maximum of the cost of the system up to a maximum of the cost of the system up to a maximum of the cost of the system up to a maximum of the cost of the system up to a maximum of the cost of the system.
- 13 Additional initiative offerings include:
- Behind the meter services: this initiative will offer on-going technical services including:
- customized on-line information
- expert site visits/assistance
- Double return plus energy workshops
- employee engagement kits

5. Purpose of the Incentives

- The Double Return Plus Initiative will offer the key elements required to assist the medium to
- large C&I sectors in the successful pursuit of continuous and deeper energy savings beyond the
- traditional C/I CDM programs that focus only on technology or equipment replacement.

6. Projected reduction in Peak Electricity Demand (MW)

- 25 This initiative is projected to achieve approximately 11MW peak reduction by the end of 2014.
- 26 Peak reduction attributable to the portion of DRP for peak shaving will have one year
- persistence, while the load balancing component will enhance persistency of results achieved in
- 28 the initiative

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 50 of 55

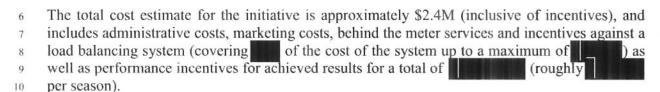
Total Peak Reduction (MW) 2011-2014						
	2011	2012	2013	2014	Total Coincident Peak Demand Reduction by end of 2014 (MW)	
Double Return Plus (MW)	4.1	6.3	8.6	11	11	

7. Total Projected Reduction in Electricity Consumption (MWh)

- This initiative is projected to achieve 30 GWh cumulative energy reduction by 2014. Energy
- 3 reduction attributable to the portion of DRP for peak shaving will have one year persistence,
- 4 while the load balancing component will enhance persistency of results achieved in the initiative.

	2011	2012	2013	2014	Total Ener Reduction Cumulative (201 2014)	
Double Return						
Plus (MWh)	4,225	6,525	8,591	10,659	30,000	

8. Projected Budget



Double Ret	urn	Plus - Init	iati	ve Budget	(\$)	2011-2014				
		2011		2012		2013		2014	Tot	al 2011-201
Marginal costs			VA.038							
Fixed costs						1				
Administrative costs	\$	12 2 2				200	П	1000		100000
Marketing	\$	61118		BURNEY.	П	8 / 118			П	
Site visits / Verifications	\$	BEUL		No. of the last of				2000		
EM&V	\$				ī					
Total Fixed Costs	\$			STREET, STREET	F		F			HARRIE .
Variable Costs	1		-		-		-		-	
Turn-Key Vendor / Load						*******				
Balancing	\$						П		П	
Total Variable Costs	\$			Santa Santa		2011			П	
Allocable costs									-	
Fixed Overhead	\$									
Variable Overhead	\$	HUURAN			Ī	2483123	П	IN ALTERNATION	П	I EU SU
Total Program Costs	\$			TVS V7		DESCRIPTION OF THE PERSON OF T				
Incentives	\$									
Total Budget	\$ 5	93,489	\$	593,489	\$	593,489	\$	593,489	\$	2,373,955

Cost Effectiveness Test Results

3 • TRC ratio: 11.3

PAC ratio: 7.4

10. Draft Evaluation Plan

Hydro One Brampton will ensure that the Double Return Plus Initiative will be evaluated in accordance with the OPA's EM&V Protocol guidelines A Draft Evaluation Plan is attached.
The initiative Final Evaluation plan will be prepared by an independent third party. The

selection of the evaluation criteria and detailed elements of the Evaluation Plan will be determined by the independent third party. Measurement and verification of initiative peak

demand savings (kW) and electricity savings (kWh) results will be conducted by a third party

review contractor selected through an RFP process from the OPA's "Third Party Vendor of

13 Record" list once the initiative is approved.

14 The following is a DRAFT EVALUATION PLAN TEMPLATE:

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 52 of 55

DOUBLE RETURN PLUS

OPA DRAFT EVALUATION PLAN TEMPLATE

	Description: See Section 1
	Key Program Elements: See Sections 2 and 4
	Goals and Objectives: See Sections 1 and 5
	Program Theory: See Section 1 and 3
	Program Timing Program Launch Date: January 1st, 2011
	Program end date: December 31, 2014
Program	Estimated Participation and Results: See Sections 6, 7 and 9
Description	Draft Budget: See Section 8
	Conservation Measures:
Conservation	
Measures	Behavioural changes Load balancing/Energy Management System
Evaluation	Evaluation Goals and Objectives
Goals and	
Objectives	i) Process Design Effectivenessii) Program Administration Effectiveness
	Program Administration Effectiveness iii) Measures and Assumptions Review
	iv) Establish gross and net energy savings and demand reductions

	achieved v) Estimate Program Cost Effectiveness
Evaluation Deliverables	 Evaluation Deliverables Draft Evaluation Plan Final Program Evaluation Plan Annual Report – elements Final Report
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Evaluation	
Elements	i) Program Process Design Effectiveness - Evaluation criteria:
	Staffing and training
	Program timing and timelines
	Use of new procedures and best practices
	Marketing Plan
	Eligibility and participants – original assumptions vs. actual
A Section of the second	• Events implementation – results of program participation from event
	Motivation for participation and incentive level
	Customer satisfaction feedback – participant satisfaction
	Non participant feedback
	Monitoring and tracking program management
	Roles and responsibilities of team members and stakeholders
	Reporting procedures
	ii) Program Administration Effectiveness - Evaluation Criteria:
	Program statistics – including participants, calculations of energy
	and demand reductions etc.

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 54 of 55

	Page 54 of 55
	Program Impact Evaluation
	Pre and post Project Analysis Assessment
	Marketing Effectiveness Assessment
	Actual versus Budget Reporting
	Market Participant review
	iii) Measures and Performance Assumptions Review:
	Custom Measures Assumptions Review
	Behavioural and Performance Assumptions Review
	 iv) Gross and Net Energy Savings and Demand Reductions Achieved: **To be performed by a 3rd party based on the OPA's EM&V protocols Measurement and verification of program energy and demand
	savings achieved
	Net to Gross ratio (including free rider rate)
	Audit and Verification of project completion
	Addit and Vernication of project completion
	v) Program Cost Effectiveness:
	Verification of program expenditures versus budget
	Verification of incentive payments
	Cost benefit Analysis – funding vs. program performance
Special	
Provisions	N/A
Data	This area is still under development and will be completed with the
Collection	assistance of a third party EM&V expert to ensure complete and appropriate
Responsibiliti	collection of data to support Program evaluation.
es to Support	Data collection and evaluation activities anticipated to support the
Program Evaluation	evaluation of the Initiative may include the following:
	Historical account consumption data
	Number of participants
	Program Costs
	Program incentives
	Customer site attributes
	Program delivery metrics
	Interviews with Initiative designers, delivery agents, administrators
	Interviews with initiative designers, derivery agents, administrators Interviews with market allies and market channel reps
	Interviews with participants and non-participants Project and agricument agets (supported by invoices)
	Project and equipment costs (supported by invoices)

Filed: November 1, 2010 Exhibit C Tab 1 Schedule 2 Page 55 of 55

•	Sample on-site inspection / verification of actions implemented
•	Draft of Customer Energy Conservation Action Plan
•	Energy Efficiency Activities and Actions Report from participants

Evaluation Schedule & Budget

Evaluation Deliverable	Budget	Date
Draft Evaluation Plan	TBD	TBD
Final Evaluation Plan	TBD	TBD
Verification of Projects	TBD	TBD
Verification of Energy Reductions	TBD	TBD
Verification of Program Costs	TBD	TBD
Draft Final Evaluation Report	TBD	TBD
Final Evaluation Report	TBD	TBD
Total Evaluation Budget	TBD	

Evaluation Team

Organization	Name	Title/Accountability
Hydro One Brampton	TBD	Program Manager
Hydro One Brampton	TBD	Energy Services Supervisor
3 rd Party (Final Evaluation Plan Development)	TBD	TBD
3 rd Party Measurement and verification Contractor (selected from OPA "Third Party Vendor of Record" list	TBD	TBD