AMPCO Table # 1

Comparison of THESL's OPA & Board Approved CDM Programs

	Peak Savings MW	Consumption Savings GWh
THESL Target	286.77	1,303.99
Provincial Target	1,330.04	5,999.97
% of Prov Target	21.6%	21.7%

OPA CDM Programs			%	$/MW	$/MWh	**Board Approved CDM Programs**			%	$/MW	$/MWh	**Projected THESL Savings Total**	**Shortfall**
Consumer	**MW**	40	14%			Consumer	**MW**	13.5					
	MWh	233,137	18%				**MWh**	10,700					
	Budget	$13,989,180	28%	$349,730	$60		**Budget**	$26,802,207	53%	$1,985,349	$2,505		
Commercial	**MW**	123	43%			Commercial	**MW**						
	MWh	765,871	59%				**MWh**						
	Budget	$32,199,168	64%	$261,782	$42		**Budget**		45%				
Industrial	**MW**	58	20%			Industrial	**MW**	0.11					
	MWh	141,790	11%				**MWh**	6,037					
	Budget	$4,006,373	8%	$69,075	$28		**Budget**		2%				
TOTAL	**MW**	**221**	77%			TOTAL	**MW**	**24.42**	9%			245	**41.35** MW
	MWh	**1,140,798**	88%				**MWh**	**127,290**	10%			1,268,088	**35,902** MWh
	Budget	**$50,194,721**		$227,125	$44		**Budget**	**50,652,853**		$2,074,236	$398		
		Exhibit J, Tab 10, Schedule 1,Page 2						*Exhibit J, Tab 10, Schedule 3,Page 2*	*Exhibit J, Tab 9, Schedule 25*	*Exhibit J, Tab 2, Schedule 7*		*Exhibit J, Tab 2, Schedule 6*	

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BOARD-APPROVED CDM PROGRAM

COMMERCIAL PROGRAM

Initiative Number: 6

Initiative Name: Double Return Plus ("DRP")

Initiative Frequency: Year round

Target Customer Type(s): Commercial and industrial interval metered customers with average peak load of 200 kW or above.

Years of Operation for the Initiative: 2011 to 2014, subject to annual reviews and approvals.

1. Initiative Description

The Double Return Plus Initiative ("DRP") targets approximately 900 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 20 MW. This Initiative has an expected program cost of $4.1 million ($200/kW) inclusive of incentives.

The Double Return Plus 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 [redacted] of the cost of a load management system, up to a maximum of [redacted] This Initiative will enable customers to control and reduce their summer peak demand as well as achieve sustainable energy savings.

The performance incentive payments will be set equal to double the amount of reduction in delivery charges on the customer's bill resulting from achieving a reduction in their peak load. While the participants are encouraged to optimize their reduction in their peak demand, incentives are only applied to savings that range from a minimum of 5% to a maximum of 10% reduction. For every dollar the customer saves in reduced delivery charges, the program will 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 response workshops, and employee engagement kits.

The program will primarily be delivered directly by Hydro One with the help of a number of third party vendors to assist with the promotion and delivery of the technical services to the customers.

2. Non-Duplicative Features of the Initiative

The unique elements of the Initiative are:

- **Non-Dispatchable versus Dispatchable Demand Response:** The Double Return Plus Initiative 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 (e.g., under Demand Response 3) for not doing so. Further, 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.

- **Bring demand response and energy efficiency together**: The Initiative equips the customer with the information and tools to meet demand reduction as well as energy savings, all in one initiative. Hydro One will hire third party vendor(s) so that participants will have access to a range of technical and information services that would help them better understand their energy usage and assist them in identifying areas where they can reduce their energy consumption and shift or shave their peak load. Several tools including workshops, online assistance, and written information material would be used to assist customers to reach this goal. The Initiative will also offer free expert on-site visits to identify specific opportunities in customers' facilities focusing on loads associated with industrial processes, motors, lighting, compressed air, and electro-technologies. Bringing together demand response and energy efficiency is a unique feature compared to OPA-contracted Demand Response initiatives available in the market
- **No cost - low cost opportunities:** Double Return Plus 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

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.

4. Initiative Elements

While the key success factor in the original Double Return program has been the simplicity of its design, the new Double Return Plus initiative includes three additional components:

- **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 to perform load balancing through energy management programming to achieve savings. The financial incentives will cover [redacted] of the cost of the system, up to a maximum of [redacted]

Other Initiative offerings include:

- **Incentives:** Double Return Plus incentives will be set to equal double the amount of reduction in delivery charges on the customer's bill resulting from achieving 5% - 10% reduction in the summer peak load as compared to the previous year. Double Return Plus incentives will also provide funds up to [redacted] of the cost of the Load Balancing/Management System up to [redacted] per system.
- **Behind-the-meter services:** this Initiative will offer on-going technical services including:
  - customized online information
  - expert site visits/assistance
  - Double Return Plus energy workshops
  - employee engagement kits

5. Purpose of the Initiative

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)

This Initiative is projected to achieve 21 MW peak reduction by the end of 2014. For Double Return Plus a portion of the peak reduction will have one year persistence attributable to behavioural changes, and the remaining peak reduction will have multi-year persistency attributable to the application of the load management system.

Total Peak Reduction (MW) 2011-2014					
	2011	**2012**	**2013**	**2014**	**Total Coincident Peak Demand Reduction by end of 2014 (MW)**
Double Return Plus (MW)	7.9	12.5	16.5	21.0	**21**

7. Total Projected Reduction in Electricity Consumption (MWh)

This Initiative is projected to achieve 52 GWh cumulative energy reduction by 2014. Energy reduction attributable to the portion of Double Return Plus for peak shaving will have one-year persistence, while the load balancing component will enhance persistency of results achieved in the Initiative.

Total Energy Reduction (MWh) 2011-2014					
	2011	2012	2013	2014	Total Energy Reduction Cumulative (2011-2014)
Double Return Plus (MWh)	9,250	12,200	14,450	16,100	52,000

8. Projected Budget

The total cost estimate for the Initiative is approximately $4.1million (inclusive of incentives), and the incentives include a financial contribution towards a load management system (covering [redacted] of the cost of the system up to a maximum of [redacted] as well as performance incentives for achieved results for a total of approximately [redacted] (roughly [redacted] per summer season).

Double Return Plus - Initiative Budget ($) 2011-2014					
	2011	2012	2013	2014	Total 2011-2014
Marginal costs					
Fixed costs					
Administrative costs					
Marketing					
Site visits / Verifications					
EM&V					
Total Fixed Costs					
Variable Costs					
Turn-Key Vendor / Load Balancing					
Total Variable Costs					
Allocable costs					
Fixed Overhead					
Variable Overhead					
Total Program Costs					
Financial Incentives (Based on Load Reduction)					
Total Budget	$ 1,021,300	$ 1,021,300	$ 1,021,300	$ 1,020,700	$ 4,100,000

Note: The total budget shown above is projected to be allocated between commercial and industrial participants on a 40/60 basis, respectively.

9. Cost Effectiveness Test Results

- TRC ratio: 11.3
- PAC ratio: 7.4

10. Draft Evaluation Plan

Hydro One will ensure that the Double Return Plus Initiative will be evaluated in accordance with the OPA's EM&V Protocol for any custom measures not included in the OPA's Measures and Assumption List. A Draft Evaluation Plan is attached based on the most current version available on the OPA's website as of Oct. 15, 2010. 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:

Table 2: Summary of THESL CDM Programs – EDR-funded and OPA-funded ($000s)

Year	Program	Funding Source	OPEX		CAPEX	Total Cost	Program Annual Savings		TRC Net Benefits	TRC Benefit/Cost	
			Labor	Other			kw	kwh			
2008	Mass Market	OPA	42	1,833	0	1,875	530	26,633,000	6,150	3.89	
	Social Housing	OPA	42	1,015	0	1,057	420	10,420,000	1,477	1.52	
	Business Incentive Program	OPA	42	2,625	0	2,667	6,670	26,667,000	875	1.26	
	Program Support	OPA	378	455	0	833	N/A	N/A	N/A	N/A	
	OPA Programs Total		**504**	**5,928**	**0**	**6,432**	**7,610**	**63,719,000**	**8,502**	**N/A**	
	Residential Load Control	OEB	527	687	385	1,599	50,000	0	44,183	2.22	Note 1
	CDM Program Governance	OEB	261	64	0	326	N/A	N/A	N/A	N/A	
	OEB Programs Total		**788**	**752**	**385**	**1,925**	**50,000**	**0**	**44,183**	**N/A**	
	Grand Total		1,292	6,680	385	8,357	57,610	63,719,000	52,685	N/A	
2009	Mass Market	OPA	42	1,833	0	1,875	530	26,633,000	6,150	3.89	
	Social Housing	OPA	42	1,015	0	1,057	420	10,420,000	1,477	1.52	
	Business Incentive Program	OPA	42	2,625	0	2,667	6,670	26,667,000	875	1.26	
	Program Support	OPA	378	455	0	833	N/A	N/A	N/A	N/A	
	OPA Programs Total		**504**	**5,928**	**0**	**6,432**	**7,610**	**63,719,000**	**8,502**	**N/A**	
	Residential Load Control	OEB	549	731	491	1,771					Note 2
	CDM Program Governance	OEB	272	66	0	338	N/A	N/A	N/A	N/A	
	OEB Programs Total		**822**	**797**	**491**	**2,110**	**0**	**0**	**0**	**N/A**	
	Grand Total		1,326	6,726	491	8,542	7,610	63,719,000	8,502	N/A	
2010	Mass Market	OPA	21	917	0	938	260	13,316,000	3,075	3.89	
	Social Housing	OPA	21	508	0	529	210	5,210,000	739	1.52	
	Business Incentive Program	OPA	21	1,312	0	1,333	3,330	13,333,000	437	1.26	
	Program Support	OPA	189	228	0	417	N/A	N/A	N/A	N/A	
	OPA Programs Total		**252**	**2,964**	**0**	**3,216**	**3,800**	**31,860,000**	**4,251**	**N/A**	
	Residential Load Control	OEB	573	811	246	1,631					Note 2
	CDM Program Governance	OEB	284	68	0	352	N/A	N/A	N/A	N/A	
	OEB Programs Total		**857**	**880**	**246**	**1,983**	**0**	**0**	**0**	**N/A**	
	Grand Total		1,109	3,844	246	5,199	3,800	31,860,000	4,251	N/A	

Note 1: TRC Test results reflect all the costs for the 2008-2010 Residential Load Control operation and the 50MW demand response capacity installed prior to 2008
Note 2: Residential Load Control program costs for 2008-2010 are reflected in the 2008 TRC Test results