

## CDM Strategy

1. Distributor's Name: **Woodstock Hydro Services Inc. (Woodstock Hydro)**
2. Total Reduction in Peak Provincial Electricity Demand (MW) Target: **4 MW**
3. Total Reduction in Electricity Consumption (kWh) Target: **21,000,000 kWh**
4. CDM Strategy

The following chart depicts the nature of programming proposed to be undertaken by Woodstock Hydro, and the expected savings from each program area, towards meeting the overall peak demand and electricity consumption targets.

	2011			2012			2013			2014		
	No. Of participants	MW	MWh	No. Of participants	MW	MWh	No. Of participants	MW	MWh	No. Of participants	MW	MWh
Consumer Program	6,630	0.18	505	4,247	0.42	1,602	4,335	0.70	3,332	4,372	0.99	5,710
Business Program	249	0.28	873	271	0.63	2,765	130	0.97	5,221	151	1.36	8,278
Industrial Program	0	0.00	0	0	0.00	0	0	0.00	0	0	0.00	0
Low Income Program	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>		<b>0.46</b>	<b>1,378</b>		<b>1.05</b>	<b>4,366</b>		<b>1.67</b>	<b>8,554</b>		<b>2.35</b>	<b>13,988</b>
<b>OEB TARGET</b>											<b>4.00</b>	<b>21,000</b>
<b>surplus/deficiency of OEB Target</b>											<b>-1.65</b>	<b>- 7,012</b>

Please see Appendix A for a further breakdown of individual programming for each program areas as per the summarized table above.

## 5. OPA-Contracted Province-Wide CDM Programs

Woodstock Hydro proposes to undertake the following programs to meet their CDM Target requirements for years 2011-2014. Program budgets will be a function of funding formulae being finalized at the OPA. No specific budget information or allocation of provincial program funding was available at the time of this submission.

### Consumer Programs

#### Appliance Retirement/Exchange Events

This initiative is a carry forward and enhancement of the Great Refrigerator Roundup. It includes free pick-up and decommissioning of old, inefficient, working, appliances. As

well, the Exchange events target room air conditioners and dehumidifiers at retail locations:

The Exchange Events portion of the Program is a carry forward and enhancement of exchange events previously hosted by retailers. It includes exchange events held biannually at participating retailers for room air conditioners and dehumidifiers. The Spring exchange event will feature a \$50 coupon toward the purchase of a high efficiency replacement unit; the Fall event will feature a \$25 gift card.

	2011			2012			2013			2014		
	No. Of participants	MW	MWh	No. Of participants	MW	MWh	No. Of participants	MW	MWh	No. Of participants	MW	MWh
Appliance Retirement	206	0.01	97	195	0.03	287	176	0.04	537	157	0.05	841
Exchange Events	16	0.00	4	16	0.01	13	16	0.01	27	16	0.01	44

### Instant Discounts (Rebates)

This is a carry forward of the Power Savings Event with some enhancements. It will now include year round coupons and bi-annual in-store instant discounts (Rebates) for energy efficient products.

Measures for this program include: Energy Star CFLs, Energy Star qualified fixtures, Energy Star Ceiling fans, Lighting Control products, Hot water pipe wrap, Water Heater Blanket, Weather-stripping, Heavy Duty Plug In Timer, Advanced Power strips, Clotheslines, and Baseboard Programmable thermostats for electric baseboard heaters.

	2011			2012			2013			2014		
	No. Of participants	MW	MWh	No. Of participants	MW	MWh	No. Of participants	MW	MWh	No. Of participants	MW	MWh
Instant Rebates	5,546	0.01	177	3,035	0.01	463	3,035	0.02	856	3,035	0.02	1,357

### HVAC Discounts (Rebates)

This offer is a carry forward of the Cool Savings Rebate. It has been enhanced to include local marketing and engagement. Measures include: High Efficiency furnaces equipped with electronically commutated motors (ECM) and Energy Star qualified Central Air conditioners.

	2011			2012			2013			2014		
	No. Of participants	MW	MWh	No. Of participants	MW	MWh	No. Of participants	MW	MWh	No. Of participants	MW	MWh
HVAC Rebates	232	0.05	81	244	0.11	246	255	0.16	500	268	0.22	847

## Midstream Incentives

This is a carry over and enhancement of the midstream television incentive from the Power Savings Event. In addition to providing incentives for retailers to promote energy efficient televisions, it will include incentives for satellite and cable providers to use high-efficiency set-top boxes and network configurations. It will also include pool pumps, providing contractors with incentives to install “right sized” pool equipment. Savings from the midstream initiatives will be proportionally allocated to LDCs based on the size of their residential customer base.

	2011			2012			2013			2014		
	No. Of participants	MW	MWh	No. Of participants	MW	MWh	No. Of participants	MW	MWh	No. Of participants	MW	MWh
Midstream Electronics Incentive	351	0.00	2	351	0.00	6	351	0.00	11	351	0.00	19
Midstream Pools Incentive	5	0.00	18	5	0.00	55	5	0.00	111	5	0.01	184

## Residential New Construction

This is a new initiative. It includes incentives for builders to construct new, single family homes that include energy efficiency standards that are above current building codes. It includes incentives for:

- Prescriptive measures:
  - “All-off” Switches
  - ECM Motors
  - SEER 15 CAC
  - Lighting Control Products
  - Energy Efficient Lighting Fixtures
  - Residential Demand Responses Devices (subject to results of the pilots)

	2011			2012			2013			2014		
	No. Of participants	MW	MWh	No. Of participants	MW	MWh	No. Of participants	MW	MWh	No. Of participants	MW	MWh
Residential New Construction	84	0.01	14	99	0.01	44	119	0.02	92	149	0.03	165

## Demand Response

This is a re-design of peaksaver®, the residential demand response initiative. Existing program features will continue to be offered through June 30, 2011 pursuant to existing agreements between the OPA and participating LDCs. The OPA and the Residential Demand Response Work Group are currently conducting pilot projects to test new technologies for use in the future province wide residential demand response initiative with an anticipated start of July 1, 2011. Further details will be provided at the conclusion of pilot in December 2010.

Measures/Devices included: Home Energy Interfaces (Switch, Thermostats), Dashboard.

	2011			2012			2013			2014		
	No. Of participants	MW	MWh	No. Of participants	MW	MWh	No. Of participants	MW	MWh	No. Of participants	MW	MWh
Demand Response	189	0.09	111	303	0.25	489	379	0.45	1,199	391	0.65	2,252

## Business Programs

### Direct Install – Lighting

The Direct Installed Lighting initiative targets customers in the General Service <50kW account 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 the initial \$1,000 limit. There will also be a similar initiative for servicing of space cooling equipment, as described below.

A customer can qualify for Direct Installed Lighting incentives for a given building or premises only once during the Program period (through December 31, 2014). The customer can, however, take advantage of other Program initiatives including Equipment Replacement incentives (assuming they satisfy the criteria for the other initiative(s)) with regard to the particular building or premises.

Please note the following table represents both Direct Install Lighting and Direct Install Space cooling.

	2011			2012			2013			2014		
	No. Of participants	MW	MWh	No. Of participants	MW	MWh	No. Of participants	MW	MWh	No. Of participants	MW	MWh
Power Savings Blitz	185	0.05	282	185	0.09	847	5	0.08	1,305	5	0.06	1,656

### Direct Install – Space cooling

The Direct Serviced Space Cooling initiative is available to customers with roof-top or ground-mounted air conditioning systems with a capacity of 25 tons or less. The initiative is intended to target the same customer base as the Direct Install 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 \$750 of services and labour to service the customer's air-conditioning unit(s).

## 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 Program will continue these two approaches, but will also include an Engineered approach.

	2011			2012			2013			2014		
	No. Of participants	MW	MWh	No. Of participants	MW	MWh	No. Of participants	MW	MWh	No. Of participants	MW	MWh
MultiRes Condos, Eschools,	<b>1</b>	<b>0.13</b>	<b>235</b>	<b>1</b>	<b>0.31</b>	<b>781</b>	<b>1</b>	<b>0.52</b>	<b>1,614</b>	<b>1</b>	<b>0.76</b>	<b>2,774</b>
Small Office	3	0.02	37	4	0.05	125	4	0.09	252	5	0.13	427
Agriculture	0	0.00	0	0	0.00	0	0	0.00	0	0	0.00	0
Small Retail	2	0.01	22	3	0.02	75	4	0.03	157	4	0.04	275
MultiResidential	55	0.03	217	74	0.07	671	110	0.12	1,324	129	0.16	2,137
Elementary Schools	0	0.00	7	0	0.01	25	0	0.02	55	0	0.03	100
Large Retail	1	0.03	71	1	0.07	237	1	0.11	502	1	0.17	885

## Existing Building Commissioning

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 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, (ii) the procurement of devices and/or software associated with commissioning activities and (iii) third party services for building commissioning.

## Demand Response

The OPA and the Residential Demand Response Working Group are currently conducting pilot projects to test new technologies for use in the C&I Program with an anticipated start date of July 1, 2011. Further details will be provided at the conclusion of the pilot in December 2010

	2011			2012			2013			2014		
	No. Of participants	MW	MWh	No. Of participants	MW	MWh	No. Of participants	MW	MWh	No. Of participants	MW	MWh
Small Commercial DR	<b>2</b>	<b>0.00</b>	<b>1</b>	<b>3</b>	<b>0.01</b>	<b>5</b>	<b>4</b>	<b>0.01</b>	<b>12</b>	<b>4</b>	<b>0.02</b>	<b>23</b>

## Industrial Programs

Woodstock Hydro's assumed definition of Industrial is those customers over 5 MW based on our gathered understanding during OPA strategy development sessions. Because Woodstock Hydro does not have any customers deemed as over 5 MW of peak use at this time, there is no current need for this programming. Woodstock Hydro will seek further clarity on this issue and would pursue consideration of programming to meet the needs of this customer group over the next four years.

In addition, Woodstock Hydro will develop and maintain contact with area DR aggregators in an effort to better understand and support conservation efforts within this programming area as well.

## Low Income Programs

At this time, the details or program summaries for low income programs have yet to be released by the OPA. Woodstock Hydro is interested in the contribution that low income programs can potentially make to help meet and/or exceed CDM target savings, and provide financial savings to low income customers in its service territory. Woodstock Hydro will evaluate the feasibility and benefit of these new programs once further details have been released to LDCs.

## 6. Potential Board-Approved CDM Programs

Woodstock Hydro has approached the forecasting of savings for Tier 1 programming primarily through the projections from the OPA model representing the most accurate information to date. However, until sufficient program performance data across all programs is available, variations of reported actual results from these projections are highly probable. Addressing this uncertainty and the resulting gap between projections and actual, Woodstock Hydro will be undertaking Tier 2/3 program development to meet the shortfall. Considerations for Tier 2 programming at this time include the following:

### *In Home Displays (Consumer Program, Commercial Program)*

Woodstock Hydro and the former Woodstock Public Utility operated the Pre-pay metering program within the City of Woodstock for over 20 years, providing a pay-as-you-go and in-home display technology to roughly 30 percent of residential customers. The combined concept of pre-payment of power and real-time consumption and cost feedback through the in-home display unit demonstrated a consistent drop in consumption by up to 25 percent.

We believe reintroducing the in-home display component of this technology to former prepay customers and others will provide once again, a means of monitoring and controlling the rate of consumption. Woodstock Hydro holds empirical data verifying these results. Former pay-as-you-go customers in Woodstock continue to lament the loss of this technology and will undoubtedly embrace the return of at least part of this unique conservation tool.

Through this the results of smart metering can be further leveraged and verifiable CDM savings credited to an LDC.

### *Blue Sky Student Initiative – Technology and Conservation Partnership Program (Consumer Program, Commercial Program)*

Smart metering, renewable energy and conservation initiative training will begin in Woodstock at the public and high-school level beginning in 2010.

In meeting with the environmental committee of an area highschool and public school, conversation holds promise of a partnership program for 2011 in recognition of the enthusiasm and technology expertise of the students that could boost Woodstock Hydro's Smart meter and Smart grid development. Specific ideas discussed include the concept of a Smart meter pilot among students, and an Internet web page challenge for our 'Sunny Side Up' microFIT installation.

We firmly believe that energy conservation and demand management and renewable energy development complement one-another.

An early estimate of budgeted costs for Board-Approved Programs is \$2.5M based on current industry benchmarks. Woodstock Hydro will endeavor to refine this estimate in 2011 as 2011 OPA province wide results become available and analysed, and as the design requirements of the fore mentioned Board Approved Programs are determined.

## **7. Program Mix**

Woodstock Hydro will strive to ensure that CDM Programming is provided to all customer type(s) through the implementation of the portfolio of programs specified in this strategy. Further review will be made of OPA or Board-Approved programming to address specific options for lower income groups. Regardless of changes made to the strategy, the intent will remain to strive for an effective mix of programming that addresses all customer groups.

## **8. CDM Programs Co-ordination**

To date and with further emphasis after the November 1<sup>st</sup> submission deadline, Woodstock Hydro is considering the current infrastructure and organization of our company, the demands of upcoming and new programming and operational responsibilities, and required contingency to protect us from risk. In going forward in the most efficient way, our organization will be interested to build alliances with other local LDCs, natural gas distributors, social services and other government agencies, and the OPA. This will enable the most efficient use of resources related to energy savings programs and work to remove operational and marketing redundancies.

Woodstock Hydro will coordinate or participate in programs with other parties for the best benefit the rate payer and partnering organizations, towards continued energy savings initiatives.

### APPENDIX A: Summary of Detailed Programming Proposed by Woodstock Hydro

	2011			2012			2013			2014		
	No. Of participants	MW	MWh	No. Of participants	MW	MWh	No. Of participants	MW	MWh	No. Of participants	MW	MWh
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<b>TOTAL</b>	<b>6,630</b>	<b>0.18</b>	<b>505</b>	<b>4,247</b>	<b>0.42</b>	<b>1,602</b>	<b>4,335</b>	<b>0.70</b>	<b>3,332</b>	<b>4,372</b>	<b>0.99</b>	<b>5,710</b>
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Agriculture	0	0.00	0	0	0.00	0	0	0.00	0	0	0.00	0
Small Retail	2	0.01	22	3	0.02	75	4	0.03	157	4	0.04	275
MultiResidential	55	0.03	217	74	0.07	671	110	0.12	1,324	129	0.16	2,137
Elementary Schools	0	0.00	7	0	0.01	25	0	0.02	55	0	0.03	100
Large Retail	1	0.03	71	1	0.07	237	1	0.11	502	1	0.17	885
Small Commercial DR	2	0.00	1	3	0.01	5	4	0.01	12	4	0.02	23
DR1	0	0.00	0	0	0.00	0	0	0.00	0	0	0.00	0
DR3	0	0.00	0	0	0.00	0	0	0.00	0	0	0.00	0
<b>TOTAL</b>	<b>249</b>	<b>0.28</b>	<b>873</b>	<b>271</b>	<b>0.63</b>	<b>2,765</b>	<b>130</b>	<b>0.97</b>	<b>5,221</b>	<b>151</b>	<b>1.36</b>	<b>8,278</b>
	2011			2012			2013			2014		
	No. Of participants	MW	MWh	No. Of participants	MW	MWh	No. Of participants	MW	MWh	No. Of participants	MW	MWh
Industrial Accelerator	0	0.00	0	0	0.00	0	0	0.00	0	0	0.00	0
Custom Industrial	0	0.00	0	0	0.00	0	0	0.00	0	0	0.00	0
ERIP Prescriptive Industrial	0	0.00	0	0	0.00	0	0	0.00	0	0	0.00	0
DR1	0	0.00	0	0	0.00	0	0	0.00	0	0	0.00	0
DR3	0	0.00	0	0	0.00	0	0	0.00	0	0	0.00	0
<b>TOTAL</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0</b>	<b>0.00</b>	<b>0</b>