

May 2, 2011

Kirsten Walli  
Board Secretary  
Ontario Energy Board  
P.O. Box 2319  
2300 Yonge Street, Suite 2700  
Toronto, Ontario  
M4P 1E4

**RE: Conservation and Demand Management (CDM) Code for Electricity  
Distributors Board File No.: EB-2010-0215**

Dear Ms. Walli,

Welland Hydro-Electric System Corp. (WHESC) filed its CDM Strategy on November 1, 2010 in accordance with the Ontario Energy Board's September 16, 2010 issuance of the Conservation and Demand Management Code for Electricity Distributors (EB-2010-0215). This amended CDM Strategy is being submitted as requested by the Ontario Energy Board in their letter dated November 12, 2010 and modifies the original CDM Strategy by updating WHESC's final CDM targets and adding estimated budget information to deliver the suite of OPA-Contracted-Province-Wide programs in WHESC's service territory.

I hope that this amended CDM Strategy will be found to be adequate. If you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,

Ross Peever  
President and C.E.O.  
Welland Hydro-Electric System Corp.

**Welland Hydro-Electric System Corp.**  
**(ED-2003-0002)**

Conservation and Demand Management Strategy 2011-2014

(EB-2010-0215)

Submitted to the Ontario Energy Board on November 1, 2010

Amended May 2, 2011

# Welland Hydro-Electric System Corp.

## Conservation and Demand Management Strategy 2011 - 2014

### (EB-2010-0215)

Welland Hydro-Electric System Corp. (WHESC) filed its CDM Strategy on November 1, 2010 in accordance with the OEB's September 16, 2010 issuance of the Conservation and Demand Management Code for Electricity Distributors (EB-2010-0215). This amended CDM Strategy is being submitted as requested by the Ontario Energy Board (OEB) in their letter dated November 12, 2010 and modifies the original CDM Strategy by updating WHESC's final CDM targets and adding estimated budget information to deliver the suite of OPA-Contracted Province-Wide programs in WHESC's service territory.

1. **Distributor's Name:** Welland Hydro-Electric System Corp. (ED-2003-0002).
2. **Total Reduction in Provincial Peak Electricity Demand (MW) Target:** 5.56 MW as stated in section 21.1 of WHESC's Electricity Distribution Licence dated November 12, 2010.
3. **Total Reduction in Electricity Consumption (kWh) Target:** 20,600,000 kWh as stated in section 21.1 of WHESC's Electricity Distribution Licence dated November 12, 2010.
4. **CDM Strategy**

This strategy outlines how WHESC will attempt to meet its Provincial Peak Electricity Demand and Electricity Consumption targets as set out in its license. This strategy does not take into consideration the significant portion of the target that the Ontario Power Authority (OPA) expects to result from smart meter and time-of-use rate implementation. The OPA advised that the CDM targets assigned to all electricity distributors should include approximately 308 MW of savings related to smart meters and time-of-use rates. This advice was based on a study commissioned by the OPA and filed with the OEB as part of the Integrated Power Supply Plan proceeding.

Welland Hydro-Electric System Corp. will continue to employ several different educational and marketing approaches depending on the customer class it is targeting. With the consumer program, Welland Hydro-Electric System Corp. will create awareness and promote the CDM programs via traditional methods such as bill inserts, newspaper ads, online advertising, neighborhood blitzing, consultation with residential home builders and attendance at community events. For our commercial, institutional and industrial customers, information sessions and face-to-face meetings have proven to be effective in the past. In addition, collaboration with other Niagara-area LDCs to educate local contractors about the conservation programs available to their clients will be fundamental in our ability to meet our CDM Targets. Finally, working closely with the natural gas distributors and the inclusion of their new construction component (previously HPNC) will result in significant Provincial Peak Electricity Demand and Electricity Consumption savings.

#### 4.1. High Level Description of CDM Strategy

Welland Hydro-Electric System Corp. has utilized the Ontario Power Authority's (OPA) Resource Planning Tool, along with past CDM performance, other supporting technology and market data documentation (i.e. OPA Measures and Assumptions List, OPA residential profile, MPAC database, etc..) and in-depth knowledge of their service territory and customer base, to forecast their 2011 – 2014 reductions in provincial peak electricity demand and electricity consumption.

The following tables summarize both our forecasted annual and cumulative savings by year through the delivery of the OPA-Contracted Province-Wide programs.

##### 4.1.a. Forecasted CDM Target Achievement - Year by Year

Annual Savings	2011	2012	2013	2014
Provincial Peak Electricity Demand Reduction – kW	1,270	1,290	1,420	1,590
Electricity Consumption Reduction - MWh	2,504	2,600	1,141	502

##### 4.1.b. Forecasted CDM Target Achievement – Annual Milestones

Cumulative Savings	2011	2012	2013	2014
Peak Demand Reduction – kW	1,270	2,560	3,980	5,570
Provincial Peak Electricity Demand Reduction - Percentage of CDM target	22.8%	46%	71.5%	100%
Electricity Consumption Reduction – MWh	2,504	7,608	13,853	20,600
Electricity Consumption Reduction - Percentage of CDM target	12.1%	36.9%	67.2%	100%

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

### 5.1. Program Descriptions

Welland Hydro-Electric System Corp. is planning to deliver all OPA-Contracted Province-Wide programs to its consumer base. The following tables outline the program name, estimated operating budget and projected peak demand and energy savings by customer segment.

#### Consumer Program

The Consumer Program will provide incentives to both existing home owners and developers/builders to motivate the installation of energy efficiency measures in both existing and new home construction. The program has a number of initiatives, targeting a variety of activities

and channels. WHESC will deploy the program when available, for the four year period effective January 1, 2011, as it applies to all of its residential consumers. Full program details are available on the OPA's website at <http://icon.powerauthority.on.ca/>. Table 5.1.1 contains a sample of the Consumer Program initiatives.

**Table 5.1.1 Consumer Program Initiatives and Description**

Initiative Name	Years of Operation	Initiative Description	Target Customers
Instant Rebates	2011-14	In-store discounts on energy efficient products.	Residential
Midstream Electronics Incentive	2011-14	Retail promotion of energy efficient televisions.	Residential
Midstream Pools Incentive	2011-14	Retail promotion of "right sized" pool equipment.	Residential
HVAC Rebates	2011-14	On-line rebates on high efficiency replacement of heating/cooling systems.	Residential
Appliance Retirement	2011-14	Free pick-up/decommissioning of old, working inefficient appliances.	Residential
Exchange Events	2011-14	Room air conditioner and dehumidifier exchange events at retailers.	Residential
Residential New Construction	2011-14	Incentives for builders to construct efficient, smart, and integrated new homes.	Residential
Residential Demand Response	2011-14	Free, installed direct load control devices and in-home display systems/capability. Non-DR offers: subsidized in-home display systems/capabilities.	Residential

Table 5.1.2 below provides the projected energy and demand reductions for the OPA-Contracted-Province-Wide Consumer Program.

**Table 5.1.2 Consumer Program Summary**

Consumer Program Summary	
Total Operating Budget	\$ 1,721,729.50 *
Projected Reduction in Provincial Peak Electricity Demand	556 kW
Projected Reduction in Electricity Consumption	4,120 MWh

\* Budget figures apply to the achievement of Provincial Peak Electricity Demand and Electricity Consumption reductions and include Program Administration Funding, estimated Participant Based Funding and estimated Participant Incentive Funding.

## Commercial and Institutional Program

The Commercial and Institutional Program is designed to assist building owners and operators as well as tenants and occupants in achieving demand and energy savings, and to facilitate a culture of conservation among these communities as well as the supply chains which serve them. This is achieved by offering incentives throughout the continuum of CDM activities including audit and design team incentives as well as end user focused incentives. WHESC will deploy the program when available, for the four year period effective January 1, 2011, as it applies to all of its commercial and institutional consumers. Full program details are available on the OPA's website at <http://icon.powerauthority.on.ca/>. Table 5.2.1 contains a sample of the Commercial and Institutional Program initiatives.

**Table 5.2.1 Commercial and Institutional Program Initiatives and Description**

<b>Initiative Name</b>	<b>Years of Operation</b>	<b>Initiative Description</b>	<b>Target Customers</b>
Equipment Replacement (currently ERIP)	2011-14	Incentive program designed to encourage high-efficiency electricity retrofits to existing structures.	Commercial Institutional
Direct Install – Lighting (currently Power Savings Blitz)	2011-14	Continuation of existing lighting retrofit incentive program (PSB) for small business customers in the General Service < 50kW.	Commercial Institutional
Direct Service – Space Cooling	2011-14	New initiative that provides incentive towards servicing of roof-top and ground-mounted air conditioners with a capacity of 25 tons or less.	Commercial Institutional
New Construction (currently HPNC)	2011-14	Inclusion of existing HPNC program which provides incentives for energy efficient new building design as well as installation of energy efficient measures.	Commercial Institutional
Small Commercial Demand Response	2011-14	Free, installed direct load control devices and in-home display systems/capability. Non-DR offers: subsidized in-home display systems/capabilities.	Commercial Institutional
DR1	2011-14	An initiative where distribution-connected electricity customers voluntary provide DR capabilities to reduce peak demand and increase system reliability.	Commercial Institutional
DR3	2011-14	An initiative where distribution-connected electricity customers to provide DR capability to mandatorily reduce peak demand and increase system reliability.	Commercial Institutional
Building Commissioning	2011-14	Commissioning of chilled water plants for customers with a demand > 50 kW and facilities larger than 50,000 sq ft.	Commercial Institutional

Table 5.2.2 below provides the projected energy and demand reductions for the OPA-Contracted-Province-Wide Commercial and Institutional Program.

**Table 5.2.2 Commercial and Institutional Program Summary**

Commercial and Institutional Program Summary	
Total Operating Budget	\$ 2,488,486.12 *
Projected Reduction in Provincial Peak Electricity Demand	3,892 kW
Projected Reduction in Electricity Consumption	14,420 MWh

\* Budget figures apply to the achievement of Provincial Peak Electricity Demand and Electricity Consumption reductions and include Program Administration Funding, estimated Participant Based Funding and estimated Participant Incentive Funding.

Industrial Program

The Industrial Program will provide incentives to both existing and new industrial customers to motivate the installation of energy efficiency measures. WHESC will deploy the program when available, for the four year period effective January 1, 2011, as it applies to all of its industrial consumers. Full program details are available on the OPA’s website at <http://icon.powerauthority.on.ca/>. Table 5.3.1 contains a sample of the Industrial Program initiatives.

**Table 5.3.1 Industrial Program Initiatives and Description**

Initiative Name	Years of Operation	Initiative Description	Target Customers
Equipment Replacement (currently ERIP)	2011-14	Incentive program designed to encourage high-efficiency electricity retrofits to existing structures.	Industrial
Industrial Accelerator	2011-14	New component aimed at improving the energy efficiency of equipment and production processes by offering capital incentive and enabling initiatives.	Industrial
Energy Manager / Roving Energy Manager	2011-14	Access funding for customer-employed energy manager(s) for eligible consumers. Access funding for LDC-employed roving energy manager(s).	Industrial
Key Accounts Manager	2011-14	Join with other LDCs in close geographical proximity to apply for a shared Key Accounts Manager.	Industrial
DR1	2011-14	An initiative where distribution-connected electricity customers voluntary provide DR capabilities to reduce peak demand and increase system reliability	Industrial
DR3	2011-14	An initiative where distribution-connected electricity customers to provide DR capability to mandatorily reduce peak demand and increase system reliability	Industrial

Table 5.3.2 below provides the projected operating budget, along with demand and energy consumption reductions for the OPA-Contracted-Province-Wide Industrial Program.

**Table 5.3.2 Industrial Program Summary**

<b>Industrial Program Summary</b>	
Total Operating Budget	\$ 515,829.40 *
Projected Reduction in Provincial Peak Electricity Demand	1,112 kW
Projected Reduction in Electricity Consumption	2,060 MWh

\* Budget figures apply to the achievement of Provincial Peak Electricity Demand and Electricity Consumption reductions and include Program Administration Funding, estimated Participant Based Funding and estimated Participant Incentive Funding.

### Low Income Program

WHESC intends on participating in the OPA-Contracted Province-Wide Low Income Program. Our strategy, operating budget and forecasted reductions in provincial peak electricity demand and electricity consumption will be filed with the Board once this program has been finalized and its details regarding funding and program components are made available.

## **6. Potential Board-Approved CDM Programs**

6.1. At this time WHESC does not have any Board-Approved programs planned. Our current assumption is that the OPA-Contracted Province-Wide CDM Programs will allow us to achieve 100% of our targets. Should this assumption need to be readdressed in order for us to meet our CDM Targets, we will potentially develop, or join with another Local Distribution Company (LDC), in seeking a Board-Approved CDM Program.

## **7. Program Mix**

7.1. Section 5 above illustrates that programs will be delivered to all customer types in WHESC's service area.

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

8.1. WHESC has been working with other LDCs of similar size and/or geographical closeness in the administration, marketing and implementation of the current suite of OPA CDM Programs. Through this continued collaboration, WHESC expects to achieve efficiencies of delivery and cost savings going forward. WHESC will also work closely with social service agencies, local municipal and regional governments, natural gas distributors and other LDCs to deliver its portfolio of OPA-Contracted Province-Wide CDM Programs.