



November 1, 2010

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
P.O. Box 2319
27th Floor
2300 Yonge Street
Toronto, ON M4P 1E4

Dear Ms. Walli

**Re: Veridian Connections Inc., Licence # ED-2002-0503
Conservation and Demand Management Strategy, 2011 to 2014
Board File # EB-2010-0215**

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Veridian Connections Inc. (“Veridian”) is pleased to submit its enclosed 2011 to 2014 Conservation and Demand Management (“CDM”) Strategy in accordance with section 2.1 of the Board’s CDM Code for Electricity Distributors.

Veridian’s CDM Strategy has been prepared on the basis of best available information at the time of submission. It is expected that this strategy will evolve as further clarity is provided on matters such as:

- Funding for OPA-Contracted Province-Wide CDM Programs
- Final contract arrangements governing Veridian’s delivery of OPA-Contracted Province-Wide CDM Programs
- The final form of the OPA-Contracted Province-Wide CDM Program for low-income consumers
- The determination of peak demand reductions related to smart meters and time-of-use rates
- Finalization of distributor CDM targets

We trust that this CDM Strategy meets the Board’s requirements. However, should clarification be required on any of its contents, please do not hesitate to contact me by phone at 905-427-9870, ext. 2202 or by email at garmstrong@veridian.on.ca.

Yours truly,

Original signed by

George Armstrong, C.E.T., B.A.S.
Manager of Regulatory Affairs and Key Projects

The power to make your community better.

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Veridian Connections Inc.

Conservation and Demand Management Strategy 2011 - 2014

**Submitted to:
Ontario Energy Board
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1. **Distributor's Name:** Veridian Connections Inc.
2. **Total Reduction in Peak Provincial Electricity Demand Target:** 29 MW (proposed)
3. **Total Reduction in Electricity Consumption Target:** 117 GWh (proposed)
4. **CDM Strategy**

4.1. Overview

Veridian has prepared its CDM Strategy using the best information available at the time of submission. However, information is limited in a number of areas, as referenced throughout this document. Most importantly, there is a lack of information available at this time from which to estimate the impacts of the planned province-wide Low Income Program and the smart meter/time-of-use rates initiative. Therefore, this strategy does not include projected energy or demand reductions related to these initiatives.

Another unresolved matter is the establishment of final CDM targets for distributors. The Ontario Energy Board (the "Board") issued proposed targets for comment on June 22nd 2010 (EB-2010-0216). Then, on October 1st 2010 the Board invited distributors to report details of embedded load that may need to be taken into consideration when setting final distributor CDM targets. Veridian provided details of its embedded load on October 4th 2010 and expects that its final CDM targets will differ from those proposed on June 22nd. However, for this purpose of this CDM Strategy submission, the proposed targets have been used.

Veridian intends to deliver all available OPA-Contracted Province-Wide CDM Programs within its licensed service area. As shown in section 4.5, it is estimated that these programs will enable Veridian to meet approximately 74% of its demand reduction target, and 88% of its electricity consumption reduction target. It is possible that the target-to-savings shortfalls may be closed once further clarity is provided on the Low Income Program and the time-of-use rates initiative. Nonetheless, Veridian will consider opportunities for potential Board-Approved Programs to further support its achievement of targets.

4.2. Projection of OPA-Contracted Province-Wide Program Results

The OPA has developed and made available a Resource Planning Tool for use by distributors. The tool assists with the allocation of aggregate province-wide savings projections to an individual electricity distributor. Veridian has used the OPA's planning tool to project electricity demand and consumption savings related to the province-wide Consumer, Commercial & Institutional, and Industrial Programs.

In addition to the tool, the OPA has provided residential customer profile data to each distributor. The data provides a useful comparison of key customer demographic information pertinent to the distributor's service area, along with a comparison to the provincial average. Veridian has also used this data in projecting the savings potential of the province-wide programs.

Through the use of the planning tool and the residential profile data, Veridian has prorated the OPA's projected province-wide program savings using the Board's 2009 Yearbook customer count data, with minor adjustments to reflect known deviations between its customer attributes and the provincial average. The accuracy of this methodology is clearly dependent upon the accuracy of the OPA's province-wide savings projections.

4.3. Treatment of Smart Meter/Time-Of-Use Rates Savings

The CDM targets assigned to electricity distributors include, in aggregate, approximately 308 MW of savings related to smart meters and time-of-use rates. These savings projections were derived from a 2005 study commissioned by the OPA and filed with the Board as part of the Integrated Power Supply Plan (IPSP) proceeding.

In total, 1330 MW of electricity demand reduction targets have been assigned to electricity distributors. The 308 MW related to time-of-use rates therefore makes up more than 23% of each distributor's demand reduction target. This is a significant component of distributor targets. However, to date, no mechanism has been put into place to accommodate the verification and recognition of time-of-use related savings as a contribution towards a distributor's mandatory CDM targets.

It is Veridian's view that an assessment of the impacts of time-of-use rates on electricity demand should be done on a province-wide basis, perhaps by the Ontario Power Authority. It is reasonable to expect that these impacts will generally be consistent across distributor service areas. The expense of having each distributor individually assess time-of-use rate impacts does not seem cost efficient or justifiable.

4.4. Development of Board-Approved Programs

Veridian is a member of the Coalition of Large Distributors (the "CLD"), which consists of Enersource Hydro Mississauga, Horizon Utilities Corporation, Hydro Ottawa, PowerStream, Toronto Hydro, and Veridian Connections Inc. Hydro One Networks has worked with the CLD on planning for CDM. Through these affiliations, Veridian is aware that some of these distributors will be applying for Board-Approved CDM programs. Veridian intends to review these programs to determine if they would pertain to its customer base, and if they could be cost effectively deployed within its service area. Following this review, Veridian may submit an application for Board-Approved programs.

Veridian may also consider submitting applications related to Pilot and/or Educational CDM programs, as provided for in the Board's CDM Code for Electricity Distributors.

4.5. Annual Savings Projections

The following two tables summarize Veridian's current annual projections of progress towards its 2014 peak demand and electricity consumption reduction targets:

	Projected Peak Demand Reduction			
	2011	2012	2013	2014
OPA Consumer Program	1.21 MW	1.8 MW	2.13 MW	2.20 MW
OPA Commercial & Institutional Program	2.00	2.39	2.56	2.93
OPA Industrial Program	0.92	1.10	1.13	1.12
OPA Low Income Program	Not available	Not available	Not available	Not available
Smart meters/Time-of-Use Rates	Not available	Not available	Not available	Not available
Total Annual Reduction	4.14 MW	5.28 MW	5.82 MW	6.25 MW
Total Cumulative Reduction	4.14 MW	9.42 MW	15.24 MW	21.49 MW
% of Proposed Target (29 MW)	14.3 %	32.5 %	52.6 %	74.1 %

	Projected Electricity Consumption Reduction			
	2011	2012	2013	2014
OPA Consumer Program	3.78 GWh	4.33 GWh	4.69 GWh	4.81 GWh
OPA Commercial & Institutional Program	4.85	5.74	5.28	5.46
OPA Industrial Program	0.56	1.76	1.76	1.76
OPA Low Income Program	Not available	Not available	Not available	Not available
Smart meters/Time-of-Use Rates	Not available	Not available	Not available	Not available
Total Annual Reduction	9.19 GWh	11.83 GWh	11.73 GWh	12.03 GWh
Total Cumulative Reduction	9.19 GWh	29.91 GWh	60.92 GWh	102.56 GWh
% of Proposed Target (117 GWh)	7.9 %	25.6 %	52.1 %	87.7 %

5. OPA-Contracted Province-Wide CDM Programs

5.1. Consumer Program

5.1.1. **Years of Operation:** 2011 – 2014

5.1.2. **Target Customers:** Residential customers

5.1.3. **Description:** The following table summarizes and describes the elements of the OPA-Contracted Province-Wide Consumer Program. Full program details are available on the OPA's website at <http://icon.powerauthority.on.ca/> :

Initiative	Description
Instant Discounts (Coupons)	Annual couponing and bi-annual in-store instant discounts on select energy efficient measures
Midstream Electronics Incentive	Incentives for distributors of cable and satellite TV services and retailers to stock and promote the sale of high-efficiency set top boxes and televisions
Midstream Pool Incentive	Incentives for contractors and retailers to stock, sell and install efficient pool pumps
HVAC Rebates	Contractor initiated, on-line rebates for the replacement of high efficiency heating/cooling systems
Appliance Retirement	Free pick-up/decommissioning of old, working inefficient appliances
Exchange Events	Room air conditioner and dehumidifier exchange events at retailers
Residential New Construction	Incentives for builders to construct efficient, smart, and integrated new single-family homes
Residential Demand Response	Free, installed direct load control devices and in-home display systems/capability. Non-DR offers: subsidized in-home display systems/capabilities

5.1.4. Projected Savings and Budget: The projected energy and demand reductions for the OPA-Contracted Province-Wide Consumer Program are provided in the following table. Program budgets are not available at this time:

Consumer Program Projections	2011	2012	2013	2014
Annual Peak demand reduction (MW)	1.21	1.8	2.13	2.20
Cumulative peak demand reduction (MW)	1.21	3.01	5.14	7.34
Annual electricity consumption reduction (GWh)	3.78	4.33	4.69	4.81
Cumulative electricity consumption reduction (GWh)	3.78	11.89	24.69	42.30
Annual Budget	Not available	Not available	Not available	Not available

5.2. Commercial and Institutional Program

5.2.1. Years of Operation: 2011 – 2014

5.2.2. Target Customers: Commercial and Institutional customers, and owners of multi-family buildings and agricultural facilities.

5.2.3. Description: The following table summarizes and describes the elements of the OPA-Contracted Province-Wide Commercial and Institutional Program. Full program details are available on the OPA's website at <http://icon.powerauthority.on.ca/> :

EXISTING BUILDING RETROFIT PROJECTS – Small Business Customers

Initiative	Description
Direct Installed Lighting	Targets customers classified as General Service <50kW. Lighting retrofit incentive of \$1,000 equipment upgrade plus further incentives available for eligible equipment beyond the base offering
Direct Serviced Space Cooling	Roof-top or ground-mount air conditioning systems of 25 tons or less qualify for an incentive of up to \$750 for the service of air conditioning unit(s)
Demand Response (Small Commercial)	Free, installed direct load control devices and display systems/capability. Non-DR offers: subsidized display systems/capabilities

EXISTING BUILDING RETROFIT AND COMMISSIONING PROJECTS – Medium and Large Business Customers

Initiative	Description
Pre-Project Assessments	Eligible participants will receive incentives to complete energy audits or studies of potential energy and demand savings from equipment replacement projects, operational practices and procedures, and participation in DR initiatives.
Equipment Replacement	Traditionally known as ERIP; an incentive program designed to encourage high-efficiency electricity retrofits to existing structures.
Existing Building Commissioning	Existing GS>50kW or Large User accounts with single buildings/ premises greater than 50,000 ft. ² with chilled water plants are eligible. Incentives offered to promote building commissioning activities.
Demand Response 1 (DR1)	An initiative where distribution-connected electricity customers voluntarily provide DR capability to reduce system peak demand and increase system reliability
Demand Response 3 (DR3)	An initiative for distribution-connected electricity customers to provide DR capability to mandatorily reduce system peak demand and increase system reliability.

NEW CONSTRUCTION – All Buildings and Customer Types

Initiative	Description
New Construction	For all C&I customers, this initiative provides incentives for new buildings to exceed existing codes and standards for energy efficiency utilizing Prescriptive and Custom approaches.

CAPABILITY BUILDING

Initiative	Description
Capability Building	3 types of capability building activities will be offered to C&I customers: Training and Certification, Energy Efficiency Solutions Provider, and Education.

5.2.4. Projected Savings and Budget: The projected energy and demand reductions for the Commercial and Institutional Program are provided in the following table. Program budgets are not available at this time:

Commercial and Institutional Program Projections	2011	2012	2013	2014
Annual peak demand reduction (MW)	2.00	2.39	2.56	2.93
Cumulative peak demand reduction (MW)	2.00	4.39	6.95	9.88
Annual electricity consumption reduction (GWh)	4.85	5.74	5.28	5.46
Cumulative electricity consumption reduction (GWh)	4.85	15.14	29.27	47.46
Annual Budget	Not available	Not available	Not available	Not available

5.3. Industrial Program

5.3.1. Years of Operation: 2011 – 2014

5.3.2. Target Customers: Industrial customers

5.3.3. Description: The following table summarizes and describes the elements of the OPA-Contracted Province-Wide Industrial Program. Full program details are available on the OPA's website at <http://icon.powerauthority.on.ca/> :

Initiative	Description
Demand Response 1 (DR1)	An initiative where distribution-connected electricity customers voluntarily provide DR capability to reduce system peak demand and increase system reliability.
Demand Response 3 (DR3)	An initiative for distribution-connected electricity customers to provide DR capability to mandatorily reduce system peak demand and increase system reliability.
Industrial Equipment Replacement	Traditionally known as ERIP; an incentive program designed to encourage high-efficiency electricity retrofits to existing structures.
Industrial Accelerator (IA)/ "Accelerator"	Initiative aimed at improving the energy efficiency of equipment and production processes. Accelerator offers capital incentives and enabling initiatives.

5.3.4. Projected Savings and Budget: The projected energy and demand reductions for the Industrial Program are provided in the following table. Program budgets are not available at this time:

Industrial Program Projections	2011	2012	2013	2014
Annual peak demand reduction (MW)	0.92	1.10	1.13	1.12
Cumulative peak demand reduction (MW)	0.92	2.02	3.15	4.27
Annual electricity consumption reduction (GWh)	0.56	1.76	1.76	1.76
Cumulative electricity consumption reduction (GWh)	0.56	2.88	6.96	12.80
Annual Budget	Not available	Not available	Not available	Not available

5.4. Low Income Program

The OPA is currently developing a Low Income Program to address the unique needs of this market segment. Details on program design, projected energy savings and program budgets are not available at this time.

Once available, Veridian expects that it will contract with the OPA to make this program available to its eligible customers.

6. Potential Board-Approved CDM Programs

As outlined in section 4.4 of this document, Veridian will assess applications for Board-Approved CDM Programs as submitted by members of the CLD and Hydro One Networks. Where these programs are pertinent to Veridian's customer base and can be cost effectively deployed, Veridian may submit an application for Board-Approved programs at a later date. Veridian may also consider submitting applications related to Pilot and/or Educational CDM programs

7. Program Mix

As stated in section 4.1, Veridian intends to deliver all available OPA-Contracted Province-Wide CDM Programs within its service area. Due to the comprehensive nature of the menu of OPA programs, all customer types will be addressed. This is exhibited in the following table:

Program Coverage by Customer Type				
Initiative or Program Element	Customer Type			
	Residential	Residential Low Income	Commercial, Institutional, Multi-family Buildings & Agricultural	Industrial
Instant Discounts (Coupons)	X	X		
Midstream Electronics Incentive	X	X		
Midstream Pool Incentive	X	X		
HVAC Rebates	X	X		
Appliance Retirement	X	X		
Exchange Events	X	X		
Residential New Construction	X	X		
Residential Demand Response	X	X		
Residential Low Income		X		
Direct Installed Lighting			X	
Direct Serviced Space Cooling			X	
Demand Response (Small Commercial)			X	
Pre-Project Assessments			X	
Equipment Replacement			X	
Existing Building Commissioning			X	
Demand Response 1 (DR1) – C&I			X	
Demand Response 3 (DR3) – C&I			X	
New Construction			X	
Capability Building			X	
Demand Response 1 (DR1) - Industrial				X
Demand Response 3 (DR3) - Industrial				X
Industrial Equipment Replacement				X
Industrial Accelerator (IA)				X

8. CDM Programs Co-ordination

Veridian has been very involved in and supportive of the development of OPA Province-Wide Programs. This has been done through participation in a number of committees and working groups that have made contributions to the development of the new programs. These include:

- The Electricity Distributors Association (EDA) CDM Caucus
- The EDA/OPA Consumer Program development committee
- The EDA/OPA Commercial & Institutional Program development committee
- The EDA/OPA Marketing Committee

Veridian is committed to making the province-wide programs a success, and will continue to provide support as resources permit.

Efforts will also be made to efficiently deploy the province-wide programs through collaboration with members of the CLD, Hydro One Networks, local natural gas distributors, social service agencies and other electricity distributors. And, Veridian will assess applications for Board-Approved Programs as filed by CLD members and Hydro One Networks, to identify opportunities for program expansion and the attendant opportunities for synergies and costs savings.