

2004 November 4



Mr. Howard Wetston, Board Chair  
Mr. John Zych, Board Secretary *RD 4/4*  
Ontario Energy Board  
P.O. Box 2319, 26<sup>th</sup> Floor  
2300 Yonge Street  
Toronto ON M4P 1E4



*By fax (416-440-7656) and courier*

**RE: Applications by Large Utilities for Approval of Conservation and Demand Management Plans**



Dear Messrs. Wetston and Zych:

This letter introduces the Conservation and Demand Management (CDM) plans of six of the largest municipally owned Local Distribution Companies in the province. As a group these six utilities distribute electricity to over 1.5 million customers, 40% of the provincial total. In aggregate these plans propose investing over \$70 million in conservation and demand management, distribution system loss reduction and distributed energy programs. All of these initiatives support the government's clearly stated objective of creating a "conservation culture" in Ontario.



As the largest LDC's we plan to take a leadership role in delivering CDM. A key part of our strategy is to co-brand a number of our mass-market CDM initiatives. This will leverage our individual investments, provide for more consistent messaging in our promotional campaigns, and create exciting new program delivery opportunities. We have already established a steering committee to oversee our joint programs.

Please find enclosed six separate, but uniformly prepared applications for approval of CDM plans from Enersource Hydro Mississauga, Hamilton Hydro, Hydro Ottawa Limited, PowerStream Inc., Toronto Hydro-Electric System Limited, and Veridian Connections Inc.

Each of us appreciates the need to implement utility CDM programs as soon as possible. We are committed to working closely with the Board through its approval processes to expedite the implementation of the programs set out in the attached applications. We are confident that the applications conform to the requirements set out in the Board's RP-2004-0203 Procedural Order of October 5, 2004.

We trust that you will find the enclosed applications sufficient and satisfactory for the purpose. Please contact us individually or collectively as required to support your review of the applications.

Yours truly,



Gunars Ceksters  
President and CEO  
Enersource Corporation



Art Leitch  
President and CEO  
Hamilton Utilities Corporation



Ron Stewart  
President and CEO  
Hydro Ottawa Limited



Brian Bentz  
President and CEO  
PowerStream Inc.



David S. O'Brien  
President and CEO  
Toronto Hydro Corporation



Michael Angemeer  
President and CEO  
Veridian Connections Inc.



---

# **Veridian Connections Inc.**

---

## ***Conservation and Demand Management Plan***

**Ontario Energy Board File No. RP-2004-0203**

November 4<sup>th</sup>, 2004



## TABLE OF CONTENTS

<b>INTRODUCTION .....</b>	<b>2</b>
<b>PLAN BUDGET AND ASSUMPTIONS .....</b>	<b>3</b>
<b>OBJECTIVES.....</b>	<b>4</b>
<b>STRATEGY .....</b>	<b>4</b>
<b>PROGRAMS .....</b>	<b>5</b>
<b>CONSERVATION AND DEMAND MANAGEMENT (CDM).....</b>	<b>5</b>
<b>RESIDENTIAL AND SMALL COMMERCIAL (&lt; 50 KW) .....</b>	<b>5</b>
<i>Co-branded Mass Market Program.....</i>	<i>5</i>
<i>SMART Meter Pilot.....</i>	<i>6</i>
<i>SMART Meter Program .....</i>	<i>7</i>
<b>DISTRIBUTION LOSS REDUCTION .....</b>	<b>8</b>
<i>Distribution Loss Reduction .....</i>	<i>8</i>
<b>DISTRIBUTED ENERGY.....</b>	<b>9</b>
<i>Load Displacement.....</i>	<i>9</i>
<i>Stand-by Generators.....</i>	<i>10</i>
<b>CONCLUSION.....</b>	<b>11</b>
<b>CONTACT INFORMATION.....</b>	<b>11</b>
<b>PROGRAM BUDGET AND TIMELINE SUMMARY.....</b>	<b>12</b>



## Introduction

Ontario's Minister of Energy has authorized electricity distributors to apply to the Ontario Energy Board (the 'Board') for 2005 rate implementation of their third installment of market adjusted revenue requirement (MARR), on the condition that an equivalent amount of incremental revenue be invested by those distributors in conservation and demand management activities. In a letter dated May 31, 2004 to electricity distributors, the Minister identified some of the activities that might be included in a distributor's Conservation and Demand Management Plan, including:

- Energy efficiency;
- Behavioral and operational changes, including the application of benchmarking or "SMART" control systems;
- Load management measures which facilitate interruptible and dispatchable loads, dual fuel applications, thermal storage, and demand response;
- Measures to encourage fuel switching which reduces the total system energy for a given end-use;
- Programs and initiatives targeted to low income and other hard to reach consumers; and
- Distributed energy options behind a customer's meter such as tri-generation, co-generation, ground source heat pumps, solar, wind, and biomass systems.

On October 5, 2004 the Board issued a procedural order (RP-2004-0203) setting out the process for how distributors may apply for approval of a Conservation and Demand Management Plan. It also set out the filing requirements for a distributor's plan. Distributors were given the option of applying for interim or final approval of their plan.

Veridian Connections' Conservation and Demand Management (CDM) Plan has been developed within the context of the Minister of Energy's May 31, 2004 letter and the procedural order issued by the Board.

Veridian Connections ('Veridian') hereby requests the Board's approval and final order authorizing its CDM plan as being appropriate and effective in discharging its CDM obligation, subject to issuance in due course of an order for distribution rates including the final tranche of the market adjusted revenue requirement (MARR), and the approval of Veridian's Board of Directors.



## **Plan Budget and Assumptions**

Veridian's third MARR installment is approximately \$3.5 million, exclusive of any payments in lieu of taxes.

Through a letter accompanying its Preliminary Guidelines for Electricity Distributor Conservation and Demand Management Activities, the Board has authorized that distributor conservation and demand management spending may occur until September 30, 2007.

Veridian's Conservation and Demand Management Plan is therefore based on investing approximately \$3.5 million in a combination of capital and operating expenses during the period from January 1, 2004 to September 30, 2007.

The implementation of this plan will require re-deployment of some existing personnel. Costs associated with the use of existing resources to implement this plan have been allocated to the individual programs and are provided for in the annual budget figures.

While the current plan is well balanced, it is recognized that the industry and regulatory framework is dynamic. Veridian will continue to assess and update its plan as new opportunities are presented. If necessary, Veridian will re-allocate funds between programs to respond to customer demand levels. However, Veridian will make best efforts to achieve the target levels of capital and operating expenditures by year.

## Objectives

The Province of Ontario is facing serious challenges in meeting its future electricity needs. Energy conservation and demand management has been identified as one of the most viable and cost-effective means of meeting the province's energy needs in the short term.

The Minister of Energy has called for the creation of a 'Conservation Culture' in the province, and has established two important objectives for the electricity sector and electricity consumers. First, he has targeted a reduction in Ontario's demand for electricity by 5% by 2007. Second, he has committed to the installation of 800,000 SMART electricity meters by 2007, and the full deployment of SMART meters for all electricity consumers by 2010.

The objective of this plan is to contribute to the emergence of a conservation culture in Ontario and, more specifically, to support the Minister's commitments to peak demand reduction and SMART meter installations.

## Strategy

In developing this plan, the following criteria were used to guide the selection of component programs:

- i. Allocation of Benefits – The overall plan should distribute benefits broadly to Veridian's customers.
- ii. Certainty of Achieving Targeted Benefits – Preference was given to investments that offer more predictable results.
- iii. Leveraging Partnerships – Partnerships will be sought to deliver 'behind the meter' programs that will benefit from greater scale for cost-effective implementation.

## Programs

### ***Conservation and Demand Management (CDM)***

#### **Residential and Small Commercial (< 50 kW)**

##### ***Co-branded Mass Market Program***

###### Description

This flagship co-branded mass-market program (e.g. *powerWISE™*) is a multifaceted approach to fostering the conservation culture in Ontario. Through development of a significant cooperative effort amongst six of the largest municipal LDCs, this program will become synonymous with specific initiatives such as Compact Fluorescent Lighting (CFL) change out programs, LED Christmas Lights, Energy Star, Multi-Choice, energy audits, water heater blanket wraps, school based education and a host of other programs aimed at providing customers with the tools and education needed to reduce their energy usage. Access to online services such as energy consumption calculators, an energy expert, and personalized energy audit services are contemplated as components of this program.

###### Target users

Mass-market including residential, commercial and industrial

###### Benefits

Increased awareness, improved product supply, culture shift, and significant demand and energy reductions.

###### Budget

<u>\$k</u>	<u>2004/05</u>	<u>2006</u>	<u>2007</u>	<u>Totals</u>
Operating Expense	\$87	\$123	\$140	\$350
Capital Expenditures	\$0	\$0	\$0	\$0
Totals	\$87	\$123	\$140	\$350



## **SMART Meter Pilot**

### Description

A pilot program for residential SMART meters will be deployed to enable the assessment of metering, communications, settlement, load control and other technologies that may be used to accommodate the universal application of SMART meters in the future. Further, sub-metering opportunities for the purposes of customer information in a bulk-metered situation (i.e. condominiums) may be considered.

This initiative will commence upon the release of a formal definition of a SMART meter by the Board.

### Target users

Residential and small commercial customers

### Benefits

This program supports the Minister of Energy's commitment to the installation of 800,000 SMART meters across Ontario by 2007. It will provide Veridian with the experience and knowledge needed to efficiently expand the use of SMART meters over the next several years.

In conjunction with appropriate rate structures, the program will also provide customers participating in the pilot programs with an incentive to conserve or shift energy use.

### Budget

<u>\$k</u>	<u>2004/05</u>	<u>2006</u>	<u>2007</u>	<u>Totals</u>
Operating Expense	\$28	\$32	\$32	\$92
Capital Expenditures	\$217	\$0	\$0	\$217
Totals	\$245	\$32	\$32	\$309



## Commercial, Industrial and Institutional (> 50 kW)

### ***SMART Meter Program***

#### Description

Veridian will make an investment to further the use of SMART or interval meters by commercial industrial and institutional customers.

This program will commence upon the release of a formal definition of a SMART meter by the Board.

#### Target users

Commercial, Industrial and Institutional customers

#### Benefits

This program supports the Minister of Energy's commitment to the installation of 800,000 SMART meters across Ontario by 2007. These meters are seen as an important means of establishing a 'conservation culture' in Ontario. In conjunction with appropriate rate structures, they will encourage customers to conserve or shift energy use.

#### Budget

<u>\$k</u>	<u>2004/05</u>	<u>2006</u>	<u>2007</u>	<u>Totals</u>
Operating Expense	\$91	\$149	\$135	\$375
Capital Expenditures	\$128	\$349	\$349	\$826
Totals	\$219	\$498	\$484	\$1201

## ***Distribution Loss Reduction***

### ***Distribution Loss Reduction***

#### Description

The Distribution Loss Program is a broad network based initiative to drive greater efficiencies within the distribution grid. This program will identify opportunities for system enhancements. Next steps will be to complete the engineering analysis and feasibility studies. Projects will be prioritized, selected and implemented based on the most attractive investment to results ratio. Items to be addressed may include, but are not limited to:

**Power Factor Correction** - Under the Power Factor Correction initiative, a power factor assessment will be completed which will identify locations for the installation of power factor correction capacitor banks. The results and available funding will determine which projects proceed.

**Power System Load Balancing** - This program is designed to ascertain where load shifting can occur within the grid to improve system efficiency including the location of optimized "open points". It is estimated that approximately 5% - 10% of system losses could be saved.

#### Target users

All of Veridian's customers

#### Benefits

Reduced electricity distribution system delivery losses will reduce system demand, relieve network capacity to accommodate growth, and reduce the requirement for new generating capacity in the Province.

Costs associated with distribution system delivery losses are recovered through electricity distribution charges. Reductions in these costs will therefore benefit all customers.

#### Budget

<u>\$k</u>	<u>2004/05</u>	<u>2006</u>	<u>2007</u>	<u>Totals</u>
Operating Expense	\$20	\$30	\$30	\$80
Capital Expenditures	\$320	\$700	\$200	\$1220
<b>Totals</b>	<b>\$340</b>	<b>\$730</b>	<b>\$230</b>	<b>\$1300</b>

## **Distributed Energy**

### **Load Displacement**

#### Description

Distributed generation behind the customer's meter provides an excellent opportunity to displace load from the local distribution system's grid in a very effective manner. Load displacement technology, such as combined heat and power systems, provides increased efficiency of power and thermal systems. Combined with an existing or new district heating distribution system this technology contributes to the development of sustainable energy networks within Ontario's communities.

Other technologies such as micro-turbines, wind, biomass fuels and solar provide additional options to meet the customer's needs. This initiative will facilitate the development and implementation of these opportunities. Financial incentives will be considered based on the project's viability.

Development of educational and technology programs in conjunction with local colleges and universities may be considered. Small pilots or demonstration projects to promote alternative and renewable energy sources may also be considered.

#### Target users

Commercial, industrial, and residential, schools, colleges and universities

#### Benefits

Benefits include additional capacity within the grid. Cleaner technologies result in reductions in green house gas (GHG) emissions. Other benefits include improved system reliability, reduced harmonics, back-up power possibilities, education and skills development.

#### Budget

<u>\$k</u>	<u>2004/05</u>	<u>2006</u>	<u>2007</u>	<u>Totals</u>
Operating Expense	\$24	\$24	\$24	\$72
Capital Expenditures	\$56	\$56	\$56	\$168
Totals	\$80	\$80	\$80	\$240



## **Stand-by Generators**

### Description

This program may provide for the use of customers' existing stand-by generators when required and/or economical. Environmentally friendly generators will be the primary focus of this initiative however all generators may be considered if needed during an emergency.

### Target Users

Commercial and industrial customers with sufficiently sized stand-by generators

### Benefits

Reduction of customer and system peak demand and energy costs

### Budget

<u>\$k</u>	<u>2004/05</u>	<u>2006</u>	<u>2007</u>	<u>Totals</u>
Operating Expense	\$10	\$5	\$5	\$20
Capital Expenditures	\$40	\$20	\$20	\$80
Totals	\$50	\$25	\$25	\$100



## Conclusion

Veridian believes that the plan set out in this document is a prudent and effective approach in helping to achieve the Province's energy conservation and demand management goals. This plan addresses many of the potential initiatives outlined in the Minister's letter and represents a responsible first step in Veridian's implementation of CDM programs.

Veridian looks forward to the Board's approval of this plan and the implementation of these initiatives. Veridian requests that in the Board's Decision granting approval of Veridian's CDM plan, the Board confirm that the approved plan will discharge Veridian's obligation to invest an amount equivalent to its third tranche MARR, subject to *ex post* review by the Board only with respect to planned versus actual CDM spending.

## Contact Information

George Armstrong  
Manager of Regulatory Affairs and Key Projects  
Veridian Corporation  
55 Taunton Road East  
Ajax, ON L1T 3V3  
Telephone: (905) 427-9870, ext. 2202  
Facsimile: (905) 619-0210  
Email: [garmstrong@veridian.on.ca](mailto:garmstrong@veridian.on.ca)



## Program Budget and Timeline Summary

	Annual Budget (\$ '000)			Total Budget (\$ '000)
	2004-05	2006	2007	
<b>CONSERVATION AND DEMAND MANAGEMENT</b>				
Residential and Small Commercial (< 50 kW)				
- Co-branded Mass Market Program	OPEX 87	123	140	350
	CAPEX 0	0	0	0
- Smart Meter Pilot	OPEX 28	32	32	92
	CAPEX 217	0	0	217
Commercial, Industrial & Institutional Market (> 50 kW)				
- Smart Meter Program	OPEX 91	149	135	375
	CAPEX 128	349	349	826
	Sub-Total, Conservation & Demand Management:	551	656	1860
<b>DISTRIBUTION LOSS REDUCTION</b>				
- Distribution Loss Reduction	OPEX 20	30	30	80
	CAPEX 320	700	200	1220
	Sub-Total, Distribution Loss Reduction:	340	230	1300
<b>DISTRIBUTED ENERGY</b>				
- Load Displacement	OPEX 24	24	24	72
	CAPEX 56	56	56	168
- Standby Generators	OPEX 10	5	5	20
	CAPEX 40	20	20	80
	Sub-Total, Distributed Energy:	130	105	340
<b>Total Budget, All Programs</b>	<b>1021</b>	<b>1488</b>	<b>991</b>	<b>3500</b>



RECEIVED

SEP 16 2005

ONTARIO ENERGY BOARD

EB-2004-0484

File 1

September 15, 2005

BY COURIER

55 Taunton Road East

Ajax, ON L1T 3V3

Tel (905) 427-9870

Tel 1-888-445-2881

Fax (905) 619-0210

www.veridian.on.ca

Mr. John Zych  
Board Secretary  
Ontario Energy Board  
P.O. Box 2319  
26th Floor, 2300 Yonge Street  
Toronto, ON M4P 1E4

Dear Mr. Zych:

RP-2004-0203 / EB-2004-0484

Re: **Application for Amendments to Veridian Connections Inc.'s Conservation and Demand Management Plan**

Earlier this year, Veridian Connections Inc. ('Veridian') was granted final approval for its Conservation and Demand Management (CDM) Plan as filed with the Board on November 4, 2004 and amended on December 6, 2004. Due to a number of developments since that time, we hereby request the Board's approval for modifications to this plan. The Board file number under which the original plan was approved is RP-2004-0203/EB-2004-0484.

The modifications for which we are seeking approval are as follow:

**1. Merger of the CDM plans of Veridian and Scugog Hydro Energy Corporation**

Veridian obtained Board approval for the acquisition of Scugog Hydro Energy Corporation ('Scugog Hydro') on June 20<sup>th</sup> 2005 (EB-2005-0256). The acquisition was finalized on July 1<sup>st</sup>. With this utility purchase, Veridian took on the obligation to execute Scugog Hydro's CDM plan as approved by the Board under RP-2004-0203/EB-2004-0515 on February 7, 2005.

As a housekeeping matter, we request approval to merge the Veridian and Scugog Hydro plans as follows:

- By augmenting the 2004-05 *Co-branded Mass Market* Program budget in Veridian's plan with Scugog Hydro's \$5,000 commitment to 'Customer Education', and;
- By adding to Veridian's approved plan, as a standalone program, Scugog Hydro's \$58,000 commitment to a bi-fuel standby diesel generator at the Township of Scugog Municipal Building.





Date: September 15, 2005  
Addressee: Mr. John Zych  
Re: Application for Amendments to Veridian Connections' Inc.  
Conservation & Demand Management Plan

---

Page 2

## 2. Addition of the *Leveraging Energy Conservation and/or Load Management Programs Initiative*

Veridian's original CDM plan was submitted to the Board for approval along with those of Toronto Hydro, Enersource Hydro Mississauga, Horizon Utilities, PowerStream and Hydro Ottawa, together known as the Coalition of Large Distributors (CLD). While these plans were individually tailored, all were based on a common menu of programs. During the proceeding that followed the applications, it was explained that the CLD members were committed to working together to share information and develop consistent programs to the extent possible. It was identified that this may, from time to time, require updates to individual CDM plans.

Through a close working relationship with the CLD group, Veridian has an opportunity to participate in both a business incentives program and a load management initiative, along with other CLD members. However, to pursue these opportunities, the CLD *Leveraging Energy Conservation and/or Load Management Programs* initiative must be added to Veridian's menu of approved CDM programs. This commercial, industrial and institutional (> 50 kW) program is currently included in the approved CDM plans of Toronto Hydro, Enersource Hydro Mississauga, Horizon Utilities and Hydro Ottawa.

In addition to the Board's approval for the addition of this program to our CDM plan, we request approval for the funding of this initiative through the following budget reallocations:

- Transfer of \$8,000 per year in OPEX and \$34,000 per year in CAPEX budget allocation from Veridian's *Distribution Loss Reduction* program, for a total reallocation of \$24,000 OPEX and \$102,000 CAPEX.
- Transfer of \$12,000 per year in OPEX and \$28,000 per year in CAPEX budget allocation from Veridian's *Distributed Energy Load Displacement* program, for a total reallocation of \$36,000 OPEX and \$84,000 CAPEX.

## 3. Updated Description for the *Distribution Loss Reduction Program*

Veridian's current approved CDM plan includes a *Distribution Loss Reduction* program. However, the elements described in this program may be interpreted as restricting our activities to power factor correction and power system load balancing. To confirm greater flexibility in the execution of this program, and to exploit CDM opportunities identified by our CLD peers, we request the Board's approval for the adoption of the following additional program element from the approved CDM plans of the other CLD utilities:



Date: September 15, 2005  
Addressee: Mr. John Zych  
Re: Application for Amendments to Veridian Connections' Inc.  
Conservation & Demand Management Plan

---

Page 3

- ***Voltage Profile Management*** – Changing voltage profiles at the distribution station level can result in a peak reduction at the controllable distribution stations. This is in addition to the IESO's voltage reduction program and will not interfere with the effectiveness of that program.

We have enclosed under appendix 'A', updated program descriptions and budget details to accommodate these proposed changes to Veridian's CDM plan. Also included is an updated 'Program Budget and Timeline Summary', in the format provided with our original CDM plan.

We respectfully request an expedited review of these proposed changes, so that we are able to promptly pursue the CDM opportunities that we have identified.

If you require further information to support this application, please contact me at 905-427-9870, extension 2202.

Yours truly

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

Enc.

c Michael Angemeer  
Axel Starck

## Residential and Small Commercial (< 50 kW)

### *Co-branded Mass Market Program*

#### Description

This flagship co-branded mass-market program (e.g. *powerWISE™*) is a multifaceted approach to fostering the conservation culture in Ontario. Through development of a significant cooperative effort amongst six of the largest municipal LDCs, this program will become synonymous with specific initiatives such as Compact Fluorescent Lighting (CFL) change out programs, LED Christmas Lights, Energy Star, Multi-Choice, energy audits, water heater blanket wraps, school based education and a host of other programs aimed at providing customers with the tools and education needed to reduce their energy usage. Access to online services such as energy consumption calculators, an energy expert, and personalized energy audit services are contemplated as components of this program.

#### Target users

Mass-market including residential, commercial and industrial

#### Benefits

Increased awareness, improved product supply, culture shift, and significant demand and energy reductions.

#### Budget

<u>\$k</u>	<u>2004/05</u>	<u>2006</u>	<u>2007</u>	<u>Totals</u>
Operating Expense	\$92	\$123	\$140	\$355
Capital Expenditures	\$0	\$0	\$0	\$0
Totals	\$92	\$123	\$140	\$355

## Commercial, Industrial and Institutional (> 50 kW)

### *Leveraging Energy Conservation and/or Load Management Programs*

#### Description

Existing energy conservation and/or load management programs such as NRCan's Energy Innovators initiative, Enbridge initiatives etc. will be promoted and incentives may be provided to advance market uptake of these programs and implementation of the recommendations. The LDCs are well positioned to introduce such programs to their customer base. Work will be conducted with the existing program providers to maximize leverage opportunities. Promotion will potentially include face-to-face meetings, conferences and seminars.

#### Target users

Large consumers over 50 kW including schools, large commercial facilities, institutional facilities, industrial, and municipal facilities.

#### Benefits

Customer awareness and additional incentives will help advance market uptake of audit services, feasibility studies and retrofit opportunities already established within the government program framework.

#### Budget

<u>\$k</u>	<u>2004/05</u>	<u>2006</u>	<u>2007</u>	<u>Totals</u>
Operating Expense	\$20	\$20	\$20	\$60
Capital Expenditures	\$62	\$62	\$62	\$186
Totals	\$82	\$82	\$82	\$246

## Distribution Loss Reduction

### Distribution Loss Reduction

#### Description

The Distribution Loss Program is a broad network based initiative to drive greater efficiencies within the distribution grid. This program will identify opportunities for system enhancements. Next steps will be to complete the engineering analysis and feasibility studies. Projects will be prioritized, selected and implemented based on the most attractive investment to results ratio. Items to be addressed may include, but are not limited to:

**Power Factor Correction** - Under the Power Factor Correction initiative, a power factor assessment will be completed which will identify locations for the installation of power factor correction capacitor banks. The results and available funding will determine which projects proceed.

**Power System Load Balancing** - This program is designed to ascertain where load shifting can occur within the grid to improve system efficiency including the location of optimized "open points". It is estimated that approximately 5% - 10% of system losses could be saved.

**Voltage Profile Management** - Changing voltage profiles at the distribution station level can result in a peak reduction at the controllable distribution stations. This is in addition to the IESO's voltage reduction program and will not interfere with the effectiveness of that program.

#### Target users

All of Veridian's customers

#### Benefits

Reduced electricity distribution system delivery losses will reduce system demand, relieve network capacity to accommodate growth, and reduce the requirement for new generating capacity in the Province.

Costs associated with distribution system delivery losses are recovered through electricity distribution charges. Reductions in these costs will therefore benefit all customers.

#### Budget

\$k	<u>2004/05</u>	<u>2006</u>	<u>2007</u>	<u>Totals</u>
Operating Expense	\$12	\$22	\$22	\$56
Capital Expenditures	\$286	\$666	\$166	\$1118
Totals	\$298	\$688	\$188	\$1174

## ***Distributed Energy***

### ***Load Displacement***

#### Description

Distributed generation behind the customer's meter provides an excellent opportunity to displace load from the local distribution system's grid in a very effective manner. Load displacement technology, such as combined heat and power systems, provides increased efficiency of power and thermal systems. Combined with an existing or new district heating distribution system this technology contributes to the development of sustainable energy networks within Ontario's communities.

Other technologies such as micro-turbines, wind, biomass fuels and solar provide additional options to meet the customer's needs. This initiative will facilitate the development and implementation of these opportunities. Financial incentives will be considered based on the project's viability.

Development of educational and technology programs in conjunction with local colleges and universities may be considered. Small pilots or demonstration projects to promote alternative and renewable energy sources may also be considered.

#### Target users

Commercial, industrial, and residential, schools, colleges and universities

#### Benefits

Benefits include additional capacity within the grid. Cleaner technologies result in reductions in green house gas (GHG) emissions. Other benefits include improved system reliability, reduced harmonics, back-up power possibilities, education and skills development.

#### Budget

<u>\$k</u>	<u>2004/05</u>	<u>2006</u>	<u>2007</u>	<u>Totals</u>
Operating Expense	\$12	\$12	\$12	\$36
Capital Expenditures	\$28	\$28	\$28	\$84
Totals	\$40	\$40	\$40	\$120

## Distributed Energy

### Peak Shaving Generator for Municipal Office

#### Description

A Bi-Fuel standby diesel generator will be sited at the Township of Scugog Municipal Building and serve the dual role as a "peak shaver" for demand response and a back-up power supply for the Township Emergency Command Centre in the event of a major emergency.

#### Target users

The Township of Scugog.

#### Benefits

Some of the benefits of peak shaving to the utility are:

- Dispatchable peak demand reduction
- Maximum use of standby capacity through safe parallel operation with the utility grid
- Cost-effective solution consistent with least cost planning emphasis
- Improved system load factor
- Enhanced voltage stability and avoided line losses during heavy load conditions

Some of the benefits of peak shaving to the end user are:

- Enhanced reliability as standby gensets are tested under real load conditions with "bumpless" power transfers and potential cost savings as separate maintenance testing is no longer required.

#### Budget

<u>\$k</u>	<u>2004/05</u>	<u>2006</u>	<u>2007</u>	<u>Totals</u>
Operating Expense	\$0	\$58	\$0	\$58
Capital Expenditures	\$0	\$0	\$0	\$0
Totals	\$0	\$58	\$0	\$58

# Program Budget and Timeline Summary

	Annual Budget (\$ '000)			Total Budget (\$ '000)
	2004-05	2006	2007	
<b>CONSERVATION AND DEMAND MANAGEMENT</b>				
Residential and Small Commercial (< 50 kW)				
- Co-branded Mass Market Program	OPEX 92	123	140	355
	CAPEX 0	0	0	0
- Smart Meter Pilot	OPEX 28	32	32	92
	CAPEX 217	0	0	217
Commercial, Industrial & Institutional Market (> 50 kW)				
- Smart Meter Program	OPEX 91	149	135	375
	CAPEX 128	349	349	826
- Leveraging Energy Conservation and/or Load Mgmt. Programs	OPEX 20	20	20	60
	CAPEX 62	62	62	186
<b>Sub-Total, Conservation &amp; Demand Management:</b>	<b>638</b>	<b>735</b>	<b>738</b>	<b>2111</b>
<b>DISTRIBUTION LOSS REDUCTION</b>				
- Distribution Loss Reduction	OPEX 12	22	22	56
	CAPEX 286	666	166	1118
<b>Sub-Total, Distribution Loss Reduction:</b>	<b>298</b>	<b>688</b>	<b>188</b>	<b>1174</b>
<b>DISTRIBUTED ENERGY</b>				
- Load Displacement	OPEX 12	12	12	36
	CAPEX 28	28	28	84
- Standby Generators	OPEX 10	5	5	20
	CAPEX 40	20	20	80
- Peak Shaving Generator, Scugog Municipal Bldg.	OPEX 0	58	0	58
	CAPEX 0	0	0	0
<b>Sub-Total, Distributed Energy:</b>	<b>90</b>	<b>123</b>	<b>65</b>	<b>220</b>
<b>Total Budget, All Programs</b>	<b>1026</b>	<b>1546</b>	<b>991</b>	<b>3563</b>

File 1

Ontario Energy  
Board  
P.O. Box 2319  
26th. Floor  
2300 Yonge Street  
Toronto ON M4P 1E4  
Telephone: 416- 481-1967  
Facsimile: 416- 440-7656  
Toll free: 1-888-632-6273

Commission de l'Énergie  
de l'Ontario  
C.P. 2319  
26e étage  
2300, rue Yonge  
Toronto ON M4P 1E4  
Téléphone: 416- 481-1967  
Télécopieur: 416- 440-7656  
Numéro sans frais: 1-888-632-6273



**BY FAX ONLY**

October 13, 2005

Mr. George Armstrong  
Manager of Regulatory Affairs and Key Projects  
Veridian Connections Inc.  
55 Taunton Road East  
Ajax, ON L1T 3V3

Dear Mr. Armstrong:

**Re: Application for Amendments to Veridian Connections Inc.'s Conservation and Demand Management Plan  
Board File No RP-2004-0203 / EB-2004-0484**

Thank you for your letter dated September 15, 2005. The Ontario Energy Board (the "Board") is treating the letter as an informational update rather than an application which requires Board approval.

In your letter, you have outlined three changes to Veridian Connections Inc.'s ("Veridian") conservation and demand management ("CDM") plan. The changes include:

- the incorporation of Scugog Hydro Energy Corporation's ("Scugog Hydro") CDM plan into Veridian's following Veridian's acquisition of Scugog Hydro on June 20, 2005;
- the addition of the Leveraging Energy Conservation and/or Load Management Programs Initiative as presented in the applications by the Coalition of Large Distributors (CLD)<sup>1</sup>; and
- a broadening of the scope of the Distribution Loss Reduction Program to include Voltage Profile Management.

---

<sup>1</sup> Joint applications by Enersource Hydro Mississauga Inc. (EB-2004-0489), Hamilton Hydro Inc. (EB-2004-0488), Hydro Ottawa Ltd. (EB-2004-0487), PowerStream Inc. (EB-2004-0486), Toronto Hydro Electric System Ltd. (EB-2004-0485), Veridian Connections Inc. (EB-2005-0484).

The requested changes are within the scope of flexibility allowed by the Board in its Final Order, dated February 3, 2005, approving Veridian's CDM plan. Furthermore, the Board's Final Order states that Veridian need only apply to the Board if cumulative fund transfers among programs exceed 20% of the approved budget.

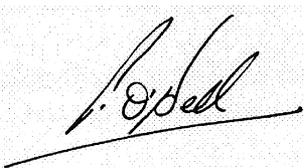
The Board's Final Order states that the Board understands that the approved CDM Plan and budget allocations to the individual programs may be subject to modifications. The Board only required that the modifications be identified in quarterly and annual reports. In reviewing your letter, the Board notes that there is effectively no change to the CDM plan proposed by Scugog Hydro, with the exception that it will be administered by the new corporation and the funding for customer education will be amalgamated with Veridian's existing Co-Branded Mass Market Program.

With respect to the changes within the plan, the Board notes that Veridian will be shifting \$246,000 from two existing programs into the Leveraging Energy Conservation and/or Load Management Programs. This amount represents approximately 7% of the gross value of Veridian's CDM plan. This amount is well below the 20% threshold set by the Board. Even if the addition of approximately \$63,000 from Scugog Hydro's CDM Plan were included as a fund transfer in Veridian's CDM Plan, in addition to the \$246,000 would only amount to approximately 8.6% of the value of Veridian's CDM Plan. Again, this amount is well below the 20% threshold set by the Board.

Further, the Board notes the Leveraging Energy Conservation and/or Load Management Programs and the Voltage profile Management program element of the Distribution Loss Reduction Program, have been approved for other CLD members as one of a menu of approved CDM programs available to the CLD members. The Board will record the change and update its files accordingly.

Should you require any further assistance, please call Stephen McComb, Analyst, Facilities at 416-440-8143.

Yours truly,

A handwritten signature in black ink, appearing to read "P. O'Dell", written over a horizontal line.

Peter H. O'Dell  
Assistant Board Secretary