



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](http://www.veridian.on.ca)

September 30<sup>th</sup>, 2013

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's 2012 Conservation and Demand Management Annual Report  
Board File No. EB-2010-0215**

---

In accordance with section 2.2 of the Ontario Energy Board's Conservation and Demand Management ("CDM") Code for Electricity Distributors please find attached the 2012 CDM Annual Report for Veridian Connections Inc.

Please do not hesitate to contact me if you require further information. I can be reached at 905-427-9870, extension 3274.

Yours truly,

*Original signed by*

Steve Zebrowski  
Regulatory & Key Projects Specialist

---

The power to make your community better.

Veridian Connections is a wholly owned subsidiary of Veridian Corporation



---

# **Veridian Connections Inc.**

---

## **Conservation and Demand Management 2012 Annual Report**

**Submitted to:  
Ontario Energy Board**

**Submitted on September 30, 2013**

**TABLE OF CONTENTS**

**EXECUTIVE SUMMARY** ..... 2

**BACKGROUND**..... 5

**1 BOARD-APPROVED CDM PROGRAMS** ..... 6

    1.1 INTRODUCTION..... 6

    1.2 TOU PRICING ..... 6

        1.2.1 *BACKGROUND*..... 6

        1.2.2 *TOU PROGRAM DESCRIPTION* ..... 6

**2. OPA-CONTRACTED PROVINCE-WIDE CDM PROGRAMS**..... 8

    2.1 INTRODUCTION.....8

    2.2 PROGRAM DESCRIPTIONS .....12

        2.2.1 *RESIDENTIAL PROGRAMS* .....12

        2.2.2 *COMMERCIAL AND INSTITUTIONAL PROGRAM*.....18

        2.2.3 *INDUSTRIAL PROGRAM*.....23

        2.2.4 *LOW INCOME INITIATIVE (HOME ASSISTANCE PROGRAM) (Schedule E-1)* .....28

        2.2.5 *PRE-2011 PROGRAMS*.....28

**3 2012 LDC CDM RESULTS**..... 29

    3.1 PARTICIPATION AND SAVINGS .....29

    3.2 EVALUATION .....31

    3.3 SPENDING.....33

**4 COMBINED CDM REPORTING ELEMENTS** ..... 37

    4.1 PROGRESS TOWARDS CDM TARGETS .....37

    4.2 VARIANCE FROM STRATEGY.....39

    4.3 OUTLOOK TO 2014 AND STRATEGY MODIFICATIONS .....42

**5 CONCLUSION** ..... 43

**APPENDIX A: INITIATIVE DESCRIPTIONS** ..... 44

**APPENDIX B: PRE-2011 PROGRAMS** ..... 56

## **Executive Summary**

This report has been prepared in accordance with section 2.2 of the Ontario Energy Board's (the "Board" or "OEB") Conservation and Demand Management Code (the "CDM Code"). It describes Veridian Connections Inc.'s CDM program activities and accomplishments for the year ending December 31, 2012, and serves as a progress report on the 2011-14 CDM Strategy that Veridian filed with the Board on November 1, 2010 (and which was supplemented with an Addendum filed on June 13, 2011). The format of this report follows a template provided by the Electricity Distributors Association, which was originally prepared in consultation with OEB staff.

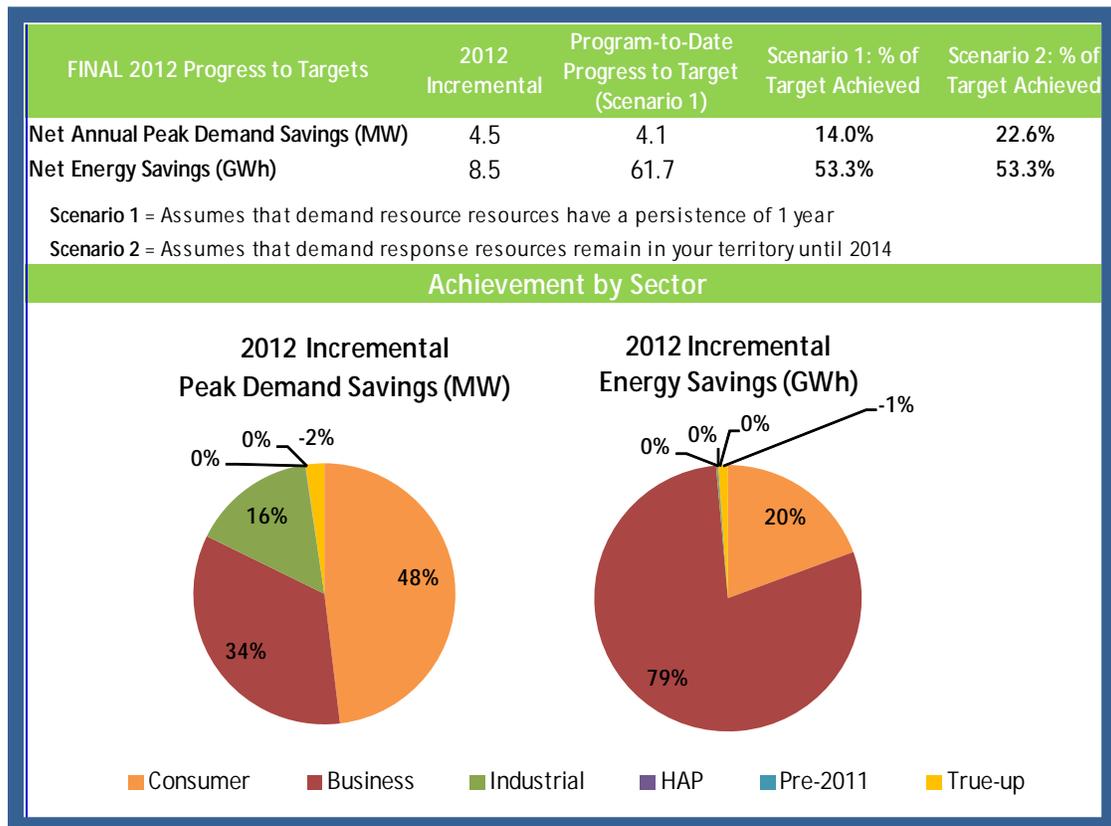
During 2012, Veridian continued its focus on the effective delivery of the entire suite of Ontario Power Authority ("OPA") province-wide CDM programs. While the majority of OPA program initiatives had been brought to market during 2011, further progress was made during 2012 in the following areas:

- The Home Assistance Program (a home retrofit initiative focused on the needs of low income consumers) was promptly introduced to market following the OPA's finalization of program details. Introduction of the program to market was coordinated with Whitby Hydro and Oshawa PUC to achieve delivery efficiencies and participant uptake.
- An arrangement with Union Gas was finalized under which Veridian leveraged one of this gas distributor's Key Account Managers to support the delivery of CDM programs to a select group of large business consumers. Union Gas is the licensed gas distributor in the portions of Veridian's service area where many of these large business customers are located, so this coordinated approach has proven to be convenient to customers and effective at increasing customer engagement in CDM.
- Commitments to pursue CDM measures were obtained from a sufficient number of large customers to support applications to the OPA for additional resources to assist these customers with the evaluation of retrofit projects. Applications submitted to the OPA in 2012 have led to the hiring of two Roving Energy Managers and one Embedded Energy Manager in Q2 2013. These resources are expected to drive CDM program uptake during 2013-2014.

In addition to fully leveraging the current suite of OPA program initiatives during the year, Veridian sought to augment these program offerings with new or improved initiatives. This was done through ongoing staff participation on OPA program working groups, which worked to enhance the province-wide programs. Additionally, Veridian partnered with an energy services provider to support that firm's bid for delivery of an OPA residential social benchmarking pilot program in Veridian's service area. The proposal was filed with the OPA on November 28, 2012, in response to a call for proposals. As of the time of this report, the OPA has not formally announced contract awards under its competitive procurement process.

As a result of its efforts during 2012, Veridian achieved 4.5 MW of net incremental demand savings and 8.5 GWh of net incremental energy savings for the year. When combined with the 2011 savings

achievements, the total energy savings to the end of 2012 represent 53.3% of Veridian's 2014 target of 115.7 GWh. The total demand savings to the end of 2012 represent 22.6% of Veridian's 2014 target of 29.05 MW, if demand response capacity is included. When demand response capacity is excluded (due to a forecast persistence of one year), the demand savings achievement falls to 14% of Veridian's 2014 target. Further details are presented in the following excerpt from Veridian's 2012 progress report as compiled by the OPA:



Veridian's 2011-14 CDM Strategy projected that delivery of OPA CDM Programs would enable it to meet approximately 74% of its demand reduction target and 88% of its electricity consumption target, with further contributions expected by the OEB's Time-of-Use electricity pricing initiative. The level of 2011-12 energy savings outlined above falls slightly below the 2012 performance milestone set out in Veridian's Strategy. There is a more significant shortfall in the level of demand reduction achievements.

While Veridian is optimistic about the impact of the additional Energy Manager resources that it has put into place in 2013, it is clear that attainment of its 2014 targets represents a significant challenge. The challenge has been exacerbated by the loss of CDM potential within the business operations of some of Veridian's largest customers. During 2013, Veridian experienced a decline in the number of customers classified as Large Use (>5 MW). The number of customers in this customer class declined from five to

three, with one of the reductions due to the complete closure of a large manufacturing facility. The closure had been announced in 2012.

During the remainder of the 2011-14 CDM framework, Veridian will continue to pursue energy and demand savings through all available OPA initiatives, with a particular emphasis on its large commercial, industrial and institutional customers, where the largest potential resides. It will also continue to support the refinement and expansion of OPA CDM programs that deliver value to customers and have the potential to contribute to Veridian's 2014 targets.

## **Background**

On March 31, 2010, the Minister of Energy and Infrastructure of Ontario, under the guidance of sections 27.1 and 27.2 of the *Ontario Energy Board Act, 1998*, directed the Ontario Energy Board (“OEB”) to establish Conservation and Demand Management (“CDM”) targets to be met by electricity distributors. Accordingly, on November 12, 2010, the OEB amended the distribution license of Veridian to require Veridian, as a condition of its license, to achieve 115.74 GWh of energy savings and 29.05 MW of summer peak demand savings, over the period beginning January 1, 2011 through December 31, 2014.

In accordance with the same Minister’s directive, the OEB issued the Conservation and Demand Management Code for Electricity Distributors (the “Code”) on September 16, 2010. The code sets out the obligations and requirements with which electricity distributors must comply in relation to the CDM targets set out in their licenses. To comply with the Code requirements, Veridian submitted its CDM Strategy on November 1, 2010 which provided a high level of description of how Veridian intended to achieve its CDM targets. An Addendum to Veridian’s CDM Strategy was submitted to the OEB on June 13, 2011.

The Code also requires a distributor to file annual reports with the Board. This is the second Annual Report by Veridian and has been prepared in accordance with the Code requirement and covers the period from January 1, 2012 to December 31, 2012.

Veridian submitted its 2011 Annual Report on September 28, 2012 which summarized the CDM activities, successes and challenges experienced by Veridian for the January 1, 2011 to December 31, 2011 period. The 2011 Annual Report identified that the delay in the full suite of CDM Programs being made available by the OPA, and the absence of some programs negatively impacted the final 2011 results for Veridian and other LDCs. This issue was also highlighted in Volumes I & II of the Environmental Commissioner’s Report on Ontario’s Annual Energy Conservation Progress.

On December 21, 2012, the Minister of Energy directed the Ontario Power Authority (“OPA”) to fund CDM programs which meet the definition and criteria for OPA-Contracted Province-Wide CDM Programs for an additional one-year period from January 1, 2015 to December 31, 2015. The Ministerial Directive did not amend the timelines for LDCs to achieve their energy savings and demand savings targets. Therefore, the main focus of Ontario’s LDCs remains the achievement of CDM targets by December 31, 2014.

# **1 Board-Approved CDM Programs**

## **1.1 Introduction**

In its Decision and Order dated November 12 2010 (EB-2010-0215 & EB-2010-0216), the OEB ordered that, (to meet its mandatory CDM targets), “Each licensed electricity distributor must, as a condition of its licence, deliver Board-Approved CDM Programs, OPA-Contracted Province-Wide CDM Programs, or a combination of the two”.

At this time, Time-of-Use (“TOU”) Pricing is the only Board-Approved Conservation and Demand Management (“CDM”) program that is being delivered by Veridian in its service area.

## **1.2 TOU Pricing**

### **1.2.1 BACKGROUND**

In its April 26, 2012 CDM Guidelines, the OEB recognizes that a portion of the aggregate electricity demand target was intended to be attributable to savings achieved through the implementation of TOU Pricing. The OEB establishes TOU prices and has made the implementation of this pricing mechanism mandatory for distributors. On this basis, the OEB has determined that distributors will not have to file a Board-Approved CDM program application regarding TOU pricing. The OEB has deemed the implementation of TOU pricing to be a Board-Approved CDM program for the purposes of achieving the CDM targets. The costs associated with the implementation of TOU pricing are recoverable through distribution rates, and not through the Global Adjustment Mechanism (“GAM”).

In accordance with a Directive dated March 31, 2010 by the Minister of Energy and Infrastructure, the OEB is of the view that any evaluations of savings from TOU pricing should be conducted by the OPA for the province, and then allocated to distributors. Veridian will report these results upon receipt from the OPA.

At the time of preparation of this report the OPA had retained the Brattle Group as the evaluation contractor and will be working with an expert panel convened to provide advice on methodology, data collection, models, etc. The initial evaluations were conducted with 5 LDCs – Hydro One, THESL, Ottawa Hydro, Thunder Bay and Newmarket.

As of September 30, 2013, the OPA has not released any verified results of TOU savings to Veridian. Therefore Veridian is not able to provide any verified savings related to LDC’s TOU program at this time.

### **1.2.2. TOU PROGRAM DESCRIPTION**

**Target Customer Type(s):** Residential and small business customers (up to 250,000 kWh per year)

**Initiative Frequency:** Year-Round

**Objectives:** TOU pricing is designed to incent the shifting of energy usage. Therefore peak demand reductions are expected, and energy conservation benefits may also be realized.

**Description:** In August of 2010, the OEB issued a final determination to mandate TOU pricing for Regulated Price Plan ("RPP") customers by June 2011, in order to support the Government's expectation for 3.6 million RPP consumers to be on TOU pricing by June 2011, and to ensure that smart meters funded at ratepayer expense are being used for their intended purpose.

The RPP TOU price is adjusted twice annually by the OEB. A summary of the RPP TOU pricing is provided below:

RPP TOU Effective Date	Rates (cents/kWh)		
	On Peak	Mid Peak	Off Peak
November 1, 2010	9.9	8.1	5.1
May 1, 2011	10.7	8.9	5.9
November 1, 2011	10.8	9.2	6.2
May 1, 2012	11.7	10.0	6.5
November 1, 2012	11.8	9.9	6.3
May 1, 2013	12.4	10.4	6.7

**Delivery:** The OEB set the rates; LDCs install and maintain the smart meters; LDCs convert customers to TOU billing.

**Initiative Activities/Progress:**

Veridian began transitioning its RPP customers to TOU billing in March 2010. At December 31<sup>st</sup>, 2012, 103,386 RPP customers were on TOU billing.

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

### 2.1 Introduction

Effective February 3, 2011, Veridian entered into an agreement with the OPA to deliver CDM programs for the period of from January 1, 2011 to December 31, 2014. A summary of the program initiatives is provided in the following table. Further details are included in Appendix A.

Initiative	Schedule	Date schedule posted	Customer Class	LDC In-Market Date
<b>Residential Program</b>				
Appliance Retirement	Schedule B-1, Exhibit D	Jan 26, 2011	All residential rate classes	February 3, 2011
Appliance Exchange	Schedule B-1, Exhibit E	Jan 26, 2011	All residential rate classes	May 14, 2011
HVAC Incentives	Schedule B-1, Exhibit B	Jan 26, 2011	All residential rate classes	January 1, 2011
Conservation Instant Coupon Booklet	Schedule B-1, Exhibit A	Jan 26, 2011	All residential rate classes	April 1, 2011
Bi-Annual Retailer Event	Schedule B-1, Exhibit C	Jan 26, 2011	All residential rate classes	March 30, 2011
Retailer Co-op	n/a	n/a	All residential rate classes	Directly delivered by the OPA
Residential Demand Response	Schedule B-3	Aug 22, 2011	All general service classes	January 1, 2011 for peaksaver® Extension.
New Construction Program	Schedule B-2	Jan 26, 2011	All residential rate classes	February 28, 2011
<b>Commercial &amp; Institutional Program</b>				
Efficiency: Equipment Replacement	Schedule C-2	Jan 26, 2011	All general service classes	February 3, 2011
Direct Install Lighting	Schedule C-3	Jan 26, 2011	General Service < 50 kW	June 17, 2011
Existing Building Commissioning Incentive	Schedule C-6	Feb 2011	All general service classes	May 25, 2011
New Construction and Major Renovation Initiative	Schedule C-4	Feb 2011	All general service classes	November 17, 2011

Initiative	Schedule	Date schedule posted	Customer Class	LDC In-Market Date
Energy Audit	Schedule C-1	Jan 26, 2011	All general service classes	February 3, 2011
Commercial Demand Response (part of the Residential program schedule)	Schedule B-3	Jan 26, 2011	All general service classes	January 1, 2011 for peaksaver® Extension.
Demand Response 3 (part of the Industrial program schedule)	Schedule D-6	May 31, 2011	General Service 50 kW & above	April 5, 2011
<b>Industrial Program</b>				
Process & System Upgrades	Schedule D-1	May 31, 2011	General Service 50 kW & above	April 5, 2011
Monitoring & Targeting	Schedule D-2	May 31, 2011	General Service 50 kW & above	April 5, 2011
Energy Manager	Schedule D-3	May 31, 2011	General Service 50 kW & above	April 5, 2011
Key Account Manager ("KAM")	Schedule D-4	May 31, 2011	General Service 50 kW & above	May 2012
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	Schedule C-2	May 31, 2011	General Service 50 kW & above	February 3, 2011
Demand Response 3	Schedule D-6	May 31, 2011	General Service 50 kW & above	April 5, 2011
<b>Home Assistance Program</b>				
Home Assistance Program	Schedule E-1	May 9, 2011	All residential rate classes	July 6, 2012

In addition to the suite of OPA programs offered during 2011-14, certain OPA CDM programs delivered by Veridian prior to 2011 provided CDM savings that are eligible for attribution to Veridian's 2014 targets. These programs are summarized in the following table:

Pre-2011 Programs			
Electricity Retrofit Incentive Program	n/a	n/a	All general service classes
High Performance New Construction	n/a	n/a	All general service classes
Multifamily Energy Efficiency Rebates	n/a	n/a	All general service classes

A number of initiatives originally contemplated in the 2011-14 suite of OPA CDM programs are no longer available to customers or were not yet launched in 2012, as follows:

<b>Initiative Not in Market in 2012</b>	<b>Objective</b>	<b>Status</b>
<b>Residential Program</b>		
Midstream Electronics	The objective of this initiative is to encourage retailers to promote and sell high efficiency televisions, and for distributors to distribute high efficiency set top boxes.	Never launched and removed from Schedule in Q2, 2013.
Midstream Pool Equipment	The objective of this initiative is to encourage pool installers to sell and install efficient pool pump equipment in residential in-ground pools.	Never launched and removed from Schedule in Q2, 2013.
Aboriginal Conservation Program	First Nations programs are delivered by the OPA and results are attributed to LDCs for reporting.	Launched in 2013 by OPA.
Home Energy Audit Tool	This is a provincial online audit tool to engage customers in conservation and help drive customer participation to CDM programs.	Never launched and removed from Schedule in Q2, 2013.
<b>Commercial &amp; Institutional Program</b>		
Direct Service Space Cooling	The objective of this initiative is to offer free servicing of air conditioning systems and refrigeration units for the purpose of achieving energy savings and demand reduction.	Not launched to market in 2011/2012. As per the OPA there no plans to launch this Initiative in 2013.
Demand Response 1 ("DR1")	This initiative allows distribution customers to voluntarily reduce electricity demand during certain periods of the year pursuant to the DR 1 contract. The initiative provides DR payment for service for the actual electricity reduction provided during a demand response event.	No customer uptake for this initiative. As a result this Initiative was removed from the Schedule in Q4, 2012.
<b>Industrial Program</b>		
DR1	As above	No customer uptake for this initiative. Removed in Q4, 2012.

The CDM Program agreement used to define the business relationships between the OPA and Local Distribution Companies ("LDCs") includes a change management process that accommodates updates to program initiatives. Collaboration between the OPA and the LDCs commenced in 2011, and continued in 2012, as the change management process was implemented to enhance the saveONenergy program

suite. The change management process allows for modifications to the Master Agreement and initiative Schedules. The program enhancements give LDCs additional tools and greater flexibility to deliver programs in a way that meets the needs of customers and further drives participation in the Initiatives.

## 2.2 Program Descriptions

Full OPA-Contracted Province-Wide CDM Program descriptions are available from the OPA and additional initiative information can be found on the saveONenergy website at <https://saveonenergy.ca>. The targeted customer types, objectives, and individual descriptions for each Program Initiative are detailed in Appendix A.

### 2.2.1 RESIDENTIAL PROGRAMS

**Description:** Provides residential customers with programs and tools to help them understand and manage the amount of energy they use throughout their entire home and help the environment.

**Objective:** To provide incentives to both existing homeowners and developers/builders to motivate the installation of energy efficiency measures in both existing and new home construction.

**Discussion:**

The inclusion of LED technology into the Bi-annual Retailers events in 2012 and the annual coupons in 2013, as well as some LDC custom coded coupons, has had a positive effect on consumer engagement. The revamped *peaksaver*PLUS program is the main Residential Initiative which drives savings for LDCs and has been well received by consumers eager to utilize an In Home Display to help manage their energy consumption.

During 2012, cross promoted the suite of Consumer Program Initiatives through traditional and non-traditional marketing and events, including:

- Participated at retail locations during Bi-annual event and Exchange event plus attended community events and festivals, tradeshow and sporting events to promote all initiatives available and as well as generate leads for *peaksaver* PLUS.
- Promoted employee awareness of the saveONenergy initiatives through targeted training sessions for customer service representatives, various communications were distributed such as brochures, coupons, weekly emails, and postings on internal televisions.
- Promoted through newspaper ads, multi initiative ads and co-branded ads with neighbouring utilities
- Bill inserts, printed LDC specific bar-coded coupons, newsletters, conservation hand book, earned media on web, direct mail campaigns, plus coordinated mailing with United Way agencies.
- Used promotional material such as fridge note pads, room temperature magnets, LED nightlights, sun reflector kits and tote bags to engage customers in conservation dialogue at community events.

The Residential Program Portfolio is predominately a carryover of Initiatives from previous programs. It is mostly driven by retailers and contractors who many not have fully delivered what was anticipated. Three

new initiatives were never launched and subsequently removed from schedule in 2013 with no new additions. Delays in communication with regards to Initiative offerings and results reporting have hampered LDCs abilities to engage customers and promote participation. Provincial wide advertising has provided limited value due to inconsistency and non-specific messaging.

Work to revitalize and increase the effectiveness and breadth of the Initiatives through the Residential Program needs to be a high priority. There are opportunities within the Residential marketplace that need to be identified, developed and offered to customers. A revised home audit and other Initiatives which could engage an average residential customer could be considered. Increased control by the LDCs such as 100% attributable coupons for LDCs and/or LDC hosted exchange events may present an opportunity for improved saving.

### **2.2.1.1 Appliance Retirement Initiative (Exhibit D)**

#### **Initiative Activities/Progress:**

The Appliance Retirement Initiative was promoted throughout the year by way of customer newsletters, bill inserts, banners, website messaging, newspaper ads and one-on-one customer interactions at community events. Veridian's team of Conservation Ambassadors attended 57 community event days during 2012.

#### **Additional Comments:**

- With the increase in appliance age to 20 years in 2013, many LDCs increased marketing and outreach throughout 2012 in an effort to increase uptake and achieve savings.
- Due to the duration of the program, and the revised eligibility requirements to a minimum of 20 years old, this Initiative appears to have reached market saturation and has been under consideration for removal from the Portfolio.
- Rather than strictly remove this Initiative from the schedules, the OPA and LDCs could review what opportunities there are to include other measures such as stoves, dishwashers, washers and dryers. The framework of this Initiative may be a suitable foundation for a more holistic residential appliance retirement program. As such, the Residential portfolio could be straightened through program evolution rather than weakened through diminished program offerings.
- As results are very responsive to province wide advertising OPA provincial marketing should continue to play a key role.
- The OPA and LDCs can continue working to establish partnerships with Independent retailers and municipalities.

### **2.2.1.2 Appliance Exchange Initiative (Exhibit E)**

#### **Initiative Activities/Progress:**

The Appliance Exchange Initiative occurred once in 2012. This event was held in June at Canadian Tire stores, and was supported by Veridian's Conservation Ambassadors at two store locations. Conservation Ambassadors promoted all initiatives while on-site and generated leads for *peaksaver*PLUS. The event was promoted by way of a bill insert that was distributed for three weeks leading up to the event, as well as a newspaper ad purchased in partnership with two neighbouring utilities.

#### **Additional Comments:**

- This Initiative, eligible measures and incentive amounts are influenced by the retail partner with no direct involvement from the LDCs. The restrictive, limited and sometimes non-participation of local stores can diminish the savings potential for this Initiative.
- To date there has only been one retailer participant in the Appliance Exchange Initiative. The Fall events have not had retailer participation, therefore savings budgeted by the LDCs have not materialized.
- Evaluation, Measurement, and Verification (EMV) results indicated that the value of savings for retired room AC has dropped resulting in the retail participant not accepting window a/c's during the Spring 2013 event.
- Notification regarding retailer participation and eligible measures continues to be delayed. Improved communications will aid in appropriate resource allocation and marketing of the Initiative.
- This Initiative may benefit from the disengagement of the retailer and allowing LDCs to conduct these events, possibly as part of a larger community engagement effort, with the backing of ARCA for appliance removal.
- The initiative appears to require more promotion from retailers and LDCs.

### **2.2.1.3 HVAC Incentives Initiative (Exhibit B)**

**Initiative Activities/Progress:** The HVAC Incentives Initiative was promoted throughout the year by way of brochures, customer newsletters, banners, website messaging, newspaper ads and one-on-one customer interactions at community events. Veridian's team of Conservation Ambassadors attended 57 community event days during 2012.

#### **Additional Comments:**

- Incentive levels appear to be insufficient to prompt Participants to upgrade HVAC equipment prior to end of useful life. It is hoped that the introduction of an Air Miles incentive in 2013 may help with this.
- This Initiative is contractor driven with LDCs responsible for marketing efforts to customers. More engagement with the HVAC contractor channel should be undertaken to drive a higher proportion of furnace and CAC sales to eligible units.
- Channel partners require timeliness of the Rebate process to maintain a positive relationship between consumers, contractors, the OPA, and the participating LDC. Due to a contracting delay no applications were processed from approximately the end of October 2012 to February 2013.
- LDC HVAC reports have been delayed and are not as complete and accurate as are required by LDCs to make adjustments to their marketing strategies.
- In an effort to build capacity, mandatory training has been instituted for all participating HVAC contractors. This could present too much of a barrier for participation for some contractors as the application process already presents a restriction to contractor sales. It has been noted that there are approximately 4500-5000 HVAC contractors in the Province, however only 1500 are participating in program.
- There are cases where non-participating contractors are offering their own incentives (by discounting their installations to match value of the OPA incentive) to make the sale. As this occurs outside of the Initiative, these installations should be attributed to the appropriate LDC.

#### **2.2.1.4 Conservation Instant Coupon Initiative (Exhibit A)**

##### **Initiative Activities/Progress:**

Veridian specific bar-coded coupons were printed in Q4 2012 and distributed by Veridian's Conservation Ambassadors at community events, festivals and sporting events.

##### **Additional Comments:**

- This Initiative was ineffective for most of 2012 as the Instant coupons (annual) were not available to consumers until September 2012. As such, savings budgeted by LDCs did not materialize.
- The timeframe for retailer submission of redeemed coupons vary from retailer to retailer and in some cases has been lengthy. The delays and incomplete results reporting limits the ability to react and respond to Initiative performance or changes in consumer behaviour. This also resulted in the delayed launch of the Initiative in 2012.
- Coupon booklets were not printed and mailed out in 2012. As such, Coupons were not widely available to consumers without the ability to download and print them.

- Without Provincial coupon distribution, and delay in Initiative launch, consumers may not have been aware of the online coupons. This Initiative could benefit from provincial marketing as a substitute to distribution.
- LDCs should be able to custom code all coupons to provide 100% allocation and push specific coupons based on localized needs.
- The product list could be distinctive from the Bi-Annual Retailer Event Initiative in order to gain more consumer interest and uptake.
- Program evolution, including new products and review of incentive pricing for the coupon Initiatives, should be a regular activity to ensure continued consumer interest.

### **2.2.1.5      *Bi-Annual Retailer Event Initiative (Exhibit C)***

#### **Initiative Activities/Progress:**

Veridian's Conservation Ambassadors promoted this initiative at the TSC and Lowes stores during the Spring Bi-Annual Retailer Event, and at Home Depot, Lowes, and Canadian Tire stores during the Fall Bi-Annual Retailer Event. The events were promoted by press release, brochures, banners, website and a front page newspaper advertisement.

#### **Additional Comments:**

- The Product list has changed very little over the past four years.
- Limited engagement of local retailers can restrict the savings potential for this Initiative.
- Program evolution, including new products and review of incentive pricing for the coupon Initiatives, must be a regular activity to ensure continued consumer interest.
- The Product list could be distinctive from the Conservation Instant Coupon Initiative in order to gain more consumer interest and uptake.
- A review conducted by the Residential Working Group in Q4 2011 identified three areas of need for Initiative evolution: 1) introduction of product focused marketing; 2) enhanced product selection and 3) improved training for retailers as retail staff tend not to be knowledgeable regarding the products or promotion.
- LDCs should be able to custom code all coupons to provide 100% allocation and push specific coupons based on localized needs.
- Communications regarding retailer participation continues to be delayed. Improved communications will aid in appropriate resource allocation and marketing of the Initiative.

- This Initiative may benefit from a more exclusive relationship with a retailer appropriate to the program. There should be a value proposition for both the retailer and LDC.

#### **2.2.1.6 New Construction Program (Schedule B-2)**

##### **Initiative Activities/Progress:**

During 2012, information for this Initiative was made available on Veridian's website. Once the program enhancements were introduced by the OPA late in 2012, Veridian initiated work on a more vigorous outreach and promotional campaign for deployment in 2013.

##### **Additional Comments:**

- This Initiative provides incentives to home builders for incorporating energy efficiency into their buildings. To support this, LDCs need to provide education to the consumers regarding the importance of choosing the energy efficient builder upgrade options without an immediate benefit to the consumer.
- Following limited participation in 2011, the application process was revisited in 2012 to streamline administration in response to builder feedback. Participation levels are expected to grow but there will be a lag to when results materialize as homes pre-approved could take a year or more to be completed.
- Administrative requirements, in particular individual home modeling, must align with perceived stakeholder payback. As per the Electricity Distributors Association ("EDA") Working Groups, changes are being processed through change management for 2012. However, the lengthy change management process has resulted in continued non-participation from builders.

#### **2.2.1.7 Residential Demand Response Program (Schedule B-3)**

##### **Initiative Activities/Progress:**

Veridian finalized a competitive procurement process for a program delivery partner in mid year. However, marketing activity for the program extended over the entire year, as Veridian's Conservation Ambassadors promoted the program and generated leads at all community events and festivals. An e-blast promotion was also deployed early in the year to encourage customers to pre-register for the new program.

Device installations commenced at the beginning of the fourth quarter, at which time marketing activity was expanded to include a direct mail campaign to both new and existing customers. Veridian also participated in the OPA-led AIR MILES e-Blast promotion for the saveONenergy PLEDGE and

*peaksaver*PLUS program. Other promotional initiatives included bill inserts, brochures, e-Blasts, newspaper ads, and banners.

**Additional Comments:**

- The schedule for Peaksaver Plus was posted in August 2011, but this did not provide adequate time for product procurement for 2011, and part of 2012. The product procurement process uncovered that the In Home Display units that communicate with installed smart meter technology were still in development and not ready for market deployment. Consequently, LDCs could not be in market with the Peaksaver Plus program until 2012, or later which has resulted in delayed savings.
- Smart Meters installed by most LDCs do not have the capability to communicate directly to an In Home Display. When proposing technical Initiatives that rely on existing LDC hardware or technology there should be an extensive consultative process.
- Introduction of new technology requires incentives for the development of such technology. Appropriate lead times for LDC analysis and assessment, product procurement, and testing and integration into the Smart Meter environment are also required. Making seemingly minor changes to provincial technical specifications can create significant issues when all LDCs attempt to implement the solution in their individual environments.
- This is the main Initiative within the Residential portfolio that drives savings for LDCs.
- Given the different LDCs smart meter environments, and needs, each LDC is positioning the Initiative slightly different. As such, greater program flexibility is required to address unique LDC needs.
- Provincial wide marketing needs to be sensitive to the variations of the Initiative and provide solid, consistent messaging.
- There currently is not an avenue for participants without the ability to provide demand response capabilities to obtain an IHD and gain energy saving benefits.

**2.2.2 COMMERCIAL AND INSTITUTIONAL PROGRAM**

**Description:** Provides commercial, institutional, agricultural and industrial organizations with energy-efficiency programs to help reduce their electrical costs while helping Ontario defer the need to build new generation and reduce its environmental footprint. It includes initiatives to help fund energy audits, to replace energy-wasting equipment or to pursue new construction that exceeds existing codes and standards. Businesses can also pursue incentives for controlling and reducing their electricity demand at specific times.

**Targeted Customer Type(s):** Commercial, Institutional, Agricultural, Multi-family buildings, Industrial

**Objective:** 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.

**Discussion:**

Throughout 2011 and 2012 the Commercial and Institutional (C&I) Working Group has strived to enhance the existing C&I programs and rectify identified program and system deficiencies. This has proven to be a challenging undertaking, normally taking months to complete sometimes relatively minor changes due to the current CDM framework. Overbuilt governance, numerous initiative requirements, complex program structure and lengthy change management have restricted growth without providing the anticipated improved Measurement and Verification results. In addition, Evaluation, Measurement and Verification (EM&V) has not yet achieved transparency. LDCs are held accountable for these results yet are mostly completely removed from the process.

LDC program management has been hampered by varying rule interpretation, limited marketing ability, a somewhat inflexible online system of checks and balances and revolving OPA support personnel.

Despite these challenges the C&I Working Group, working in cooperation with the OPA, have managed to iron out many of the issues which could be rectified. In particular, an accomplishment of 2012 was the advent of the expedited change management as means to accelerate certain program changes.

Looking ahead there is minimal opportunity to make valuable changes to the current program suite and have these changes reflected in LDC 2014 results. LDCs and the OPA should look beyond the current Initiatives and work to launch new programs, built on the strengths of the 2011-2014 programs, which will meet the needs of the industry and consumers.

**2.2.2.1 Efficiency: Equipment Replacement Incentive (ERII) (Schedule C-2)**

**Initiative Activities/Progress:**

This initiative was promoted through Veridian's website, newspaper advertisements, transit advertisements, local industry magazines, email bulletins, Chamber of Commerce partners, customer newsletters, various program events and site visits.

**Additional Comments:**

- It appears that the marketplace largely understands the programs now and a large proportion of LDC savings are attributed to ERII.
- The centralized process review used for 2012 project payment has been streamlined by the OPA and payments for projects were greatly improved – faster and more consistent compared to 2011.

- This Initiative is limited by the state of the economy and the ability of commercial/institutional facility to complete capital upgrades.
- A number of customer facing issues in CRM (the OPA centralized application system) have been resolved; however key LDC administrative back office processing issues continue to be a challenge.
- Applicants and Applicant Representatives continue to express dissatisfaction and difficulty with the online application system. This issue has been addressed by LDCs through application training workshops, Key Account Managers, channel partner/contractor training and LDC staff acting as customer Application Representatives. Although this has been an effective method of overcoming these issues and encouraging submissions, it also reflects on the complexity and time consuming nature of the application process. As such, Applicant Representatives continue to influence the majority of applications submitted. Continued development of Channel Partners is essential to program success.
- Lighting is still the most popular measure. Other market sectors are not as engaged yet, specifically the mechanical world. There continues to be significant barriers to program participation from compressed air channel partners
- Prescriptive and Engineered worksheets provide a much needed simplified application process for customers. However, the eligible measures need to be updated and expanded in both technology and incentive amounts to address changing product costs and evolution of the marketplace.
- Expanding the capacity of the engineered applications can offer customers an opportunity to maximize savings and incentives. Recognizing this, Toronto Hydro and London Hydro worked together to develop and provide the OPA with compressed air engineered worksheets for inclusion in the Initiative in Q3, 2012. To date, these have not been accepted and provided to LDCs for use.
- An identified deficiency in the various renditions of the equipment replacement is the “hard stop” of the program as of a specific date. Without a streamlined transition into a new program, many customers become frustrated and refused to participate. LDCs struggle to repair customer and channel partner relationships and gain momentum in the market place once again.
- While the Ministerial Directive provides the continuation of the conservation programs for the participant, unclear direction on LDC administrative funding could result in many LDCs ‘ramping down’ programs in 2015. The establishment of defined administrative funding for 2015 is required to avoid a “stop and start” process.

#### **2.2.2.2 Direct Install Initiative (DII) (Schedule C-3)**

##### **Initiative Activities/Progress:**

Veridian promoted the Direct Install Initiative at Chamber of Commerce, Board of Trade and Business Improvement Area events and networking sessions. It also partnered with local utilities for radio and TV promotion and participating electrical contractors and assessors promoted the program through commercial door to door activities with supporting sell sheets and brochures. Banners were displayed at local municipal offices.

**Additional Comments:**

- Successful execution of the previous rendition of this Initiative has resulted in diminished potential for the 2011-2014 Initiative in some LDC's territories.
- The inclusion of a standard incentive for additional measures increased project size and drove higher energy and demand savings results in some situations.
- Electrical contractor's margins have been reduced due to no labour rate increase, increase cost of materials, greater distances between retrofits, more door knocking required before a successful sale and no funding for lifts. This has led to a reduction in vendor channel participation in some regions.
- Ambiguity with regard to eligibility resulted in large lists of customers rejected following installation due to preserved ineligibility. Due to this, some LDCs were forced to carry considerable financial burden while this was worked through.
- The eligibility requirements have now been revamped and expanded however there has been limited communication and documentation of this to the marketplace.
- Currently LDCs are unable to offer these standard incentives to prior participants. The ability to return to prior participants and offer a standard incentive on the remaining measures has potential to provide additional energy and demand savings.

**2.2.2.3 Existing Building Commissioning Incentive Initiative (Schedule C-6)**

**Initiative Activities/Progress:**

This initiative was promoted through Veridian's website, newspaper advertisements, transit advertisements, local industry magazines, email bulletins, Chamber of Commerce partners, customer newsletters, various program events and site visits.

**Additional Comments:**

- Initiative name does not properly describe the Initiative.
- On a province-wide basis there was minimal participation for this Initiative. It is suspected that the lack of participation in the program is a result of the Initiative being limited to space cooling and a limited window of opportunity (cooling season) for participation.

- Participation is mainly channel partner driven, however the particulars of the Initiative have presented a too significant of a barrier for many channel partners to participate.
- The customer expectation is that the program be expanded to include a broader range of measures for a more holistic approach to building re-commissioning and chilled water systems used for other purposes should be made eligible and considered through Change Management.
- This initiative should be reviewed for incentive alignment with ERII, as currently a participant will not receive an incentive if the overall payback is less than 2 years.

#### **2.2.2.4 New Construction and Major Renovation Initiative (HPNC) (Schedule C-4)**

##### **Initiative Activities/Progress:**

This initiative was promoted through Veridian's website, newspaper advertisements, transit advertisements, local industry magazines, email bulletins, Chamber of Commerce partners, customer newsletters, various program events and site visits. Enbridge Gas and Union Gas were engaged as third party program administrators for assistance with program education and application assistance/completion.

##### **Additional Comments**

- There is typically a long sales cycle for these projects, and then a long project development cycle. As the program did not launch until mid-2011 and had limited participation, results did not appear in 2011. Minimum results are expected to appear in 2012. The majority of the results are expected in 2013-2014, with a reduced benefit to cumulative energy savings targets.
- Participants estimated completion dates tend to be inaccurate and are usually 6 months longer. This could result in diminished savings towards target when facilities are not substantially completed by December 31, 2014.
- The custom application process requires considerable customer support and skilled LDC staff. As there has been no defined administrative funding beyond 2014, many LDCs are unsure how these project applications will be finalized.
- The effort required to participate through the custom stream exceeds the value of the incentive for many customers.
- This Initiative has a very low Net-to-Gross ratio, which results in half the proposed target savings being 'lost'.

### **2.2.2.5 Energy Audit Initiative**

#### **Initiative Activities/Progress:**

This initiative was promoted through Veridian's website, newspaper advertisements, transit advertisements, local industry magazines, email bulletins, Chamber of Commerce partners, customer newsletters, various program events and site visits.

- The energy audit Initiative is considered an 'enabling' Initiative and 'feeds into' other saveONenergy Initiatives. There are no savings attributed to LDC targets from an audit.
- Audit reports from consultants vary considerably and in some cases, while they adhere to the Initiative requirements, do not provide value for the Participant. A standard template with specific energy saving calculation requirements should be considered.
- Customers look to the LDCs to recommend audit companies. A centralized prequalified list provided by the OPA may be beneficial.
- Participants are limited to one energy audit which restricts enabling and direction to the other Initiatives. This Initiative should be evaluated for additional customer participation when presented with a new scope of work.

### **2.2.3 INDUSTRIAL PROGRAM**

**Description:** Large facilities are discovering the benefits of energy efficiency through the Industrial Programs which are designed to help identify and promote energy saving opportunities. It includes financial incentives and technical expertise to help organizations modernize systems for enhanced productivity and product quality, as well as provide a substantial boost to energy productivity. This allows facilities to take control of their energy so they can create long-term competitive energy advantages which reach across the organization.

**Targeted Customer Type(s):** Industrial, Commercial, Institutional, Agricultural

**Objective:** To provide incentives to both existing and new industrial customers to motivate the installation of energy efficient measures and to promote participation in demand management.

#### **Discussion:**

The Industrial Program Portfolio has been able to provide valuable resources to large facilities such as Energy Managers and enabling Engineering Studies. The Engineering Studies in particular provide a unique opportunity for a customer to complete a comprehensive analysis of an energy intensive process that they would not otherwise be able to undertake. Energy Managers provide customers with a skilled individual whose only role is to assist them with conservation initiatives. To date these Energy Managers have played a key role in customer participation.

Due to the size, scope and long lead time of these Initiatives and associated projects, the Ministerial Directive provides some security for the continuation of the conservation programs and associated compensation for the participant; however the subsequent savings would not be attributed to any LDC target.

Extensive legal documents, complex program structure and lengthy change management have restricted the change and growth of this Portfolio. While the expedited change management has benefited the Commercial Portfolio, the Industrial Portfolio has not seen the same results due to the narrow scope of the process. For 2013, a change to the threshold for small capital projects and a new small capital project agreement are expected to improve the number of projects and savings achieved within PSUI. Likewise, a decision to proceed with natural gas load displacement generation projects will also increase uptake although results may not be counted towards LDC targets due to in-service dates beyond 2014. Looking ahead there is minimal opportunity to make additional valuable changes to the current program suite and have these changes reflected in LDC 2014 results

### **2.2.3.1 Process & Systems Upgrades Initiative (PSUI) (Schedule D-1)**

#### **Initiative Activities/Progress:**

This initiative was promoted through Veridian's website, newspaper advertisements, transit advertisements, local industry magazines, email bulletins, Chamber of Commerce partners, customer newsletters, various program events and site visits.

#### **Additional Comments:**

- Province-wide, approximately 100 engineering study applications have been submitted. This is a strong indication that there is the potential for large projects with corresponding energy savings. Most of these studies have been initiated through the Energy Manager and KAM resources.
- This Initiative is limited by the state of the economy and the ability of a facility to complete large capital upgrades.
- There is typically a long sales cycle for these projects, and then a long project development cycle. As such, limited results are expected to be generated in 2012. The majority of the results are expected in 2013-2014, with a much reduced benefit to cumulative energy savings targets.
- The contract required for PSUI is a lengthy and complicated document. A key to making PSUI successful is a new agreement for 'small' projects which is a simplified with less onerous conditions for the customer.
- To partially address this, changes were made to the ERII Initiative which allowed smaller projects to be directed to the Commercial stream. . Most industrial projects to-date have been submitted as ERII projects due to less onerous contract and M&V requirements.

- A business case was submitted by the Industrial Working Group in July 2012 which would change the upper limit for a small project from 700 MWh to 1 million dollars in incentives. This would allow more projects to be eligible for the new small capital project agreement and increase participant uptake, while still protecting the ratepayer. The small capital project agreement was finalized through change management on August 20, 2013).
- While there is considerable customer interest in on-site Load Displacement (Co-Generation) projects, in 2012 the OPA was accepting waste heat/waste fuel projects only. Natural gas generation projects were on hold awaiting a decision on whether PSUI will fund these types of projects. In June 2013, a decision was made to allow natural gas load displacement generation projects to proceed under PSUI. It is expected that a number of projects will proceed although results may not be counted towards LDC targets due to in-service dates beyond 2014.

### **2.2.3.2      *Monitoring & Targeting Initiative (Schedule D-2)***

#### **Initiative Activities/Progress:**

This initiative was promoted through Veridian's website, newspaper advertisements, transit advertisements, local industry magazines, email bulletins, Chamber of Commerce partners, customer newsletters, various program events and site visits.

#### **Additional Comments:**

- The M&T initiative is targeted at larger customers with the capacity to review the M&T data. This review requires the customer facility to employ an Energy Manager, or a person with equivalent qualifications, which has been a barrier for some customers. As such, a limited number of applications have been received to date.
- The savings target required for this Initiative can present a significant challenge for smaller customers.
- Through the change management process in 2013, changes are being made to ERII to allow smaller facilities to employ M&T systems.

### **2.2.3.3      *Energy Manager Initiative (Schedule D-3)***

**Initiative Activities/Progress:** This initiative was promoted through Veridian's website, newspaper advertisements, transit advertisements, local industry magazines, email bulletins, Chamber of Commerce partners, customer newsletters, various program events and site visits.

Commitments to pursue CDM measures were obtained from a sufficient number of large customers to support applications to the OPA for additional resources to assist these customers with the evaluation of retrofit projects. Applications submitted to the OPA in 2012 have led to the hiring of two Roving Energy Managers and one Embedded Energy Manager in Q2 2013. These resources are expected to drive CDM program uptake during 2013-2014.

**Additional Comments:**

- The Energy Managers have proven to be a popular and useful resource for larger customers. There are approximately 70 Embedded Energy Managers (EEMs) and 25 Roving Energy Managers (REMs) being utilized by customers across the province.
- LDCs that are too small to qualify for their own REM are teaming up with other utilities to hire an REM to be shared by the group of utilities.
- At the beginning, it took longer than expected to set up the energy manager application process and unclear communication resulted in marketing and implementation challenges for many LDCs.
- Some LDCs and Customers are reporting difficulties in hiring capable Roving and Embedded Energy Managers (REM/EEM), in some instances taking up to 7 months to have a resource in place.
- New energy managers require training, time to familiarize with facilities and staff and require time to establish "credibility". Energy Managers started filling their pipeline with projects but few projects were implemented in 2012.
- Delays with processing EEM payments causing LDCs to delay payments to Participants beyond contract requirements.
- There have been a number of studies identified by Energy Managers and they have been able to build capacity and deliver energy saving projects within their respective large commercial/industrial facilities.
- Requirement that 30% of target must come from Non-incented projects is identified as an issue for most REMs, although final targets not due to 2013. Working group has proposed to remove this requirement for REM's only as they are not resident full time at a customer facility to find the non-incented savings.
- A decision on extending funding for EM's is required in 2013 for this important Initiative, which should continue beyond 2014, failing which these expert resources will be lost in favour of full-time employment elsewhere.

**2.2.3.4 Key Account Manager (Schedule D-4)**

**Initiative Activities/Progress:**

---

Veridian Connections Inc. 2012 CDM Annual Report

In 2011, Veridian collaborated with Hydro One, Hydro One Brampton and Kingston Utilities to jointly procure Key Account Manager services. During 2012, a contract was awarded to Union Gas. A Union Gas Key Account Manager has supported delivery of CDM programs to a select group of Veridian's large business customers.

#### **Additional Comments**

- Customers appreciate dealing with a single contact to interface with an LDC, a resource that has both the technical and business background who can communicate easily with the customer and the LDC.
- A decision on extending funding for KAM's is required in 2013 for this important Initiative, which should continue beyond 2014, failing which these expert resources will be lost in favour of full-time employment elsewhere.

#### **2.2.3.5 Demand Response 3 (D-6)**

##### **Initiative Activities/Progress:**

This initiative was promoted through Veridian's website, newspaper advertisements, transit advertisements, local industry magazines, email bulletins, Chamber of Commerce partners, customer newsletters, various program events and site visits. Veridian also engaged a third party to create customized customer reports identifying potential DR3 incentive amounts. The reports were used as a sales tool.

##### **Additional Comments:**

- Until early 2013 customer data was not provided on an individual customer basis due to contractual requirements with the aggregators. This limited LDCs' ability to effectively market to prospective participants and verify savings.
- No program improvements were made in 2012 however, it was accepted that prior participants who renew their DR3 contract within the 2011-2014 term will contribute to LDC targets.
- As of 2013, Aggregators are able to enter into contracts beyond 2014. This has allowed them to offer a more competitive contract price (5 year) than if limited to 1 or 2 year contracts.
- Metering and settlement requirements are expensive and complicated and can reduce customer compensation amounts, and present a barrier to smaller customers.
- Compensation amounts for new contracts and renewals have been reduced from the initial launch of this program (premium zones and 200 hour option have been discontinued) and subsequently there has been a corresponding decrease in renewal revenue.

#### **2.2.4 LOW INCOME INITIATIVE (HOME ASSISTANCE PROGRAM) (Schedule E-1)**

##### **Initiative Activities/Progress:**

Veridian collaborated with local Region of Durham LDCs to jointly secure a delivery agent for the Home Assistance program. Program delivery resources were in place by mid-year. The three participating LDCs jointly held training for Customer Service Representatives as well as collaborated on marketing efforts to launch the program. Meetings were scheduled with municipalities, non-profit, social housing contacts, and United Way agencies to introduce the program. Program information was made available through brochures, and on-line. A news release was issued and a direct mail was sent. Banners were created for events and posters and brochures distributed to United Way agencies, food banks, libraries, churches, community and seniors centres and local legions.

##### **Additional Comments:**

- Awareness of the program amongst social agencies took time to develop. Benefits started to become evident in late 2012.
- Centralized payment processes were not developed in 2011. The payment process was established in 2012.
- The process for enrolling in social housing was complicated and time consuming. This was addressed in late 2012 and is showing benefits in 2013.
- The financial scope, complexity, and customer privacy requirements of this Initiative are challenging for LDCs and most have contracted this program out. This Initiative may benefit from an OPA contracted centralized delivery agent.

#### **2.2.5 PRE-2011 PROGRAMS**

Savings were realized towards LDC's 2011-2014 target through pre-2011 programs. The targeted customer types, objectives, descriptions, and activities of these programs are detailed in Appendix B

# 2012 LDC CDM Results

## 3.1 Participation and Savings

Table 1: Initiative and Program Level Savings by Year

		Table 1: Veridian Connections Inc. Initiative and Program Level Savings by Year (Scenario 1)													
Initiative	Unit	Incremental Activity (new program activity occurring within the specified reporting period)				Net Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Net Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)				Program-to-Date Verified Progress to Target (excludes DR)	
		2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
<b>Consumer Program</b>															
Appliance Retirement	Appliances	918	435			35	27			575,551	177,890			78	2,024,952
Appliance Exchange	Appliances	64	81			7	12			8,088	20,978			14	91,701
HVAC Incentives	Equipment	2,774	2,422			809	942			1,507,825	994,124			1,551	8,855,670
Conservation Instant Coupon Booklet	Items	11,975	727			38	5			447,750	32,893			88	1,889,680
Bi-Annual Retailer Event	Items	20,475	24,958			40	55			691,341	630,039			74	4,055,481
Retailer Covid	Items	0	0			0	0			0	0			0	0
Residential Demand Response (switch/past)	Devices	1,010	8,106			586	1,631			1,465	14,115			0	15,578
Residential Demand Response (IHD)	Devices	0	1,934			0				0					
Residential New Construction	Homes	0	0			0	0			0	0			0	0
<b>Consumer Program Total</b>						<b>1,501</b>	<b>2,252</b>			<b>3,029,800</b>	<b>1,809,992</b>			<b>1,551</b>	<b>17,511,065</b>
<b>Business Program</b>															
Retrofit	Projects	32	109			457	1,215			2,465,618	6,473,559			1,670	29,271,592
Direct Install Lighting	Projects	80	240			85	159			212,500	606,688			202	2,588,876
Building Commissioning	Buildings	0	0			0	0			0	0			0	0
New Construction	Buildings	0	0			0	0			0	0			0	0
Energy Audit	Audits	3	18			0	67			0	327,201			67	981,874
Small Commercial Demand Response	Devices	0	81			0	52			0	295			0	295
Small Commercial Demand Response (IHD)	Devices	0	0			0	0			0	0			0	0
Demand Response 3	Facilities	2	2			108	109			4,255	1,581			0	5,816
<b>Business Program Total</b>						<b>650</b>	<b>1,600</b>			<b>2,680,442</b>	<b>7,408,410</b>			<b>1,939</b>	<b>32,793,253</b>
<b>Industrial Program</b>															
Process & System Upgrades	Projects	0	0			0	0			0	0			0	0
Monitoring & Targeting	Projects	0	0			0	0			0	0			0	0
Energy Manager	Projects	0	0			0	0			0	0			0	0
Retrofit	Projects	55				58				381,825				58	1,525,800
Demand Response 3	Facilities	2	4			314	718			18,405	17,294			0	35,697
<b>Industrial Program Total</b>						<b>57</b>	<b>718</b>			<b>390,228</b>	<b>17,294</b>			<b>58</b>	<b>1,560,997</b>
<b>Home Assistance Program</b>															
Home Assistance Program	Homes	0	4			0	0			0	5,158			0	15,416
<b>Home Assistance Program Total</b>						<b>0</b>	<b>0</b>			<b>0</b>	<b>5,158</b>			<b>0</b>	<b>15,416</b>
<b>Pre-2011 Programs Completed in 2011</b>															
Electricity Retrofit Incentive Program	Projects	28	0			341	0			1,799,948	0			341	7,199,790
High Performance New Construction	Projects	8	0			278	8			1,420,152	2,575			281	5,724,886
Toronto Comprehensive	Projects	0	0			0	0			0	0			0	0
Multifamily Energy Efficiency Rebates	Projects	0	0			0	0			0	0			0	0
LDC Custom Programs	Projects	0	0			0	0			0	0			0	0
<b>Pre-2011 Programs Completed in 2011 Total</b>						<b>619</b>	<b>8</b>			<b>3,220,100</b>	<b>2,575</b>			<b>622</b>	<b>12,924,126</b>
<b>Other</b>															
Program Enabled Savings	Projects	0	0			0	0			0	0			0	0
Time-of-Use Savings	Homes														
<b>Other Total</b>						<b>0</b>	<b>0</b>			<b>0</b>	<b>0</b>			<b>0</b>	<b>0</b>
<b>Adjustments to Previous Year's Verified Results</b>															
							-109				-784,670			-109	-3,198,678
<b>Energy Efficiency Total</b>						<b>2,155</b>	<b>2,064</b>			<b>9,314,968</b>	<b>9,210,127</b>			<b>4,171</b>	<b>64,747,470</b>
<b>Demand Response Total (Scenario 1)</b>						<b>988</b>	<b>2,509</b>			<b>24,102</b>	<b>33,284</b>			<b>0</b>	<b>57,385</b>
<b>DPA-Contracted LDC Portfolio Total (Incl. Adjustments)</b>						<b>3,142</b>	<b>4,464</b>			<b>9,339,069</b>	<b>8,458,741</b>			<b>4,062</b>	<b>61,660,177</b>
Activity & savings for Demand Response resources for each year and quarter represent the savings from all active facilities or devices contracted since January 1.										Due to the limited timeframe of data, which didn't include the summer months, 2012 IHD results have been deemed inconclusive. The IHD line item on the 2012 Annual Report will be left blank Once a full year of data is available (2013 evaluation), and the savings are quantified, 2012		Full OEB Target:		<b>29,050</b>	<b>115,740,000</b>
										% of Full OEB Target Achieved to Date (Scenario 1):		<b>14.0%</b>	<b>54.3%</b>		

**Table 2: Summarized Program Results**

Program	Gross Savings*		Net Savings*		Contribution to Targets	
	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Program-to-Date: Net Annual Peak Demand Savings (kW) in 2014	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (kWh)
Consumer Program Total	2,700	3,111,758	2,252	1,809,922	1,404	16,621,376
Business Program Total	1,995	9,317,588	1,600	7,408,410	1,956	32,956,795
Industrial Program Total	718	17,294	718	17,294	58	1,560,997
Home Assistance Program Total	0	5,139	0.00	5,139	0.00	15,416
Pre-2011 Programs completed in 2012 Total	0	2,575	3	2,575	643	10,511,593
<b>Total OPA Contracted Province-Wide CDM Programs</b>	<b>5,413</b>	<b>12,454,354</b>	<b>4,572</b>	<b>9,243,410</b>	<b>4,062</b>	<b>61,666,177</b>

*\*includes savings from DR programs*

## 3.2 Evaluation

The following evaluation findings were provided to Veridian by the OPA, and speak to each of the initiatives at a province-wide level.

### Consumer Initiatives

#### Bi-Annual Coupons

- 15% lower net savings due to a change in the net-to-gross factors (increased free-ridership, less participant behavior spillover, and less non-participant like spillover)
- Majority of participation, energy, & demand savings are from standard CFLs
- 15% of net savings due to ~73,000 coupons for new LED measures

#### Annual Coupons

- The number of coupons associated with the redemption of 2012 Annual Coupons was 90% lower than 2011 Instant Coupon Booklet. Factors include:
  - Shorter duration (September – December) of availability.
  - In 2012, only online coupons were available, versus in 2011, there were coupon booklets & online coupons.

#### HVAC

- Change in measure & usage patterns caused per unit savings for furnace with ECM dropped from 1,279 annual kWh to 1,139 annual kWh.
- Net-to-gross ratio decreased by 10% from 0.6 in 2011 to 0.5 in 2012 due to an increase in free-ridership related to the furnace with ECM measure.

#### Appliance Retirement

- Participation was 39% lower in 2012 than 2011
- Per unit savings estimates per unit for refrigerators dropped this year by 3.5% based on the in situ metering conducted. This suggests the population of refrigerators collected in 2012 was more efficient than in 2011. Per unit savings estimates per unit for freezers increased this year by 17.5% based on the in situ metering conducted. This suggests the population of freezers collected in 2012 was less efficient than in 2011.

#### Appliance Exchange

- Overall participation increased by 4% in 2012 versus 2011, and dehumidifier participation was up 30% from 2011
- Higher per unit savings for dehumidifiers drove an increase in savings

#### *peaksaverPLUS*

- The event impact for the average residential peaksaver PLUS customer in Ontario is estimated to be 0.41 kW. For the average SMB customer, the impact was 0.46 kW.

- Ex ante values for residential CACs were calculated using 2012 events. Specifically, the estimated impact of 0.49 kW per unit on a 1-in-10 August peak day was used.
- Customer Information Display (CID) impact analysis produced very small and highly uncertain impact estimates.
- The offer of the CID had a positive influence on enrollment and re-enrollment. 20 to 35% of new enrollees said they wouldn't have enrolled without the IHD offer.

## Business Initiatives

### Retrofit

- Prescriptive lighting projects had verified wattage reductions were 15% higher than assumed and verified operating hours were 11% higher than assumed.
- The low realization rate in the engineered measure track can be partially explained by overstated lighting operation hour assumptions claimed on participant applications.
- Net-to-gross ratios for the initiatives were above 75% in 2012

### Small Business Lighting

- Only 12% of site visits had verified annual hours of use within +/-10% of the assumed value.
- The saturation of eligible customers and preferred business types are leading to buildings and applicants that don't necessarily operate during the summer peak period. This is leading to very low realization rates for demand in 2012.
- Due to changing regulations the assumed baseline technology will eventually be phased out. This impacts the persistence of the energy and demand savings over the lifetime of the measure.

## Industrial Initiatives

### Process and Systems Upgrade Initiative

- Energy managers are seen as important drivers of Program Enabled savings projects. 88% of survey respondents indicated that the assistance provided by energy managers was very important or somewhat important to implementing the projects.
- Energy Managers indicated it would be beneficial if they received additional support in terms of training and guides to help them influence the adoption of energy efficiency measures by the participants.
- Program enabled savings projects varied substantially in how well they were documented. More guidance on documentation requirements would be beneficial to all parties.

### DR-3

- 2012 saw improvements in the performance of DR-3 participants resulting higher *ex ante* realization rates, particularly for the industrial participants.

### 3.3 Spending

Table 3: 2012 Spending

Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
<b>Consumer Program</b>					
Appliance Retirement	\$48,652				\$48,652
Appliance Exchange	\$48,137				\$48,137
HVAC Incentives	\$54,502				\$54,502
Conservation Instant Coupon Booklet	\$46,452				\$46,452
Bi-Annual Retailer Event	\$55,248				\$55,248
Retailer Co-op					\$0
Residential Demand Response	\$223,906	\$297,101			\$521,007
New Construction Program					\$0
<b>Business Program</b>					
Efficiency: Equipment Replacement	\$203,377		\$707,755		\$911,132
Direct Installed Lighting	\$81,683	\$63,763	\$220,684		\$366,130
Existing Building Commissioning Incentive	\$65,109				\$65,109
New Construction and Major Renovation Initiative	\$67,598				\$67,598
Energy Audit	\$72,644		\$2,375		\$75,019
Small Commercial Demand Response (part of the Residential program schedule)					\$0
Demand Response 3 (part of the Industrial program schedule)					\$0
<b>Industrial Program</b>					
Process & System Upgrades					\$0
a) preliminary engineering study	\$5,132				\$5,132
b) detailed engineering study	\$5,132				\$5,132
c) program incentive	\$5,132				\$5,132
Monitoring & Targeting	\$5,132				\$5,132
Energy Manager	\$5,132				\$5,132
Key Account Manager ("KAM")	\$5,132				\$5,132
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)					\$0

Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
Demand Response 3	\$30,793				\$30,793
<b>Home Assistance Program</b>					
Home Assistance Program	\$32,378				\$32,378
<b>Pre 2011 Programs</b>					
Electricity Retrofit Incentive Program					\$0
High Performance New Construction					\$0
Toronto Comprehensive					\$0
Multifamily Energy Efficiency Rebates					\$0
Data Centre Incentive Program					\$0
EnWin Green Suites					\$0
<b>Initiatives Not In Market</b>					
Midstream Electronics					\$0
Midstream Pool Equipment					\$0
Demand Service Space Cooling					\$0
Demand Response 1 (Commercial)					\$0
Demand Response 1 (Industrial)	\$30,793				\$30,793
Home Energy Audit Tool					\$0
<b>TOTAL Province-wide CDM PROGRAMS</b>	<b>\$1,092,066</b>	<b>\$360,864</b>	<b>\$930,814</b>	<b>\$0</b>	<b>\$2,383,744</b>

Table 4: Cumulative Spending (2011-2014)

Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
<b>Consumer Program</b>					
Appliance Retirement	\$148,424				\$148,424
Appliance Exchange	\$48,137				\$48,137
HVAC Incentives	\$153,665				\$153,665
Conservation Instant Coupon Booklet	\$144,140				\$144,140
Bi-Annual Retailer Event	\$58,115				\$58,115
Retailer Co-op					\$0
Residential Demand Response	\$297,506	\$297,101			\$594,607
New Construction Program	\$1,899				\$1,899
<b>Business Program</b>					
Efficiency: Equipment Replacement	\$341,831		\$839,117		\$1,180,948
Direct Installed Lighting	\$136,107	\$70,378	\$243,315		\$449,800
Existing Building Commissioning Incentive	\$101,041				\$101,041
New Construction and Major Renovation Initiative	\$105,586				\$105,586
Energy Audit	\$110,003		\$6,275		\$116,278
Small Commercial Demand Response (part of the Residential program schedule)					\$0
Demand Response 3 (part of the Industrial program schedule)					\$0
<b>Industrial Program</b>					
Process & System Upgrades					\$0
a) preliminary engineering study	\$7,610				\$7,610
b) detailed engineering study	\$7,610				\$7,610
c) program incentive	\$7,610				\$7,610
Monitoring & Targeting	\$7,610				\$7,610
Energy Manager	\$7,610				\$7,610
Key Account Manager ("KAM")	\$7,610				\$7,610
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)					\$0
Demand Response 3	\$45,658				\$45,658

Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
<b>Home Assistance Program</b>					
Home Assistance Program	\$39,255				\$39,255
<b>Pre 2011 Programs</b>					
Electricity Retrofit Incentive Program					\$0
High Performance New Construction					\$0
Toronto Comprehensive					\$0
Multifamily Energy Efficiency Rebates					\$0
Data Centre Incentive Program					\$0
EnWin Green Suites					\$0
<b>Initiatives Not In Market</b>					
Midstream Electronics					\$0
Midstream Pool Equipment					\$0
Demand Service Space Cooling					\$0
Demand Response 1 (Commercial)					\$0
Demand Response 1 (Industrial)	\$45,658				\$45,658
Home Energy Audit Tool					\$0
<b>TOTAL Province-wide CDM PROGRAMS</b>	<b>\$1,822,682</b>	<b>\$367,479</b>	<b>\$1,088,707</b>	<b>\$0</b>	<b>\$3,278,868</b>

## 4 Combined CDM Reporting Elements

### 4.1 Progress Towards CDM Targets

#### CDM Targets:

Veridian's CDM targets require achievement of 115.74 GWh of energy savings and 29.05 MW of summer peak demand savings, over the period of January 1, 2011 to December 31, 2014.

CDM targets were established at the provincial level and allocated to distributors based on each LDC's share of total annual energy consumption, by customer account type, and contribution to system peak demand. By using this methodology, the targets may not accurately reflect the true CDM market potential within each distributor's service area.

The CDM targets assigned to LDCs include projected savings related to TOU rates. TOU-related targets comprise more than 23% of Veridian's demand reduction target. This level of reduction is based on an OPA commissioned study that contemplated a 3-to-1 on-peak to off-peak TOU price ratio, as well as off-peak pricing that commences at 9pm. Both of these assumptions do not reflect the current status of the Ontario market, in which the price ratio is 1.8 and the off-price pricing begins at 7pm.

#### Demand Savings:

Table 5 presents Veridian's verified net demand savings for 2011 and 2012. All savings relate to the delivery of OPA province-wide programs. They do not include savings achieved due to smart meter and TOU rate deployment, as these results have not yet been made available by the OPA. The projection of savings for the period of 2012 to 2014 assumes that demand response resources have a persistence of one year.

Table 5: Net Peak Demand Savings at the End User Level (MW)

Implementation Period	Annual (MW)			
	2011	2012	2013	2014
2011 – Verified by OPA	3.1	2.2	2.1	2.1
2012 – Verified by OPA		4.5	2.0	2.0
2013				
2014				
Verified Net Annual Peak Demand Savings in 2014:				4.1
Veridian 2014 Annual CDM Capacity Target:				29.05
Verified Portion of Peak Demand Savings Target Achieved (%):				14.0%

**Energy Savings:**

Table 6 presents Veridian's verified net energy savings for 2011 and 2012. All savings relate to the delivery of OPA province-wide programs. They do not include savings achieved due to smart meter and TOU rate deployment, as these results have not yet been made available by the OPA.

**Table 6: Net Energy Savings at the End-User Level (GWh)**

Implementation Period	Annual (GWh)				Cumulative (GWh)
	2011	2012	2013	2014	2011-2014
2011 – Verified by OPA	9.3	9.3	9.3	9.2	37.2
2012 – Verified by OPA		8.5	8.4	8.4	24.5
2013					
2014					
Verified Net Cumulative Energy Savings 2011-2014:					61.7
Veridian 2011-2014 Cumulative CDM Energy Target:					115.7
Verified Portion of Cumulative Energy Target Achieved (%):					53.3%

## 4.2 Variance from Strategy

Veridian's 2011-14 CDM Strategy projected that delivery of OPA-Contracted Province-Wide CDM Programs would enable it to meet approximately 74% of its demand reduction target and 88% of its electricity consumption target. The Strategy anticipated that the target-to-savings shortfalls might be closed once further clarity was provided on the expected contributions of TOU rates. However, as of this time, Veridian has not been provided with further information to assist it in projecting CDM savings related to TOU pricing.

Table 7 presents Veridian's net demand savings as of the end of 2012 at the program level, compared to that stated within its CDM Strategy. The actual savings include demand response resources in place at the end of 2012.

**Table 7: 2011-2012 Net Peak Demand Savings by Program Compared to CDM Strategy Projections**

CDM Program	Projected Savings in Strategy (MW)	Actual Savings (MW)
OPA Consumer Program	3.01	3.04
OPA Commercial & Institutional Program	4.39	2.16
OPA Industrial Program	2.02	0.78
OPA Home Assistance Program	N/A	0.00
Smart Meters/Time-of-Use	N/A	N/A
Pre-2011 Programs	N/A	0.64
<b>Total Annual Reduction</b>	<b>9.42</b>	<b>6.62</b>
<b>% of Proposed Target (29.05MW)</b>	<b>32.4%</b>	<b>22.8%</b>

Table 8 presents Veridian’s net energy savings for 2011 and 2012 at the program level, compared to that stated within its CDM Strategy.

**Table 8: 2011-2012 Net Energy Savings by Program Compared to CDM Strategy Projections**

CDM Program	Projected Savings in Strategy (GWh)	Actual Savings (GWh)
OPA Consumer Program	11.89	7.42
OPA Commercial & Institutional Program	15.14	12.84
OPA Industrial Program	2.88	0.78
OPA Home Assistance Program	N/A	0.01
Smart Meters/Time-of-Use	N/A	N/A
Pre-2011 Programs	N/A	5.25
<b>Total Annual Reduction</b>	<b>29.91</b>	<b>26.30</b>
<b>% of Proposed Target (115.74 GWh)</b>	<b>25.8%</b>	<b>22.7%</b>

As shown, Veridian is slightly behind the level of 2011-12 energy savings set out in its Strategy. There is a more significant shortfall in the level of demand reduction achievements.

As detailed in its 2011 annual CDM report, Veridian’s Strategy contemplated the pursuit of further Board-approved CDM programs to augment its results. However, such opportunities were limited when the Board introduced its CDM Guidelines, which clarify the types of program features that constitute duplication of OPA-Contracted Province-Wide CDM Programs. Due to the relatively broad scope of the OPA-Contracted Province-Wide CDM Programs and the restrictions on duplication, Veridian reported that it would increase its reliance on OPA-Contracted Province-Wide Programs as it worked towards its targets.

Veridian has made significant efforts to fully leverage OPA CDM program offerings, and has supported the expansion and augmentation of the OPA’s menu of program initiatives. For example:

- A partnership with an energy services provider was established to support that firm’s bid for delivery of an OPA residential social benchmarking pilot program in Veridian’s service area. The proposal was filed with the OPA in on November 28, 2012, in response to a call for proposals. As of the time of this report, the OPA has not formally announced contract awards under its competitive procurement process.
- Veridian representatives continued to serve on three important industry working groups that worked to drive improvements to the OPA programs. These include the EDA’s CDM Caucus, and both the Consumer and Business program working groups.

- Commitments to pursue CDM measures were obtained from a sufficient number of large customers to support applications to the OPA for additional resources to assist these customers with the evaluation of retrofit projects. Applications submitted to the OPA in 2012 have led to the hiring of two Roving Energy Managers and one Embedded Energy Manager in Q2 2013. These resources are expected to drive CDM program uptake during 2013-2014.

Veridian remains committed to executing its current Strategy of fully utilizing all current and future OPA CDM programs as it pursues its 2014 targets.

### **4.3 Outlook to 2014 and Strategy Modifications**

Attainment of Veridian's 2014 targets represents a significant challenge. This is particularly true for the demand reduction target.

The challenge of meeting targets has been exacerbated by the loss of CDM potential within the business operations of some of Veridian's largest customers. During 2013, Veridian experienced a decline in the number of customers classified as Large Use (>5 MW). The number of customers in this customer class declined from five to three, with one of the reductions due to the complete closure of a large manufacturing facility. The closure had been announced in 2012.

As stated in Section 5.1 of this report, Veridian remains committed to its current Strategy of leveraging all current and further OPA CDM programs to support attainment of its targets. A particular emphasis will be placed on its large commercial, industrial and institutional customers, where the largest potential resides. It will also continue to support the refinement and expansion of OPA CDM programs that deliver value to customers and contribute to Veridian's 2014 targets.

## **5 Conclusion**

Over the course of 2011 and 2012, Veridian achieved 4.1 MW in peak demand savings and 61.7 GWh in energy savings, representing 22.6% its 2014 energy reduction targets and 53.3% of its demand reduction target. These results reflect a considerable effort expended by Veridian, in cooperation with other LDCs, customers, channel partners and stakeholders, to overcome many operational and structural issues that limited program effectiveness across all market sectors. This achievement is a success and the relationships built within the 2011-2014 CDM program term will aid results in a subsequent CDM term.

However, despite continuing improvements to existing programs, Veridian faces challenges in the attainment of its CDM targets. The challenge in meeting the demand reduction target is particularly acute. Progress toward targets has been hampered by a number of factors including 1) delays in the introduction of province wide CDM programs in 2011 and 2012, 2) structural and operational hurdles experienced as Ontario's 2011-14 CDM framework was implemented, 3) the closure of a large customer and the related loss of CDM potential, and 4) lack of LDC influence on TOU pricing and related CDM savings.

While there is limited time to make significant changes to the current program portfolios and have these changes reflected in LDC 2014 results, new and improved initiatives will continue to serve our industry and consumers during the post 2014 CDM framework.

## Appendix A: Initiative Descriptions

### Residential Program

#### APPLIANCE RETIREMENT INITIATIVE (Exhibit D)

**Target Customer Type(s):** Residential Customers

**Initiative Frequency:** Year round

**Objectives:** Achieve energy and demand savings by permanently decommissioning certain older, inefficient refrigeration appliances.

**Description:** This is an energy efficiency Initiative that offers individuals and businesses free pick-up and decommissioning of old large refrigerators and freezers. Window air conditioners and portable dehumidifiers will also be picked up if a refrigerator or a freezer is being collected.

**Targeted End Uses:** Large refrigerators, large freezers, window air conditioners and portable dehumidifiers.

**Delivery:** OPA centrally contracts for the province-wide marketing, call centre, appliance pick-up and decommissioning process. LDC's provides local marketing and coordination with municipal pick-up where available.

Additional detail is available:

- Schedule B-1, Exhibit D
- SaveONenergy website <https://saveonenergy.ca/Consumer/Programs/Appliance-Retirement.aspx>

#### APPLIANCE EXCHANGE INITIATIVE (Exhibit E)

**Target Customer Type(s):** Residential Customers

**Initiative Frequency:** Spring and Fall

**Objective:** The objective of this Initiative is to remove and permanently decommission older, inefficient window air conditioners and portable dehumidifiers that are in Ontario.

**Description:** This Initiative involves appliance exchange events. Exchange events are held at local retail locations and customers are encouraged to bring in their old room air conditioners (AC) and dehumidifiers in exchange for coupons/discounts towards the purchase of new energy efficient equipment.

**Targeted End Uses:** Window air conditioners and portable dehumidifiers

**Delivery:** OPA contracts with participating retailers for collection of eligible units. LDCs provide local marketing.

Additional detail is available:

- Schedule B-1, Exhibit C
- SaveONenergy website <https://saveonenergy.ca/Consumer.aspx>

#### HVAC INCENTIVES INITIATIVE (Exhibit B)

**Target Customer Type(s):** Residential Customers

**Initiative Frequency:** Year round

**Objective:** The objective of this Initiative is to encourage the replacement of existing heating systems with high efficiency furnaces equipped with Electronically Commutated Motors (ECM), and to replace existing central air conditioners with ENERGY STAR qualified systems and products.

**Description:** This is an energy efficiency Initiative that provides rebates for the replacement of old heating or cooling systems with high efficiency furnaces (equipped with ECM) and Energy Star qualified central air conditioners by approved Heating, Refrigeration, and Air Conditioning Institute (HRAI) qualified contractors.

**Targeted End Uses:** Central air conditioners and furnaces

**Delivery:** OPA contracts centrally for delivery of the program. LDCs provide local marketing and encourage local contractors to participate in the Initiative.

Additional detail is available:

- Schedule B-1, Exhibit B
- SaveONenergy website <https://saveonenergy.ca/Consumer.aspx>

#### CONSERVATION INSTANT COUPON INITIATIVE (Exhibit A)

**Target Customer Type(s):** Residential Customers

**Initiative Frequency:** Year round

**Objective:** The objective of this Initiative is to encourage households to purchase energy efficient products by offering discounts.

**Description:** This Initiative provides customers with year round coupons. The coupons offer instant rebates towards the purchase of a variety of low cost, easy to install energy efficient measures and can be

redeemed at participating retailers. Booklets were directly mailed to customers and were also available at point-of-purchase. Downloadable coupons were also available at [www.saveoneenergy.ca](http://www.saveoneenergy.ca).

**Targeted End Uses:** ENERGY STAR® qualified Standard Compact Fluorescent Lights (“CFLs”), ENERGY STAR® qualified Light Fixtures lighting control products, weather-stripping, hot water pipe wrap, electric water heater blanket, heavy duty plug-in Timers, Advanced power bars, clothesline, baseboard programmable thermostats.

**Delivery:** The OPA develops the electronic version of the coupons and posts them online for download. Three LDC specific coupons were made available for local marketing and utilization by LDCs. The OPA enters into agreements with retailers to honour the coupons.

Additional detail is available:

- Schedule B-1, Exhibit A
- SaveONenergy website <https://saveonenergy.ca/Consumer.aspx>

#### BI-ANNUAL RETAILER EVENT INITIATIVE (Exhibit C)

**Target Customer Type(s):** Residential Customers

**Initiative Frequency:** Bi-annual events

**Objective:** The objective of this Initiative is to provide instant point of purchase discounts to individuals at participating retailers for a variety of energy efficient products.

**Description:** Twice a year (Spring and Fall), participating retailers host month-long rebate events. During the months of April and October, customers are encouraged to visit participating retailers where they can find coupons redeemable for instant rebates towards a variety of low cost, easy to install energy efficient measures.

**Targeted End Uses:** As per the Conservation Instant Coupon Initiative

**Delivery:** The OPA enters into arrangements with participating retailers to promote the discounted products, and to post and honour related coupons. LDCs also refer retailers to the OPA and market this initiative locally.

Additional detail is available:

- Schedule B-1, Exhibit C
- SaveONenergy website <https://saveonenergy.ca/Consumer.aspx>

#### RETAILER CO-OP

**Target Customer Type(s):** Residential Customers

**Initiative Frequency:** Year Round

**Objective:** Hold promotional events to encourage customers to purchase energy efficiency measures (and go above-and-beyond the traditional Bi-Annual Coupon Events).

**Description:** The Retailer Co-op Initiative provides LDCs with the opportunity to work with retailers in their service area by holding special events at retail locations. These events are typically special promotions that encourage customers to purchase energy efficiency measures (and go above-and-beyond the traditional Bi-Annual Coupon Events).

**Targeted End Uses:** As per the Conservation Instant Coupon Initiative

**Delivery:** Retailers apply to the OPA for co-op funding to run special promotions that promote energy efficiency to customers in their stores. LDCs can refer retailers to the OPA. The OPA provides each LDC with a list of retailers who have qualified for Co-Op Funding as well as details of the proposed special events.

#### NEW CONSTRUCTION PROGRAM (Schedule B-2)

**Target Customer Type(s):** Residential Customers

**Initiative Frequency:** Year round

**Objective:** The objective of this Initiative is to provide incentives to participants for the purpose of promoting the construction of energy efficient residential homes in the Province of Ontario.

**Description:** This is an energy efficiency Initiative that provides incentives to homebuilders for constructing new homes that are efficient, smart, and integrated (applicable to new single family dwellings). Incentives are provided in two key categories as follows:

- Incentives for homebuilders who install electricity efficiency measures as determined by a prescriptive list or via a custom option.
- Incentives for homebuilders who meet or exceed aggressive efficiency standards using the EnerGuide performance rating system.

**Targeted End Uses:** All off switch, ECM motors, ENERGY STAR qualified central a/c, lighting control products, lighting fixtures, Energuide 83 whole home, energuide 85 whole homes

**Delivery:** Local engagement of builders will be the responsibility of the LDC and will be supported by OPA air coverage driving builders to their LDC for additional information.

Additional detail is available:

- Schedule B-1, Exhibit C
- SaveONenergy website <https://saveonenergy.ca/Consumer.aspx>

#### RESIDENTIAL DEMAND RESPONSE PROGRAM (Schedule B-3)

**Target Customer Type(s):** Residential and Small Commercial Customers

**Initiative Frequency:** Year round

**Objective:** The objectives of this Initiative are to enhance the reliability of the IESO-controlled grid by accessing and aggregating specified residential and small commercial end uses for the purpose of load reduction, increasing consumer awareness of the importance of reducing summer demand and providing consumers their current electricity consumption and associated costs.

**Description:** *In peaksaverPLUS™* participants are eligible to receive a free programmable thermostat or switch, including installation. Participants also receive access to price and real-time consumption information on an In Home Display (IHD).

**Targeted End Uses:** central air conditioning, electric hot water heaters and pool pumps

**Delivery:** LDC's recruit customers and procure technology

Additional detail is available:

- Schedule B-1, Exhibit C
- SaveONenergy website <https://saveonenergy.ca/Consumer.aspx>

## C&I Program

#### **EFFICIENCY: EQUIPMENT REPLACEMENT INCENTIVE (ERII) (Schedule C-2)**

**Target Customer Type(s):** Commercial, Institutional, Agricultural and Industrial Customers

**Initiative Frequency:** Year round

**Objective:** The objective of this Initiative is to offer incentives to non-residential distribution customers to achieve reductions in electricity demand and consumption by upgrading to more energy efficient equipment for lighting, space cooling, ventilation and other measures.

**Description:** The Equipment Replacement Incentive Initiative (ERII) offers financial incentives to customers for the upgrade of existing equipment to energy efficient equipment. Upgrade projects can be classified into either: 1) prescriptive projects where prescribed measures replace associated required base

case equipment; 2) engineered projects where energy and demand savings and incentives are calculated for associated measures; or 3) custom projects for other energy efficiency upgrades.

**Targeted End Uses:** lighting, space cooling, ventilation and other measures

**Delivery:** LDC delivered.

Additional detail is available:

- Schedule C-2
- SaveONenergy website <https://saveonenergy.ca/Business/Program-Overviews/Retrofit-for-Commercial.aspx>

#### DIRECT INSTALL INITIATIVE (DIL) (Schedule C-3)

**Target Customer Type(s):** Small Commercial, Institutional, Agricultural facilities and multi-family buildings

**Initiative Frequency:** Year round

**Objective:** The objective of this Initiative is to offer a free installation of eligible lighting and water heating measures of up to \$1,000 to eligible owners and tenants of small commercial, institutional and agricultural facilities and multi-family buildings, for the purpose of achieving electricity and peak demand savings.

**Description:** The Direct Installed Lighting Initiative targets customers in the General Service <50kW account category. This Initiative offers turnkey lighting and electric hot water heater measures with a value up to \$1,000 at no cost to qualifying small businesses. In addition, standard prescriptive incentives are available for eligible equipment beyond the initial \$1,000 limit.

**Target End Uses:** Lighting and electric water heating measures

**Delivery:** Participants can enroll directly with the LDC, or would be contacted by the LDC/LDC-designated representative.

Additional detail is available:

- Schedule C-3
- SaveONenergy website <https://saveonenergy.ca/Business.aspx>

#### EXISTING BUILDING COMMISSIONING INCENTIVE INITIATIVE (Schedule C-6)

**Target Customer Type(s):** Commercial, Institutional, and Agricultural Customers

**Initiative Frequency:** Year round

**Objective:** The objective of this Initiative is to offer incentives for optimizing (but not replacing) existing chilled water systems for space cooling in non-residential facilities for the purpose of achieving implementation phase energy savings, implementation phase demand savings, or both.

**Description:** This Initiative offers Participants incentives for the following:

- scoping study phase
- investigation phase
- implementation phase
- hand off/completion phase

**Targeted End Uses:** Chilled water systems for space cooling

**Delivery:** LDC delivered.

Additional detail is available:

- Schedule C-6
- SaveONenergy website <https://saveonenergy.ca/Business/Program-Overviews/Existing-Building-Commissioning.aspx>

#### NEW CONSTRUCTION AND MAJOR RENOVATION INITIATIVE (HPNC) (Schedule C-4)

**Target Customer Type(s):** Commercial, Institutional, Agricultural and Industrial Customers

**Initiative Frequency:** Year round

**Objective:** The objective of this Initiative is to encourage builders/major renovators of commercial, institutional, and industrial buildings (including multi-family buildings and agricultural facilities) to reduce electricity demand and/or consumption by designing and building new buildings with more energy-efficient equipment and systems for lighting, space cooling, ventilation and other Measures.

**Description:** The New Construction initiative provides incentives for new buildings to exceed existing codes and standards for energy efficiency. The initiative uses both a prescriptive and custom approach.

**Targeted End Uses:** New building construction, building modeling, lighting, space cooling, ventilation and other Measures

**Delivery:** LDC delivers to customers and design decision makers.

Additional detail is available:

- Schedule C-4
- SaveONenergy website <https://saveonenergy.ca/Business/Program-Overviews/New-Construction.aspx>

## ENERGY AUDIT INITIATIVE (Schedule C-1)

**Target Customer Type(s):** Commercial, Institutional, Agricultural and Industrial Customers

**Initiative Frequency:** Year round

**Objective:** The objective of this Initiative is to offer incentives to owners and lessees of commercial, institutional, multi-family buildings and agricultural facilities for the purpose of undertaking assessments to identify all possible opportunities to reduce electricity demand and consumption within their buildings or premises.

**Description:** This Initiative provides participants incentives for the completion of energy audits of electricity consuming equipment located in the facility. Energy audits include development of energy baselines, use assessments and performance monitoring and reporting.

**Targeted End Uses:** Various

**Delivery:** LDC delivered.

Additional detail is available:

- Schedule C-1
- SaveONenergy website <https://saveonenergy.ca/Business/Program-Overviews/Audit-Funding.aspx>

## Industrial Program

### PROCESS & SYSTEMS UPGRADES INITIATIVE (PSUI) (Schedule D-1)

**Target Customer Type(s):** Industrial, Commercial, Institutional and Agricultural Customers

**Initiative Frequency:** Year round

**Objectives:** The objectives of this Initiative are to:

- Offer distribution customers capital incentives and enabling initiatives to assist with the implementation of large projects and project portfolios;
- Implement system optimization project in systems which are intrinsically complex and capital intensive; and
- Increase the capability of distribution customers to implement energy management and system optimization projects.

**Description:** PSUI is an energy management Initiative that includes three Initiatives: (preliminary engineering study, detailed engineering study, and project incentive Initiative). The incentives are

available to large distribution connected customers with projects or portfolio projects that are expected to generate at least 350 MWh of annualized electricity savings or, in the case of Micro-Projects, 100 MWh of annualized electricity savings. The capital incentive for this Initiative is the lowest of:

- a) \$200/MWh of annualized electricity savings
- b) 70% of projects costs
- c) A one year pay back

**Targeted End Uses:** Process and systems

**Delivery:** LDC delivered with Key Account Management support, in some cases.

Additional detail is available:

- Schedule D-1
- SaveONenergy website <https://saveonenergy.ca/Business.aspx>

#### MONITORING & TARGETING INITIATIVE (Schedule D-2)

**Target Customer Type(s):** Industrial, Commercial, Institutional and Agricultural Customers

**Initiative Frequency:** Year round

**Objective:** This Initiative offers access to funding for the installation of Monitoring and Targeting systems in order to deliver a minimum savings target at the end of 24 months and sustained for the term of the M&T Agreement.

**Description:** This Initiative offers customers funding for the installation of a Monitoring and Targeting system to help them understand how their energy consumption might be reduced. A facility energy manager, who regularly oversees energy usage, will now be able to use historical energy consumption performance to analyze and set targets.

**Targeted End Uses:** Process and systems

**Delivery:** LDC delivered with Key Account Management support, in some cases.

Additional detail is available:

- Schedule D-2
- SaveONenergy website <https://saveonenergy.ca/Business.aspx>

#### ENERGY MANAGER INITIATIVE (Schedule D-3)

**Target Customer Type(s):** Industrial, Commercial, Institutional and Agricultural Customers

**Initiative Frequency:** Year round

**Objective:** The objective of this initiative is to provide customers and LDCs the opportunity to access funding for the engagement of energy managers in order to deliver a minimum annual savings target.

**Description:** This Initiative provides customers the opportunity to access funding to engage an on-site, full time embedded energy manager, or an off-site roving energy manager who is engaged by the LDC. The role of the energy manager is to take control of the facility's energy use by monitoring performance, leading awareness programs, and identifying opportunities for energy consumption improvement, and spearheading projects. Participants are funded 80% of the embedded energy manager's salary up to \$100,000 plus 80% of the energy manager's actual reasonable expenses incurred up to \$8,000 per year. Each embedded energy manager has a target of 300 kW/year of energy savings from one or more facilities. LDCs receive funding of up to \$120,000 for a Roving Energy Manager plus \$8,000 for expenses.

**Targeted End Uses:** Process and systems

**Delivery:** LDC delivered with Key Account Management support, in some cases.

Additional detail is available:

- Schedule D-3
- SaveONenergy website <https://saveonenergy.ca/Business.aspx>

#### KEY ACCOUNT MANAGER (KAM) (Schedule D-4)

**Target Customer Type(s):** Industrial, Commercial, Institutional and Agricultural Customers

**Initiative Frequency:** Year round

**Objective:** This initiative offers LDCs the opportunity to access funding for the employment of a KAM in order to support them in fulfilling their obligations related to the PSUI.

**Description:** This Initiative provides LDCs the opportunity to utilize a KAM to assist their customers. The KAM is considered to be a key element in assisting the consumer in overcoming traditional barriers related to energy management and help them achieve savings since the KAM can build relationships and become a significant resource of knowledge to the customer.

**Targeted End Uses:** Process and systems

**Delivery:** LDC delivered

Additional detail is available:

- ScheduleD-4

#### DEMAND RESPONSE 3 (Schedule D-6)

**Target Customer Type(s):** Industrial, Commercial, Institutional and Agricultural Customers

**Initiative Frequency:** Year round

**Objective:** This Initiative provides for Demand Response (“DR”) payments to contracted participants to compensate them for reducing their electricity consumption by a pre-defined amount during a DR event.

**Description:** Demand Response 3 (“DR3”) is a demand response Initiative for commercial and industrial customers, of 50 kW or greater to reduce the amount of power being used during certain periods of the year. The DR3 Initiative is a contractual resource that is an economic alternative to procurement of new generation capacity. DR3 comes with specific contractual obligations requiring participants to reduce their use of electricity relative to a baseline when called upon. This Initiative makes payments for participants to be on standby and payments for the actual electricity reduction provided during a demand response event. Participants are scheduled to be on standby approximately 1,600 hours per calendar year for possible dispatch of up to 100 hours or 200 hours within that year depending on the contract.

**Targeted End Uses:** Commercial and Industrial Operations

**Delivery:** DR3 is delivered by Demand Response Providers (“DRPs”), under contract to the OPA. The OPA administers contracts with all DRPs and Direct Participants (who provide in excess of 5 MW of demand response capacity). OPA provides administration including settlement, measurement and verification, and dispatch. LDCs are responsible for local customer outreach and marketing efforts.

Additional detail is available:

- Schedule D-6
- SaveONenergy website <https://saveonenergy.ca/Business.aspx>

It is noted that while the Schedule for this Initiative was not posted until May 2011, the Aggregators reported that they were able to enroll customers as of January 2011.

## Home Assistance Program

#### LOW INCOME INITIATIVE (Schedule E)

**Target Customer Type(s):** Income Qualified Residential Customers

**Initiative Frequency:** Year Round

**Objective:** The objective of this Initiative is to offer free installation of energy efficiency measures to income qualified households for the purpose of achieving electricity and peak demand savings.

**Description:** This is a turnkey Initiative for income qualified customers. It offers residents the opportunity to take advantage of free installation of energy efficient measures that improve the comfort of their home, increase efficiency, and help them save money. All eligible customers receive a Basic and Extended Measures Audit, while customers with electric heat also receive a Weatherization Audit. The Initiative is designed to coordinate efforts with gas utilities.

**Targeted End Uses:** End use measures based on results of audit (i.e. compact fluorescent light bulbs)

**Delivery:** LDC delivered.

Additional detail is available:

- Schedule E

## **Appendix B: Pre-2011 Programs**

### **ELECTRICITY RETROFIT INCENTIVE PROGRAM**

**Target Customer Type(s):** Commercial, Institutional, and Agricultural Customers

**Initiative Frequency:** Year Round

**Objective:** The objective of this Initiative is to offer incentives to non-residential distribution customers to achieve reductions in electricity demand and consumption by upgrading to more energy efficient equipment for lighting, space cooling, ventilation and other measures.

**Description:** The Equipment Replacement Incentive Program (ERIP) offered financial incentives to customers for the upgrade of existing equipment to energy efficient equipment. This program was available in 2010 and allowed customers up to 11 months following Pre-Approval to complete their projects. As a result, a number of projects Pre-Approved in 2010 were not completed and in-service until 2011. The electricity savings associated with these projects are attributed to 2011.

**Targeted End Uses:** Electricity savings measures

**Delivery:** LDC Delivered

### **HIGH PERFORMANCE NEW CONSTRUCTION**

**Target Customer Type(s):** Commercial, Institutional, and Agricultural Customers

**Initiative Frequency:** Year round

**Objective:** The High Performance New Construction Initiative provided incentives for new buildings to exceed existing codes and standards for energy efficiency. The Initiative uses both a prescriptive and custom approach and was delivered by Enbridge Gas under contract with the OPA (and subcontracted to Union Gas), which ran until December 2010.

**Description:** The objective of this Initiative is to encourage builders of commercial, institutional, and industrial buildings (including multi-family buildings and agricultural facilities) to reduce electricity demand and/or consumption by designing and building new buildings with more energy-efficient equipment and systems for lighting, space cooling, ventilation and other Measures.

**Targeted End Uses:** New Building construction, building modeling, lighting, space cooling, ventilation and other measures

**Delivery:** Through Enbridge Gas (and subcontracted to Union Gas)