

March 31, 2006

Ontario Energy Board
Attention: John Zych, Board Secretary
2300 Yonge Street
Suite 2700
Toronto, Ontario
M4P 1E4

Dear Mr. Zych,

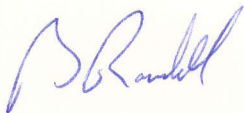
**Re: Peninsula West Utilities Limited
RP-2004-0203/EB-2002-0555**

Enclosed please find the 2005 Annual Conservation & Demand Management Report for Peninsula West Utilities Limited.

This application includes five (5) hard copies & two (2) electronic copies of:

- 2005 OEB Annual Conservation & Demand Management Report
- Appendix A – Evaluation of the CDM Plan
- Appendix B – Discussion of the Program
- Electronic copy of entire report in PDF format
- Electronic copy of the appendices in Excel format

Yours truly,



Brad Randall, P. Eng.
Engineering Manager

BR/jm

March 31, 2006

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

2005 Annual Conservation and Demand Management Report RP-2004-0203 / EB 2002-0555

On December 9, 2004 Niagara Erie Public Power Alliance (NEPPA)¹ members filed their plans to implement conservation and demand management programs. During plan preparations, concerted effort amongst the group to organize and share initiatives when ever possible to share costs and improve the overall consistency of programming.

Some key joint initiatives have included

1. Conserver Joe – Family Education Package
 - a. Handbook
 - b. Bill Inserts
 - c. Newsletters
 - d. Print Ads
 - e. Website
2. RFP process to select qualified commercial/agricultural and industrial auditors
3. Participation in provincial coupon campaigns.
 - a. Lighten Your Electricity Bill
 - b. Cold Water Wash
4. Training and Development
5. LED Traffic Lights

¹ NEPPA comprising Canadian Niagara Power Inc. Grimsby Power Inc., Haldimand County Hydro Inc. Niagara Falls Hydro Inc., Niagara On The Lake Hydro Inc., Norfolk Power Distribution Inc., Peninsula West Utilities Limited, St. Catharines Hydro Utility Services Inc., and Welland Hydro-Electric System Corp., Brant County Power, Brantford Power.

How Did We Do?

Collectively our NEPPA members contributed to annual energy savings of **5,548,693.64** kWh and demand savings of **2,353.73** kW².

Energy reductions occurred from a variety of programming both through joint initiatives and localized community programming.

Opportunities

As we develop a conservation culture in Ontario we must continue to balance the need for short-term results while fostering a long-term conservation attitude among the citizens and businesses in the province. The industry must continue to coordinate its efforts to ensure that program delivery is efficient and available to all customers. Our goal should be rapid program deployment and using the LDCs clear channel to market. Clarity regarding the roles of the LDCs, OPA, IESO, etc. would be beneficial in this regard.

Further, clarity on the topics of LDC cost recovery, lost revenues, and criteria for assessing prudence of CDM spending would also be helpful. This will lead to more aggressive applications for second generation funding. At all times, we must strive to minimize bureaucracy wherever possible. For example, the opportunity to determine and agree on effective conservation programs up front should minimize the measurement and verification efforts required to substantiate these same programs at their conclusion.

Our commitment remains firm of remaining an active participant and advocacy of developing and promoting a conservation culture in Ontario.

Regards,



Brad Randall, P. Eng.
Engineering Manager
NEPPA Member

² Energy Saved does not include data from St. Catharine's Hydro as they submitted a joint data statement with the CLD group to share collective results. At time of this report we were still waiting for Fortis and Brantford to report their kWh & kW numbers therefore the numbers shown are incomplete from a complete NEPPA Collective Reporting.

"Providing power for the future"

Peninsula West Utilities Limited

PEN WEST



"Providing power for the future"

Peninsula West Utilities Limited

RP-2004-0203/EB-2002-0555

**2005 OEB Annual
Conservation and Demand
Management Report**

March 31, 2006

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1. Introduction

Peninsula West Utilities Limited (Pen West) provides electrical distribution to approximately 16,000 customers within the Municipalities of Lincoln, Pelham and West Lincoln located on the south shore of Lake Ontario. We have a combination of rural and suburban customers and our service territory covers 544 square kilometers.

In order to develop a Conservation & Demand Management Program we worked collectively with the Niagara Erie Public Power Alliance (NEPPA), which consists of eleven LDC's, to have a regional approach as well as achieve economies of scale by pooling our resources.

The NEPPA group has long been known in the Industry as a leader in facilitating regional understanding of regulatory changes, public safety messaging, co-ordination of training and now conservation and demand management.

Our Conservation and Demand Management (CDM) plan was prepared as a NEPPA initiative. Together we represented 525,000 customers and a total of \$5.5 million dollars of CDM funding. Our primary goal is to leverage common solutions and deliverables to maximize results when ever feasible.

Our plan recognizes the need to deliver safe and reliable electricity, while taking a proactive approach to conservation. 2005 laid the groundwork by getting implementing programs as well as the start of promoting a conservation culture for the long-term throughout our customer base. We will continue in 2006 with localized programs as well as support Government initiatives delivered by the OPA.

The following is a list of proposed C&DM projects and initiatives. It is the intent to extend these programs to September 2007.

Project	Target User	Local/Shared Initiative with NEPPA	Approved Expenditures	Actual Expenditure to Dec. 31, 2005
Co-branded Mass Market Program	Residential & Small Commercial (<50kW)	Development of Conserver Family	\$62,606.43	\$20,106.30
Smart Metering/Prepaid Metering Program	Residential & Small Commercial (<50kW)	NEPPA & OUSM	\$59,582.00	\$3,492.00
Energy Audits Programs	Residential & Small Commercial (<50kW)	Local	\$15,651.60	
Social Housing Programs	Residential – Non-profit & Social Housing	Local	\$12,627.17	
Smart Metering/Interval Metering Programs	Large User, Industrial/General Service & Institution Facilities	Local	\$21,214.20	\$2,763.38
Energy Audits/Feasibility Audits	Large User, Industrial/General Services & Institution Facilities	Local	\$21,214.20	\$795.00
LED Traffic Light Retrofits	Municipalities	Local	\$6,048.86	
Load Management Programs/Load Control Programs	Large User, Industrial/General Service, Institution Facilities & Residential	Local	\$28,285.60	\$4,775.00
Distribution Loss Reduction	LDC programs aimed to benefit all Customer Classes	Local	\$227,230.02	\$4,000.00
Project and Budget Totals			\$454,460.08	\$35,931.68

2. Evaluation of the CDM Plan

Pen West has implemented CDM projects that has effectively reduced 61 kW in demand with annual savings of 164,958 kWh and total project savings over the lifespan of the technology of 1,740,131 kWh.

Appendix A depicts our overall CDM portfolio summarizing both programs with qualitative and quantitative results. Our overall TRC value is \$40,032 with total spending of \$20,901. We have opted to not project TRC calculations for projects not completed by December 31, 2005.

Some programs are not designed to have specific quantifiable energy savings but are nevertheless effective and important in our view. Examples of this second category of program include:

- Educational components like the “Conserver Family” information
- Active participation in the implementation study of smart meters for low volume customers in Ontario
- Staff development and education in CDM

3. Discussion of the Programs

A summary of our CDM initiatives is listed below and includes completed as well as started in 2005 projects. Appendix B included details on the programs with TRC values.

Completed Projects

Lighten Your Electricity Bill

TRC - \$ 40,032.00

Timeline – October 31, 2005 to December 31, 2005

A coupon campaign was offered to our customers between October 1 to December 31, 2005. This campaign gave our customers the opportunity to purchase energy efficient products at Canadian Tire at a discounted price. The campaign was a joint effort between NEPPA members and other LDCs across the province.

All our residential customers received their Lighten Your Electricity Bill coupon via a special unaddressed package containing, Conserver Joe Pamphlet and a coupon for Cold Water Wash Tide, a conservation letter from our President as well as billing stuffers. Approximately 15,000 packages were mailed to both our individually metered and bulk metered residential customers.

We found the most popular products purchased throughout the campaign were LED lights as well as compact fluorescent bulbs.

Our specific results were as follows:

LED Lights	50.0%
CFL	40.0%
Programmable Thermostats	4.5%
Timers	4.5%
Ceiling Fans	1.0%

We were expecting an approximate response rate of 3% from our customers and were pleased to see that 7% of our customer base responded to the offering. We had 1010 conserving energy products purchased.

Ongoing Projects – Initiated in 2005

Cold Water Wash

TRC – to be provided with 2006 OEB Annual Report

Timeline – October 1, 2005 – March 31, 2006

Pen West, along with other NEPPA members and LDCs across the province, supported and promoted the use of cold water to wash clothes. In partnership with Proctor and Gamble, we distributed 15,000 coupons.

We are expecting participation results in 2006 between 2-4%. It should be noted that our results will be based on percentage of our customer base rather than only specifically our customers. Last minute program preparation did not provide to specific LDC identification for processing purposes.

Conserver Joe Media Kit

TRC - Qualitative

Timeline – Ongoing

In partnership with the NEPPA group, we developed a diversified customer education package referred to as our media kit. The media kit is built around Conserver Joe and his family to promote an approach with each family member contributing their own personal touch to encourage and share conservation values with each other.

We know that changing our consumer's habits to sustain ongoing support and belief in conservation would take the resources of the working folks, as well as the push and enthusiasm of our youth. The media kit was developed with the knowledge that the product could be further expanded including; for example, interactive youth website, school educational programs, updates on new technology and specific programming messaging.

To assist in local use of the Conserver Family, Product Use guidelines have been developed to keep our Conserver Family used in a consistent manner.

Conserver Joe and his family will be making appearances in various media as follows.

- **Conservation Handbook** – advises residential customers how to seasonally tune up their home to optimize energy use.
- **Newsletter** – a tabloid designed to share the success stories across LDCs utilizing the Conserver Joe.
- **Bill Inserts** – Initially 10 bill inserts have been developed each sharing a single conservation message. All four family members share a tips on saving energy.
- **Website** – www.conserverjoe.com – the website was developed to create a consistent message and branding. All NEPPA participants are able to use the website links.
- **Print Ads** – a selection of print ads have been developed for easy and quick circulation.

Peninsula West Utilities Limited in conjunction with other NEPPA members, embarked on a mass mailing of the Conservation Handbook in a specially marked unaddressed envelope to all residential households in the Pen West service territory, including any bulk metered customers. Also included in the mass mailer was the Lighten Your Electricity Bill coupon, Cold Water Wash coupon from Proctor and Gamble, billing inserts as they were not compatible with our billing stuffer and a letter from the President.

Training / Education Seminars

TRC- Qualitative

Timeline – Ongoing

During 2005 Pen West participating in some staff training to understand the application of the Total Resource Cost (TRC) calculations that included a generic seminar delivered by Seeline as well as a purchase of a TRC calculator tool from Enerspectrum.

We also hosted an e-meter-data seminar for our large use customers explaining how their interval meter works and their ability to access their meter data in detail helping them track costs and consumption.

Administrative

TRC – Qualitative

Timeline – Ongoing

General administrative costs to cover our cost to participate in the Ontario Caucus Webinars, meeting expenses and media costs for CDM plan notification. Administrative funds are not directly attributed to any one program, but rather a general expense to cover our cost to participate.

Voltage Conversion at Various Locations - 4 & 8 kV to 27.6 kV

TRC - to be provided with 2006 OEB Annual Report

Timeline – December 2005 – November 2006

Permanent improvements to our overall loss factor will benefit all our customers. Pen West still has several areas that can and should be converted to a higher distribution voltage. There are opportunities to change sections of the distribution system from 4 kV & 8kV to 27.6kV. A conversion to this higher primary voltage will reduce line losses, in turn providing overall benefits to our customer base.

These conversions also provide us the opportunity to take older (high loss) transformers out of service and replace them with more efficient models built to modern standards. This is the first step in the process of decommissioning aged substation transformers and eliminating their associated losses.

The conversion areas covered by this work include a substantial area surrounding Caistor Centre, Fonthill and Jordan Harbour. Work in these areas is tentatively planned over the next two years. Other partial circuits will be converted as various line extension projects proceed.

Line Loss Improvements

TRC - to be provided with 2006 OEB Annual Report

Timeline – December 2005 – November 2006

A number of projects have been launched to improve overall distribution system efficiency. These include; a study on our rural distribution feeders to measure voltage quality; conductor upgrades to optimize loading requirements; an analysis of our distribution loading and a review of current automation technology to alter tap settings within distribution transformer stations. Results from each of these initiatives should improve the quality of voltage delivered to the customer and allow us to minimize system losses.

Implementation of the recommendations from each study is underway. Reconfiguration or decommissioning of some of our existing feeders may result. Completion is anticipated before year end. In addition to these plans, automated monitoring of the system has begun to be able to efficiently react and re-configure the network on a real-time basis.

Smart Metering – Low Volume Customers

TRC - Qualitative

Timeline – Ongoing

Pen West has elected not to directly facilitate a low volume smart metering pilot. However, we have embraced our responsibility to understand and participate in the development of smart metering implementation. We hold an active role on the OUSM working group in all

facets and contribute to a more localized working group with the 11 NEPPA members to explore regional solutions.

All funding attributed to Smart Metering for low volume customers is to support on involvement in both these organizations.

Smart Metering – Large Volume Customers

TRC- To be Determined

Timeline – Ongoing

In response to the smart meter initiative, all of our large customers (>50 kW) who have peak energy demands greater than 200kW will have an interval meter installed. In total 18 customers will be receiving or have received an interval meter. Our Conditions of Service clearly reflect the requirement for all new customers with loading greater than 200 kW to have an interval meter installed.

Each customer is required to connect a phone line to allow remote interrogation. Alternative communication technology is under consideration to make these installations less costly for the customer and the data more accessible.

We also plan to communicate with all interval account customers to encourage monitoring and influence changes in their energy consumption to off-peak timeframes.

4. Lessons Learned

Creating a balanced plan requires a concerted effort to include a mix of localized programming to engage a community commitment and broader initiatives to connect Pen West to a provincial goal and solution.

Our plan was developed with the express desire to improve our overall customer base efficiency and target specific customer segments. Our limited budget of \$454,460 required some creative approaches.

The improvement of our overall loss factor during the conversion of 4 kV and 8kV lines to 27.6 kV benefits our entire customer base. Converting eighteen of our largest customers to interval meters is an important start of initiating other demand response programs. Showing customers when they use the power, with the relative price signal, creates the proper support for ongoing efforts on their part that could lead to onsite capital improvements to reduce their consumption and demand.

Our participation in the Lighten Your Electricity Bill campaign was successful. During our initial budgeting process we expected to see customer participation between a low of 3% and a high of 10%. Final results showed 7% customer participation.

A valued component of our CDM efforts is our joint co-operation with the NEPPA members. It is clear that a consistent message and branding over a larger geographical area improves the success for long term goals of a sustained conservation culture. In 2006 we are exploring the inclusion of other working groups to streamline messaging to customers, learn

from each other and to whenever possible co-ordinate programming to maximize customer results, share in costs and reduce confusion in the market.

In 2006 we will continue to strive towards continued customer education to build on our past efforts and support of specific customer projects. Ongoing efforts to minimize line losses will encompass much of our capital spending.

5. Conclusion

In 2005 we embarked on key initiatives to introduce our customers to our collective goals to commit to changing our energy usage. Our overall conclusion is that our customers are ready and willing to participate in using new products and using energy differently. We will encourage customers to continue to shift their loads into non-peak periods through education. With improvements in communication technology, we hope to begin to provide real-time feedback to customers.

Peninsula West Utilities Limited has benefited by actively participating with the NEPPA group to leverage programming, remaining adaptable to the regulatory changes, maintaining low cost initiatives through bulk purchasing and whenever possible, foster a regional solution for our customers. Limited outside assistance for TRC reporting purposes may be necessary in this upcoming year.

We are committed to local delivery of CDM programming to our customers and look forward to continued cost effective innovative solutions.

Appendix A - Evaluation of the CDM Plan

	Qualitative Only Residential/Commercial <50 kW	Qualitative Only Commercial >200 kW
	\$10,352	\$795

	Total	Residential/Commercial <50 kW	Commercial > 200 kW	Residential Non-Profit	Municipalities	All Customers
Net TRC value (\$):	\$ 40,032.00	\$40,032				
Benefit to cost ratio:	4.57	4.57				
Number of participants or units delivered:	1555	1555				
Total KWh to be saved over the lifecycle of the plan (kWh):	1740131.8	1740131.8				
Total in year kWh saved (kWh):	164958.1	164,958.1				
Total peak demand saved (kW):	61.0	61.0				
Total kWh saved as a percentage of total kWh delivered (%):	0.044%	0.044%				
Peak kW saved as a percentage of LDC peak kW load (%):	0.084%	0.084%				
Gross in year C&DM expenditures (\$):	\$9,754	\$9,754				
Expenditures per KWh saved (\$/kWh)*:	0.059	\$0.0056				
Expenditures per KW saved (\$/kW)**:	159.90	159.90				
Utility discount rate (%):	8.16					

Appendix B - Discussion of the Program

(complete this section for each program)

A. Name of the Program:

Lighten Your Electricity Bill

Description of the program (including intent, design, delivery, partnerships and evaluation):

Residential Coupon Program running from October 1st to December 31, 2005. Peninsula West Utilities partnered with Energysnap, Canadian Tire and 9 NEPPA members to deliver the a residential program that offered energy efficient products at a discounted rate. We joined 32 other LDC's across the province to launch a provincial campaign. Included discounts for the following products - ceiling fans, LED Lights, CFL, Programmable Thermostats, Indoor and Outdoor Timers. We were expecting a 3% response rate from our customer base and are pleased to report an actual of 7%. **NOTE-TRC was not calculated for ceiling fans as there is not enough evidence to support a savings estimate.**

Measure(s):

	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)	Measure 4 (if applicable)
Base case technology:	Incandescent Xmas Lights	Incandescent - 60 watt	Non-programmable Thermostat	No Timer
Efficient technology:	LED Lights	CFL- 15 watt	Programmable Thermostats	In Door and Outdoor Timer
Number of participants or units delivered:	1060	400	47	48
Measure life (years):	30	4	18	20

B. TRC Results:

TRC Benefits (\$):	\$	51,241.74	
TRC Costs (\$):			
	Utility program cost (less incentives):	\$	4,909.79
	Participant cost:	\$	6,300.00
	Total TRC costs:	\$	11,209.79
Net TRC (in year CDN \$):	\$	40,031.95	
Benefit to Cost Ratio (TRC Benefits/TRC Costs):	\$		4.57

C. **Results:** (one or more category may apply)

Conservation Programs:

Demand savings (kW):

Summer		5
Winter		61

Energy saved (kWh):

lifecycle	1740131.782		in year	164,958.10
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Other resources saved:

Natural Gas (m3):		
Other (specify):		

Demand Management Programs:

Controlled load (kW)

Energy shifted On-peak to Mid-peak (kWh):

Energy shifted On-peak to Off-peak (kWh):

Energy shifted Mid-peak to Off-peak (kWh):

Demand Response Programs:

Dispatchable load (kW):

Peak hours dispatched in year (hours):

Power Factor Correction Programs:

Amount of KVar installed (KVar):

Distribution system power factor at beginning of year (%):

Distribution system power factor at end of year (%):

Line Loss Reduction Programs:

Peak load savings (kW):

Energy savings (kWh):	lifecycle	in year
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Distributed Generation and Load Displacement Programs:

Amount of DG installed (kW):

Energy generated (kWh):

Peak energy generated (kWh):

Fuel type:

Other Programs (specify):

Metric (specify):

D. Program Costs*:

Utility direct costs (\$):

Incremental capital:	\$ -
Incremental O&M:	\$ 4,841.73
Incentive:	\$ 4,912.00
Total:	\$ 9,753.73

Utility indirect costs (\$):

Incremental capital:	
Incremental O&M:	
Total:	

Participant costs (\$):

Incremental equipment:	
Incremental O&M:	
Total:	

E. Comments:

LDC direct costs were determined based on the assumption that costs were shared as a percentage of overall sales. Incentive dollars are specific to coupon product.

*Please refer to the TRC Guide for the treatment of equipment cost in the TRC Test.