

A Ratepayer-Funded Ongoing Assistance Program for Ontario

Presentation to OEB Stakeholder Forum

On behalf of:

Low-Income Energy Network (LIEN)

By:

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Public Finance and General Economics

Belmont (MA)

November 6, 2014

Scope of Program (1 of 3)

Question #1: Should OESP provide support to the greatest number of low-income customers or provide support to those low-income customers with greatest need?

- OESP should provide sufficient assistance to meet its objective. The purpose is not simply to distribute money. Assistance is the means to an end, not the end unto itself.
- OESP objectives include (but are not limited to) improving both the effectiveness and efficiency of utility collections from low-income customers; reducing the needed trade-offs between utility bill payments and other household necessities; and generating “social” benefits such as improved health outcomes, improved educational outcomes, improved housing quality, reduced homelessness, and the like.
- OESP benefits that are “too low” result in the expenditure of money without generating either the offsetting cost savings and without achieving program objectives.

Scope of Program (2 of 3)

It is possible to “scale” a percentage of income-based fixed credit program for budget control purposes without facing the choice presented in the OEB question. For example:

- Revising the income eligibility (e.g., Low-Income Measures (LIMs) rather than Low-Income Cut-Off (LICO))
- Placing maximum credit ceilings on benefits
- Changing percentage of income burdens deemed to be “affordable”

Scope of Program (3 of 3): Cost of LIEN's proposed Percentage of Income Fixed Credit program:

Base Year	
Current bill credits	\$32,902,702
Arrearage credit (3-year forgiveness)	\$2,461,042
Sub-total credits	\$35,363,744
Administration (12% of credits)	\$4,243,649
Annual start-up (5 year amortization)	\$353,637
Total	\$39,961,031
Before Tax LICO (2011) as eligibility: 771,030 (StatsCAN data)	

Meeting the Intended Objective (1 of 5)

Question #2: Should OESP best meet its intended objective through a percentage-based credit, a fixed credit that is the same for all participants, or a “customized” fixed credit?

- If sufficient to meet program objectives, both a percentage-based credit and a fixed-credit are highly inefficient tools to use. They pay “too much” to some households in order to pay “enough” to other households.
- A percentage of income fixed-credit program achieves program objectives while serving other important public policy functions.
- A percentage of income fixed-credit program achieves “net back” benefits that percentage-based credits and uniform fixed credits cannot achieve.

Meeting Program Objective (2 of 5)

PECO (electric)	Tiered Discount (4 tiers)		Fixed Credit (POI) /a/	
Shortfall				
R (non-heating)		\$71,714,002		\$67,128,206
RH (heating)		\$5,252,442		\$6,059,603
Total		\$76,966,443		\$73,187,809
Affordability	% Unaffordable	\$ Over Affordable Mean	% Unaffordable	\$ Over Affordable Mean
R (non-heating)	34%	\$504	7%	\$360
RH (heating)	28%	\$764	4%	\$345
/a/ With rolling credit and dollar limit.				

Meeting the Intended Objective (3 of 5)

Net back (the appropriate measure of “cost-effectiveness”):

$$\begin{array}{rcl} & \text{Billed revenue} & \\ \times & \underline{\text{Rate of collection}} & \\ = & \text{Collected revenue} & \\ - & \underline{\text{Cost of collection}} & \\ = & \text{NET BACK} & \end{array}$$

Net Back is evidence-based, not theoretical (see, e.g., Indiana, Colorado) (see, evaluations listed in Appendix B).

Principle: It is better to collect 90% of a \$70 bill (\$63) than it is to collect 60% of a \$100 bill (\$60). Revenues are higher and the cost of collection is lower.

Meeting the Intended Objective: Cost offsets (4 of 5)

Universal Service Savings Offsets (biggest to smallest)	
1	Working capital: current bill
2	Charge-off savings: current bill
3	Avoided disconnections for nonpayment (DNP)
4	Charge-off savings: redeployed collections
5	Avoided revenue lost to vacancies
6	Working capital: non-charged off beginning arrears
7	Working capital: redeployed collections
8	Staff turnover prevention
9	Charge-offs: beginning arrears
10	Increased staff productivity
11	Working capital: charged off beginning arrears
12	Sub-total offsets
13	Savings adjusted for bad debt
Offsets as percent of gross program costs (59%)	
Cost offset included in LIEN proposal: 25% (or roughly one-third that which is expected).	

Meeting the Intended Objective (5 of 5)

A percentage of income-based fixed credit maximizes “price signals” as well as maximizes conservation incentives:

- **Price signals**: To be effective, price signals must not only be sent, but must be capable of being received and acted upon. If a customer can only afford to pay \$60, whether the customer receives a bill for \$90 or for \$110 provides no price signal. Price signals are sent by the bill amount that is subject to payment.
- **Conservation incentives**: Under a percentage of income-based fixed credit program, program participants pay for increased usage and benefit from decreased usage.

Observation: Even without the “fixed credit” program structure, not a single independent third party program evaluation of a low-income program in the 25 – 30 years programs have existed (and been evaluated) has found a systematic increase in consumption in a percentage of income program (see, list of evaluations in Appendix B).

Funding the OESP (1 of 2)

Question #3: Should OESP be funded through a uniform provincial charge or through distribution charges specific to service territory?

- The OESP should be funded through a uniform provincial charge.
- Some small utilities have an insufficient customer base to support a low-income program.
- The purpose of province-wide funding is to make the funding correspond with the need.

Funding the OESP (2 of 2)

Two types of provincial funding structures:

- **Volumetric charge** (uniform charge per kWh all classes)
 - Year 1: Charge per kWh (for 100% BT LICO eligibility): \$0.00034/kWh
 - Year 1: Average annual charge (residential): \$3.10
 - Year 1: Average monthly charge (residential): \$0.26
- **Meters charge** (uniform charge per meter within customer class):
 - Year 1 (residential): \$0.25 / month
 - Year 1 (small general service): \$1.00 / month
 - Year 1 (large general service): \$35.00 / month

NOTE 1: Based on 2013 OEB Annual Yearbook data.

NOTE 2: Future year cost projections based on OEB data shows changes in cost recovery in future years are reasonably small. For example, Year 6 average annual residential cost is \$4.62 (\$0.39/mo).

Summary of Recommendations

- **Question 1**: The question presents a false choice. The program should meet low-income residential affordability needs. Mechanisms exist to “scale” a program scope to greater or lesser budgets.
- **Question 2**: Ontario should adopt a percentage of income-based fixed credit program as described in LIEN’s prior filings.
- **Question 3**: Funding should be provided by all customer classes on a provincial basis, either through a volumetric charge or through a meters charge.

Appendix A:

2013 LIEN Conference Presentation

A Low-Income Energy Affordability Program for Ontario

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Low-Income Energy Network (LIEN) annual conference
March 27, 2013

Overall “philosophy” of Affordability Program

“We, in conjunction with utilities, and social service agencies, have all worked hard to devise ways to [e]nsure that low-income Pennsylvanians have utility services which really are necessities of life as the tragic fire deaths associated with the loss of utility service underlined. . .

“However, for the poorest households with income considerably below the poverty line, existing initiatives do not enable these customers to pay their bills in full and to keep their service. . .Consequently, to address realistically these customers’ problems and to stop repeating a wasteful cycle of consecutive, unrealistic payment agreements that cannot be kept, despite the best of intentions, followed by service termination, then restoration, and then more unrealistic agreements, we believe that new approaches like PECO’s CAP program and the OCA’s proposed EAP program should be tried.”

Pennsylvania Public Utility Commission

Four Objectives for today

- Explain program components.
- Introduce estimate of total program costs.
- Introduce different approaches to cost recovery.
- Introduce program outcomes.

Affordability Program: three components

- TOTAL bill must be affordable:
 - Establish affordable bill for current usage
 - Provide pre-program arrearage forgiveness
- Program administration

Energy efficiency is not excluded. It is separately funded.

Total Program Cost: Summary

- Base Year
 - Total: \$64,136,921
 - Current usage credits (the “shortfall”): 83%
 - Arrearage credits: 5%
 - Administration: 12%
- Factors that affect:
 - Number of participants
 - Affordable burden
 - Price of Electricity

Program cost: Current Bill Credits

- Cost estimation methodology:
 - Standard residential bill – affordable bill = “shortfall”
 - “Shortfall” x number of participants = program costs
- Cost offsets: 25%

Cost estimates: Current usage

Parameters

- Program eligibility:
 - Electric only
 - Eligibility limit: 100% of LICO
 - Benefits only to people who pay own electric bill (76%)
- Affordable burden:
 - Total home energy: 6% of income (has an empirical basis)
 - 4% for electric non-heating
 - 6% for electric heating
- Program participation: 40% (but no hard limit).
 - Some people choose not to participate.
 - Some have bills that are already affordable.
 - Some people are never reached with communication / outreach.

Program cost: Arrearage Credits

- Cost estimation methodology:
 - (Pre-program Arrears – Affordable Copayment) / 3 years = Arrearage credit
 - “Arrearage credit” x Number of participants with arrears > affordable copayment = program costs

Program costs: Arrearage credits

- Program parameters:
 - Pre-program arrears subject to forgiveness (not in-program arrears)
 - When payments (including copayments) are made, one month of arrears forgiven
 - Arrears forgiven over 3 year period
- Copayment affordability parameters:
 - Copayment: electric baseload: 1% of annual income
 - Copayment: electric heating: 2% of annual income

Cost recovery: per kwh vs. per meters

Per kWh: Total program cost / total customer consumption = cost per kWh

Base Year: \$64,136,921

- Cost per kWh: \$0.00055
- Residential average cost (7,200 kWh): \$3.93/year *** \$0.33/month
- Total revenue: \$64,606,823

Per Meter: Total program cost / total number of customers = cost per meter

Base Year: \$64,136,921

- Cost per meter:
 - Residential: \$0.50/month
 - General service (small): \$2.00/month
 - General service (large): \$45.00/month
- Total revenue: \$67,146,462

Program outcomes

- Customer impacts:
 - Improved health outcomes
 - Improved housing stability
 - Decreased forced trade-off (e.g., nutrition)
- Utility outcomes:
 - Improved cash flow / collection of revenue
 - Decreased costs (collection, bad debt, working capital)
 - Improved collections efficiency / effectiveness
- Community outcomes:
 - Improved competitiveness
 - Improved worker productiveness

For more information:

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Appendix B:

List of 3rd Party Evaluations

Low-Income Rate Affordability Assistance: 25 Years of Independent Third Party Program Evaluations

Compiled by:

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August 2014 (2d ed.)

Items for which Electronic Copies Exist	Date Report Published	Jurisdiction of Program Subject to Evaluation	Utility/Program	Consultant Preparing Evaluation Report	Report Title
No Electronic copies	1985	Ohio	State	Tractell, Inc.	A Study of the Commission's Procedural Determination of Customer Payment Options Pursuant to the Investigation into the Long-Term Solutions Concerning Disconnection of Gas and Electric Service in Winter Emergencies.
	1988	Illinois	State	Brenda Griffin	IRAPP: Preliminary Evaluation of the Illinois Residential Affordable Payment Program.
	1989	Montana	State	Thomas Schneider	Evaluation of Ravalli County Percentage of Income Payment Plan (PIPP) Pilot Project.
	1992	Pennsylvania	State	Pennsylvania PUC, Bureau of Consumer Services	Final Report on Investigation into the Control of Uncollectible Balances (Vol. 1 and Vol. 2).

Items for which Electronic Copies Exist	Date Report Published	Jurisdiction of Program Subject to Evaluation	Utility/Program	Consultant Preparing Evaluation Report	Report Title
1.	Dec-87	Rhode Island	State	Nora Barnes	A Study of Client Satisfaction: Rhode Island Percentage of Income Payment Plan
2	Jan-88	Rhode Island	State	Roger Colton	Evaluation of Warwick (Rhode Island) Percentage of Income Payment Plan (PIPP) Demonstration Project
3	1990	National	Non-program	Roger Colton	Client Consumption Patterns within an Income-Based Energy Assistance Program, Journal of Economic Issues, Vol. 24, Issue 4 (1990)
4	Jun-91	Philadelphia	Non-program	Institute for Public Policy Studies, Temple University	An Examination of the Relationship Between Utility Terminations, Housing Abandonment and Homelessness
5	Jan-93	Philadelphia	Philadelphia Gas Works (PGW)	Response Analysis (now Apprise)	Energy Assurance Program Pilot: Year One Report
6	Jan-96	NY	National Fuel Gas	Barakat & Chamberlin	Final Report: Process and Impact Evaluation of National Fuel Gas Distribution's Low-Income Residential Assistance Program

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7	Dec-96	Colorado	PSCO	Steve Brown	Affordable Rate Pilot Project: Report on Two Evaluations of Public Service Company of /Colorado Payment Assistance Programs
8	1997	Wisconsin	Non-program	Ron Grosse	Win-Win Alternatives for Credit and Collection
9	Aug-99	Pennsylvania	National Fuel Gas	Barakat & Chamberlin	Final Evaluation Report: Low-Income Residential Assistance Program
10	Jun-00	Iowa	Non-program	Mercier Associates	Iowa's Cold Winters: LIHEAP Recipient Perspective
11	Feb-02	NY	Niagara Mohawk	Apprise	Low Income Customer Assistance Program: Impact on Payments and Arrearages
12	Jun-02	Penn	PECO	Gil Peach	Customers with Incomes to 50% of the Federal Poverty Level in PECO Energy's Customer Assistance Program

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13	Jun-02	Penn	PGW	Gil Peach	Philadelphia Gas Works Universal Service Programs: Pathways to Compliance.
14	Aug-02	NY	Niagara Mohawk	Apprise	LICAP Program Evaluation: Final Report
15	Jan-03	Oregon	State	quantec	Oregon Energy Assistance Program Evaluation: Final
15A	Apr-03	National	Non-program	NRRI	Where Consumers Go for Help Paying Utility Bills
16	Sep-03	California	State	quantec	Evaluation of California Alternate Rates for Energy (CARE) Program's Outreach and Administrative Practices
17	Oct-03	Penn	Allegheny Power	RETEC Group	Evaluation of LIPURP and Other Allegheny Power Universal Service Programs
18	Oct-03	Penn	Duquesne Light	RETEC Group	Evaluation of CAP and Other Duquesne Light Universal Service Programs

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19	Oct-03	Washington	PacifiCorp	quantec	Final Report: Washington Low-Income Bill Assistance Program: Phase II Impact Analysis
20	Oct-03	Missouri	Missouri Gas Energy	Roger Colton	The Impact of Missouri Gas Energy's Experimental Low-Income Rate (ELIR) on Utility Bill Payments by Low-Income Customers: A Preliminary Assessment
21	Apr-04	National	Non-program	Apprise	National Energy Assistance Survey Report: 2003
22	Jul-04	Penn	Columbia Gas	Melanie Popovich	Columbia Gas of PA, Inc.: Universal Service Program Impact Evaluation
23	Oct-04	Penn	First Energy: Penelec	Gil Peach	Impact Assessment of the First Energy Pennsylvania Universal Service Programs (Pennelec component)
24	Oct-04	Penn	First Energy: Met Ed/Penn Power	Gil Peach	Impact Assessment of the First Energy Pennsylvania Universal Service Programs: Met Ed and Penn Power components)

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25	Nov-04	Penn	TW Phillips	Apprise	TW Phillips Energy Help Fund Program Evaluation: Final Report
26	Nov-04	NV	State	Gil Peach	State Fiscal Year 2003 Evaluation of the NRS 702: Energy Assistance Program and Weatherization Assistance Program
27	Nov-04	Penn	Dominion Peoples	Melanie Popovich	Dominion Peoples Universal Service Program: Impact Evaluation
28	Jan-05	Utah	PacifiCorp	quantec	Utah HELP: Program Evaluation
29	Apr-05	NV	State	Gil Peach	State Fiscal Year 2004 Evaluation of the NRS 702: Energy Assistance Programs and Weatherization Assistance Programs
30	Jun-05	Ohio	Non-program	Triad Research Group	Focus Groups with PIP Participants

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31	Jul-05	National	Non-program	Apprise	LIHEAP Burden Evaluation Study: Final Report
32	Aug-05	Penn	PG Energy	Apprise	PG Energy: Universal Services and Energy Conservation Programs: Final Report
33	Sep-05	National	Non-program	Apprise	National Energy Assistance Survey Report: 2005
34	Nov-05	NJ	JCPL	Apprise	Evaluation of the New Jersey Universal Service Fund: Fresh Start Program: Jersey Power and Light Payment Counseling Program
35	Feb-06	Penn	PGW	Apprise	Philadelphia Gas Works Customer Responsibility Program: Final Evaluation Report
36	Feb-06	Missouri	Empire District Electric	Roger Colton	Experimental Low-Income Program (ELIP): Empire District Electric Company Final Program Evaluation

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37	Apr-06	NJ	NJ BPU	Apprise	Impact Evaluation and Concurrent Process Evaluation of the New Jersey Universal Service Fund: Final Report
38	Apr-06	Penn	PECO	Apprise	PECO Energy Universal Services Program: Final Evaluation Report
39	Apr-06	Penn	PPL Electric	Apprise	PPL Electric Utilities: Winter Relief Assistance Program: Final Evaluation Report
40	May-06	NV	State	Gil Peach	State Fiscal Year 2005 Evaluation of the NRS 702: Energy Assistance Program and Weatherization Assistance Program
41	Oct-06	Penn	PECO	Apprise	PECO Energy Customer Assistance Program for Customers Below 50 Percent of Poverty: Final Evaluation Report
42	May-07	NV	State	Gil Peach	State Fiscal Year 2006 Evaluation of the NRS 702: Energy Assistance Program and Weatherization Assistance Program

Items for which Electronic Copies Exist	Date Report Published	Jurisdiction of Program Subject to Evaluation	Utility/Program	Consultant Preparing Evaluation Report	Report Title
43	May-07	MD	MD PSC	PA Consulting Group	Electric Universal Service Program Evaluation: Final Evaluation Report
44	Jul-07	Indiana	NIPSCO, CGCU, Vectren Energy	Roger Colton	An Outcome Evaluation of Indiana's Low-Income Rate Affordability Programs: 2007 Report
45	Jun-08	National	Non-program	Apprise	2008 Energy Cost Survey
46	Oct-08	Penn	PPL	Apprise	PPL Electric Utilities: Universal Service Programs: Final Evaluation Report
47	Dec-08	National	Non-program	Apprise	National Energy Assistance Survey Report: 2008
48	Apr-09	National	Non-program	Apprise	National Energy Assistance Survey Report: 2009

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49	Aug-09	Indiana	NIPSCO, CGCU, Vectren Energy	Roger Colton	An Outcome Evaluation of Indiana's Low-Income Rate Affordability Programs: 2008/2009 Report
50	Oct-09	Penn	Duquesne Light	AECOM	Evaluation of Duquesne Universal Service Programs
51	Dec-09	IL	State	Apprise	Illinois PIP Program Impact Evaluation: Draft Report
52	Feb-10	National	Non-program	Apprise	LIHEAP Special Study of the 2005 Residential Energy Consumption Survey: Dimensions of Energy Insecurity for Low Income Households: Final Report
53	Jul-10	Penn	Allegheny Power	Apprise	Allegheny Power Universal Service Programs: Final Evaluation Report
54	Aug-10	Penn	Peoples Natural Gas	Melanie Popovich	Peoples: Universal Service Impact Evaluation

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55	Oct-10	Penn	First Energy (Met Ed, Penelec, PennPower)	Gill Peach	2010 Impact Assessment of the First Energy Pennsylvania Universal Service Programs: Metropolitan Edison, Pennsylvania Electric Co., PennPower
56	Nov-10	Penn	Columbia Gas	Melanie Popovich	Columbia Gas: Universal Service Impact Evaluation§
57	Jan-11	NV	State	Gil Peach	SFY 2010 Evaluation: Energy and Weatherization Assistance Programs
58	May-11	Penn	Equitable Gas	Melanie Popovich	Equitable Gas: Universal Service Impact Evaluation
59	Nov-11	NV	State	Gil Peach	SFY 2011 Evaluation: Energy and Weatherization Assistance Programs: Executive Summary
60	Dec-12	NV	State	Gil Peach	SFY 2012 Evaluation: Energy and Weatherization Assistance Programs

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61	Jun-07	Penn	UGI	Melanie Popovich	UGI Utilities Inc.: Universal Service Program Evaluation
62	Aug-06	Penn	NFG	Melanie Popovich	National Fuel Gas Distribution Corporation: Universal Service Program Evaluation
63	Feb-12	CO	Public Service Co. Colorado	Roger Colton	Public Service Company of Colorado Pilot Energy Assistance Program (PEAP) and Electric Assistance Program (EAP): 2011 Final Evaluation Report
64	Mar-12	Mass	State	Roger Colton	Attributes of Massachusetts Gas/Electric "Arrearage Management Programs" (AMP); 2011 Program Year
65	Oct-12	Penn	PECO	Apprise	PECO Energy Universal Services Program: Final Evaluation Report
66	Nov-11	National	Non-program	Apprise	National Energy Assistance Survey Report: 2011

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67	May-91	Kentucky	Louisville Gas & Electric	Roger Colton	The Percentage of Income Payment Plan in Jefferson County, Kentucky: One Alternative to Distributing LIHEAP Benefits
68	Jul-12	Pennsylvania	UGI Utilities	Apprise	UGI Utilities, Inc. (Gas Division), UGI Penn Natural Gas Universal Service Program Final Report