

ENERGY OPTIMIZATION PLAN

March 9, 2009

**Bay City Electric Department
Town Hall Meeting /
Energy Efficiency Expo
Presented by Phil Newton**

Background

- Saving energy costs less than buying power or building new generation
- Good for the environment
- Reduce the need for new generating plants
- Customers may need incentives to choose more efficient products
- Expenditures to benefit all customers classes
- Measure energy not used

Aggressive Schedule

- Legislation signed - October 2008
- MPSC Preliminary Order - December 2008
- Technical Conference - January 2009
- Draft Plan and Public Comments - March 2009
- File Plan with MPSC - April 2009
- Plan Approved by MPSC - June 2009
- Launch Programs – July 2009

Energy Savings Requirement

Sales Year	% Savings	Total Energy MWh	Total Savings MWh
2005-07	0.30%	323,836	972
2007-09	0.50%	323,709	1,618
2008-10	0.75%	323,153	2,424
2009-11	1.00%	322,950	3,229

Maximum Expenditures Calculation

Sales Year	% Spending	Baseline Revenues \$	Maximum Spending
2007	0.75%	\$27,576,997	\$206,827
2008	1.00%	\$30,098,841	\$300,988
2009	1.50%	\$30,915,200	\$463,728
2010	2.00%	\$31,848,000	\$636,960

Energy Optimization Components

- Plan Development
- Implementation
- Evaluation

Plan Development

- Market Assessment – Potential participation for different efficiency programs for different customer groups
- Benefit/Cost Analysis – Evaluate cost effectiveness of each potential program.
- Required Incentives
- Prioritize programs to maximize energy savings versus budget constraints

Implementation - Functions

- Marketing
- Data Tracking
- Trade ally coordination
- Incentive processing services
- Call center
- Quality assurance
- Reports
- Customer Satisfaction

Implementation Strategies

- Self-Directed versus Third-Party
- Partnerships – Economies of Scale
 - Other Utilities
 - Local retailers and contractors
 - Existing weatherization agencies and community organizations

Energy Optimization Program Portfolio

BCEL&P Energy Optimization Program Portfolio

Program Portfolio	USRCT Results	CCE Results	2009		2010		2011		2012	
			Gross First Year kWh Savings	Program Budget	Gross First Year kWh Savings	Program Budget	Gross First Year kWh Savings	Program Budget	Gross First Year kWh Savings	Program Budget
Self-Direct Customers	NA	NA	75,816		134,506					
Low Income Services			31,846	\$20,700	57,346	\$37,275	100,962	\$65,625	136,385	\$88,650
Efficient Lighting			262,797	\$21,754	394,196	\$32,630	591,294	\$59,690	886,941	\$79,535
Refrigerator/Freezer Turn-In & Recycling			141,856	\$19,393	212,784	\$30,147	319,176	\$50,233	478,764	\$77,903
Efficient Appliances/Electronics					26,891	\$12,515	40,337	\$20,394	60,506	\$30,962
Efficient HVAC Equipment					6,050	\$4,305	9,075	\$6,930	13,613	\$10,395
Educational Services			14,573	\$2,070	29,869	\$3,113	29,869	\$3,420	29,869	\$3,503
Pilot/Emerging Technology Programs					24,278	\$3,728	36,355	\$6,563	48,442	\$8,865
Program Savings-2008					16,185	\$2,485	48,473	\$8,750	80,737	\$14,775
Subtotal - Residential Solutions			451,072	\$63,917	767,599	\$126,198	1,175,540	\$221,604	1,735,257	\$324,588
Multi-Family Common-Area Efficiency										
Prescriptive Incentive Program			350,536	\$48,125	556,471	\$76,558	959,914	\$132,063	1,110,620	\$152,797
Custom Incentive Program			79,859	\$11,500	119,789	\$17,250	203,641	\$29,324	254,551	\$36,655
Educational Services			14,573	\$2,070	24,278	\$3,728	36,355	\$6,563	48,442	\$8,865
Pilot/Emerging Technology Programs					16,185	\$2,485	48,473	\$8,750	80,737	\$14,775
Subtotal - Business Solutions			444,968	\$61,695	716,723	\$100,020	1,248,382	\$176,699	1,494,351	\$213,092
Total Program Portfolio			971,856	\$125,612	1,618,828	\$226,218	2,423,923	\$398,304	3,229,608	\$537,680
BCEL&P Program Administration				\$6,900		\$12,425		\$21,875		\$29,550
Evaluation (EM&V)				\$5,520		\$9,940		\$17,500		\$23,640
Subtotal - BCEL&P Admin/Evaluation				\$12,420		\$22,365	0	\$39,375	0	\$53,190

Residential Programs

- Low Income Services
- Efficient Lighting
- Refrigerator/Freezer Trade-in and Recycling
- Efficient Appliances and Electronics
- Efficient Heating and Air Conditioning
- Education Services
- Pilot Emerging Technologies

Commercial & Industrial Programs

- Multi-Family Common Area Programs
- Prescriptive Incentive Programs
- Custom Incentive Programs
- Educational Services
- Pilot Emerging Technologies

Low Income

- BCEL&P will spend 15% on low income customers
- Target market is resident whose income is estimated at 20% below poverty level
- Single and multi families
- Home owners
- Renters
- Elderly
- BCEL&P working with Community Development and local weatherization agencies

Program Implementation Parameters

- Program Objective
- Target Market
- Program Duration
- Program Description
- Eligible Measures
- Implementation Strategy
- Marketing Strategy
- Schedule
- Evaluation, Measurement & Validation
- Estimated Participation
- Program Budget
- Savings Targets

Rate Surcharge

		2009
Residential	Per kWh	
Commercial	Per meter	
Industrial	Per meter	
Low Income	Per meter	

Questions

