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Conservation and Load Management Plan 2005



Submitted jointly by:

The Connecticut Light and Power Company

Zand

The United Illuminating

Company

Docket 04-11-01 Final Submission

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TABLE OF CONTENTS

CHAPTER ONE: OVERVIEW	•
Energy Conservation Management Board	
Conservation and Load Management Activities for Southwest Connection Indoor Air Quality	cut (SWCT)
New and Modified Activities for 2005	
Alternative Transitional Standard Offer (ATSO) - Energy Efficiency	
Planned 2005 Budgets	
Budget Tables	
CHAPTER TWO: RESIDENTIAL PROGRAMS	27
CONSUMER PRODUCTS	
ENERGY STAR Retail Products (CL&P & UI)	
Appliance Retirement Program (CL&P & UI)	47
Residential Customer Initiated Project (CL&P and UI)	57
RESIDENTIAL NEW CONSTRUCTION	65
Residential New Construction (CL&P & UI)	65
RESIDENTIAL HEATING AND COOLING	
Residential Heating and Cooling (CL&P & UI)	
CHAPTER THREE: COMMERCIAL AND INDUSTRIAL PROGRAMS.	
C&I NEW CONSTRUCTION	
C&I EXISTING BUILDINGS	
C&I Express Services (CL&P)	
C&I RFP (CL&P & UI)	
C&I Custom Services (CL&P)	
C&I Operation & Maintenance Services (CL&P)	
Operations and Maintenance RFP (CL&P & UI)	
Energy Opportunities (UI)	
Small Business Energy Advantage (CL&P & UI)	161
CHAPTER FOUR: OTHER	
EDUCATION/OTHER	175
SmartLiving Center® (CL&P & UI)	
eesmarts™ (CL&P & UI)	
Residential Audits (CL&P & UI)	
Community Based Program (CL&P & UI)	
Institute for Sustainable Energy (CL&P & UI)	
SPECIAL NEEDS	217
Low Income – CL&P WRAP and UI Helps (CL&P & UI)	
Municipal (CL&P)	
Municipal Energy (UI) Energy Conservation Loan (CL&P & UI)	
Conservation & Load Management Financing (CL&P & UI)	243243
Small Industrial and Commercial Conservation Loan (CL&P)	
LOAD MANAGEMENT	
ISO-NE Load Response Program Support (CL&P & UI)	

Exhibit CL&P/UI 1

Power Factor Improvement Program (CL&P)	261
Demand Reduction Program (CL&P)	267
RENEWABLE INCENTIVES (CL&P & UI)	273
RESEARCH, DEVELOPMENT AND DEMONSTRATION (CL&P & UI)	
CHAPTER FIVE: ACTIVITIES IN SOUTHWESTERN CONNECTICUT	291
CHAPTER SIX: COST-BENEFIT ANALYSIS	295
CHAPTER SEVEN: PROGRAM EVALUATION	299
CHAPTER EIGHT: IT INITIATIVE (CL&P)	303

CHAPTER ONE: OVERVIEW

In accordance with Connecticut General Statutes § 16-245m, The Connecticut Light and Power Company (CL&P) and The United Illuminating Company (UI) (together referred to as the Companies), submit this Conservation & Load Management (C&LM) comprehensive plan (Plan) for 2005 for the implementation of cost-effective energy conservation programs and market transformation initiatives. The 2005 C&LM Plan conforms to the directives of the Department of Public-Utility Control (Department) in its decisions in Docket Nos. 01-01-14, 02-01-22, 03-01-01 and 03-11-01 (Phase 1 and Phase 2). The 2005 Plan is based on advisement and review by the Energy Conservation Management Board (the "ECMB").

The 2005 Plan, as well as future plans and budget through 2011, have been affected by the General Assembly's 2003 decision to divert \$1 million a month from the C&LM Fund (the Fund) to the state's General Fund and subsequent decision to allow the Department to authorize bonding. Diversions from the Fund will continue through July 2005. The bonds have now been issued, but the net result is an overall one-third reduction in C&LM program funding for the next seven years. Also affecting the 2005 Plan is the legislative "cap" that constrained the C&LM expenditures through all of 2003 and most of 2004. Due to this cap, unexpended 2004 program funds have been carried forward into the same programs for 2005 and are reflected in the 2005 Plan.

Energy Conservation Management Board

As required by the Department and the Connecticut General Statutes, the Companies developed the 2005 C&LM Plan in conjunction with the Energy Conservation Management Board (ECMB) and its consultants. To ensure maximum value to customers, the Companies worked extensively with the ECMB, its consultants and the Department to maximize the value and efficiency of C&LM programs and services for 2005.

In its May 28, 2003 Final Decision in Docket No. 03-01-01, the Department asked that the ECMB shift its focus from creating new programs to evaluating current programs. In compliance with the Department's directive, the ECMB and its consultants reviewed, analyzed and helped craft the nature and content of the proposed 2005 conservation programs in order to maximize benefits from the C&LM Fund. The ECMB consultants have recommended organizational changes to the C&I programs to group the lost opportunity programs and also group the retrofit programs to streamline the program offerings. This effort will be followed in 2005 of a more detailed review of the C&I program offerings. The Companies have also implemented a monthly program presentation at each ECMB meeting to provide the ECMB with more details about program operation.

As required by state statute, the ECMB holds public meetings on a regular basis and receives public input. In its September 19, 2001 Final Decision in Docket No.01-01-14, the Department adopted the ECMB's process for obtaining public comment (Roadmap Process). Pursuant to the Roadmap Process, the ECMB has received public comment in connection with the 2005 C&LM Plan. For the 2005 C&LM Plan, the ECMB solicited public involvement early in the 2005 C&LM Plan development process to allow public comments to be incorporated during the preliminary budget phase of the 2005 C&LM Plan. In addition, a standard public comments meeting was held on

September 21, 2004 to allow the public the opportunity to provide comment or input on the Companies' 2005 C&LM plan.

In Docket No. 03-11-01, the Department issued a Final Decision on February 4, 2004 approving a budget for 2004 for the Companies. On July 28, 2004, the Department issued a Phase 2 Final Decision and for 2005, directed the Companies to evaluate and recommend modifications to consolidate program administration, ensure independence in the selection of third party program evaluators and evaluate the marketing of its Commercial and Industrial (C&I) retrofit programs. This Plan reflects efforts undertaken to date in response to those directives.

Strategic Focus and Quality Control

The strategic focus of the Companies' C&LM programs is the product of a multi-level collaborative process involving the Companies and a diverse group of stakeholders. These stakeholders include the Department, the ECMB, Connecticut governmental, consumer and business interests, national and regional environmental and energy efficiency organizations, design professionals and energy services providers.

The Companies participate in national and regional activities to develop a long range focus for energy efficiency. The organizations include the Consortium for Energy Efficiency (CEE), the American Council for an Energy-Efficient Economy (ACEEE), Northeast Energy Efficiency Partnerships (NEEP) and other utility and public benefit fund organizations. The activities include market baseline research, development of efficiency standards, exchange of programmatic ideas and concepts and the assessment of the need for incentives. These efforts have produced many of the energy efficiency concepts and measures upon which the programs are based.

The Companies have developed and instituted many award winning programs which have received national attention and praise for their quality and performance. This trend continued in 2004 with CL&P receiving four awards for its C&LM programs. These awards include the Silver Award for the Connecticut Innovation Prize from Connecticut Quality Improvement Award Partnership, Inc. (CQIA) for the Small Business Energy Advantage, the Small C&I Loan, the Research Development and Demonstration and the Weatherization Residential Assistance Partnership (WRAP)/Low Income programs. CQIA's Connecticut Innovation Prize is the State's annual quality award recognizing Connecticut organizations that excel in managing quality improvement for business success and growth. UI was awarded "EPA Energy Star Leadership in Energy Efficiency 2003" for its Retail Lighting Program, and was also awarded the EPA's 2003 Energy Star Small Business Special Award".

In developing the C&LM plans, the Companies work with each other, with Department staff, with the ECMB and its consultants and other Connecticut stakeholders to determine the appropriate areas and levels of emphasis and funding to best serve Connecticut's needs. In recent years there has been a high level of cooperation and collaboration between the Companies to develop programmatic consistency and common implementation where appropriate.

The collaborative efforts also carry beyond the strategic aspects of the programs into implementation. The Companies actively seek the assistance and involvement of design

professionals and trade-allies in implementing the programs. Design professionals are a major participant in bringing the programs to the new construction market and effectively achieving market penetration. Trade-ally knowledge of program benefits helps produce many of the energy efficiency gains in existing buildings and industrial processes. Regional programs, such as Cool Choice for high efficiency commercial air conditioning and Motor UP for premium efficiency motors, have increased market impact by leveraging the combined efforts of multiple efficiency programs. In the residential arena, partnerships with the U.S. Environmental Protection Agency (EPA), the Department of Energy (DOE) and other efficiency programs built around the ENERGY STAR brand have led to increased levels of market transformation, an example of which is the recent increases in washing machine and refrigerator efficiency standards. These regional efforts would have been virtually impossible without the collaborative efforts to develop efficiency standards described above.

To ensure the value that the C&LM programs bring to Connecticut's electric consumers, the Companies employ a professional staff and management which utilize technical, procedural and accounting systems to manage and control the programs. Through close coordination between the Companies and the ECMB consultants, programs are continually modified and improved to reflect the latest market trends. Company staff and third-party energy engineering consultants evaluate project and program energy and economic assumptions to determine cost-effectiveness, and inspect projects after implementation to assure compliance. Programs are evaluated by independent consultants to assess the effectiveness of the programs and the persistence of the energy savings. The Companies use the results of these evaluations to continually improve program offerings by reinforcing areas of success and strengthening weaknesses.

Conservation and Load Management Activities for Southwest Connecticut (SWCT)

Activities in SWCT are an important focus of the 2005 Plan. Beginning with the summer of 2002 and continuing through 2004, the C&LM programs took specific actions to alleviate potential electricity shortages and reduce congestion in SWCT. The Department addressed these issues in Docket Nos. 02-01-22, 02-04-12, 03-01-01 and 03-11-01. In the 2005 Plan, the programs propose to continue focusing many of the C&LM programs and activities to support that critical area. These activities target the 53 towns of SWCT in the Companies' service territories, and provide focused efforts in the 16 priority towns of the Norwalk-Stamford sub-area as designated by ISO-NE, while maintaining adequate C&LM program implementation statewide. As discussed in Chapter Five of this filing, CL&P and UI believe that a broad based portfolio of programs, developed in conjunction with the ECMB and the Department, effectively address the Department's concerns for mitigating the constraints in SWCT.

In December of 2003, ISO-NE issued a Request for Proposal (RFP) for SWCT Emergency Capability. The Emergency Capability projects are intended to address reliability needs in SWCT and are paid for by Connecticut customers. This RFP requested approximately 300 MW of capacity in SWCT, through generation resources, demand response resources, or peak-load reducing C&LM projects. ISO-NE has accepted several of the proposals that it received in response to the RFP. As a consequence, the Companies, with ECMB support, have terminated the SWCT ISO-NE Supplemental Payments Program.

Indoor Air Quality

Recognizing that poor indoor air quality has very serious consequences for the health of Connecticut's children, the Connecticut State Legislature recently passed legislation (Public Act No. 03-220 "An Act Concerning Indoor Air Quality in Schools") to help improve air quality conditions in our schools.

Since poor indoor air quality results, in part, from poor heating, ventilation and air conditioning system design, maintenance and operation, the enacted legislation requires schools to inspect and evaluate these systems.

The Companies' C&I program engineers continue to work with designers and maintenance staff to better understand the issues and how they can design and operate systems to save energy without compromising indoor air quality.

C&LM funds are used to provide a variety of conservation measures which help improve indoor air quality. For example, automatic control of the outside air supply based on indoor carbon dioxide (CO²) levels automatically optimizes the use of outside air to meet both the fresh air ventilation needs of the school while reducing energy consumption. The Companies also work to increase the efficiency of the cooling equipment as well as adding high efficiency variable speed drives to pumps and fans. Improved energy efficient systems allow reduced energy consumption and lower operating costs while maximizing cooling capabilities. The Companies' engineers and marketing representatives work with both designers and customers to better educate them on proper system operation and the resultant benefits. With lower energy costs and better educated staff, customers are more likely to operate the cooling equipment as designed, improving indoor air quality in a cost effective manner.

New and Modified Activities for 2005

This is the sixth C&LM filing made by the Companies since passage of the State's restructuring legislation (Public Act 98-28). Since their original Plan in 2000, the Companies, the ECMB and the ECMB consultants have developed and provided award winning programs that have received national recognition for quality and performance. These programs are aimed at key strategic objectives and maintain services to all classes of customers for a wide array of end uses.

The 2005 Plan builds upon the strengths of the past, recognizes immediate challenges, and adds elements in anticipation of future needs. The 2005 Plan is designed to provide the largest energy and demand savings that the available funds allow. Some new innovations in the Plan for 2005 include:

Modifications to existing programs. The Companies are planning changes to a variety of programs. These changes are designed to enhance program delivery, consolidate programs, provide improved administrative efficiencies and meet Department expectations for specific program elements.

The Residential Retail Lighting and Residential Appliance Programs are now administered together under the Retail Products Program. Recognizing that energy use is now so low on ENERGY STAR refrigerators that it is no longer cost effective to offer a rebate, the Companies have eliminated the \$25 rebate for refrigerators.

To pursue both demand and energy savings, and focus on SWCT, an enhanced Appliance Retirement Program is proposed. This multi-faceted program is proposed to have the flexibility to address non-primary refrigerators and older, existing freezers through the appliance pick-up initiative using cooperative strategies with retailers and possibly manufacturers. Room air conditioner turn-in events should be tied to the purchase of new ENERGY STAR units. Retailer and manufacturer participation may be negotiated to provide additional rebates and support for turn-in events.

In recognition that SEER 13 central air conditioning equipment will become the standard in 2006 and to be consistent with the ENERGY STAR specification for central air conditioners, the Residential Heating and Cooling Program will continue incentives for SEER 13 equipment and will work with the contractor/distributor community to explore ways to ease the transition to the new, higher Federal Standard.

Several programs are being consolidated under successful existing programs. For example, CL&P is consolidating their O&M RFP and new O&M Retro-Commissioning Pilot programs under O&M Services and Prime under the successful Custom Services Program. These consolidations will reduce delivery costs and simplify program offerings to customers.

An alternative residential new construction pilot program designed to encourage broader participation is anticipated in 2005. This program targets multi-family homes of four units or more and will be streamlined from the existing ENERGY STAR Homes rating procedure by relying on the state's existing building code standards.

The Energy Conscious Construction (ECC)/Energy Blueprint (EB) programs are faced with a unique challenge in 2005. Connecticut has adopted ASHRAE 90.1-2001 standard as the new Building Energy Code. This is good news for Connecticut, since gains in energy-efficient designs will now be institutionalized. The challenge is that the code change requires a major reassessment, realignment and update of the ECC/EB program offerings. The impacts on energy savings, eligible measures, incentive offerings, and cost-effectiveness of the current design will be examined and evaluated, with many incentives potentially being substantially modified. The Companies anticipate reassessing their offerings to manufacturers in 2005 by exploring ways to effectively package and integrate various offerings (New Construction, O&M, Retro-commissioning, and Lean Manufacturing). As an example, UI will be offering its industrial customers a greater opportunity to maximize the benefits of Lean Manufacturing through its Energy Blueprint program.

Although these programs remain extremely cost effective, the Companies continue to raise the bar for high efficiency building designs. The Companies continue to work closely with the ECMB consultants and other industry experts throughout the review process.

The Companies have introduced a Retro-Commissioning (RetroCx) pilot in 2004 to serve the largest Commercial customers in SWCT as requested by SACIA through the ECMB roadmap process. The plan in 2005 is to evaluate the pilot, with the intentions of offering a program in both territories, dependent on the results of the evaluation. Typically, RetroCx is capable of capturing large amounts of energy savings from poorly maintained HVAC systems.

As a result of a recommendation made by the ECMB at its October 19, 2004 meeting, the Companies have allocated \$125,000 to develop and deploy an ISO Price Response Pilot Program in 2005.

In 2005, the Companies will be making a concerted effort to service their mid-size customers more effectively. The eligibility criteria for both the C&I RFP and the Small Business Energy Advantage programs have been modified. C&I RFP eligibility has been lowered to 200 kW, while the Small Business Energy Advantage eligibility has been increased to 200 kW (CL&P) and 150 kW (UI). In addition, the Companies are modifying, revising and expanding the list of eligible measures to include such items as Super T-8's, automated controllers for HVAC systems, AC tune-ups, replacement evaporator fan motors, and possibly air compressor controls.

The Companies have begun the first step towards better alignment of the C&I offerings. The realignment should provide a seamless view of the Companies' programs to vendors and customers operating across the state. The first step was to align the C&I programs into two categories. These two programs are lost opportunity programs and retrofit programs. The lost opportunity programs include those programs that seek to influence purchasing of new equipment or design of new buildings. The retrofit programs seek to promote equipment replacements because of the benefits associated with replacing existing equipment with more efficient equipment. The effort is continuing in 2005.

Alternative Transitional Standard Offer (ATSO) - Energy Efficiency

In the Department's October 20, 2004 Final Decision in Docket 03-07-16, it approved a general framework for the development of Alternative Transitional Standard Offer (ATSO) service in Connecticut, including energy efficiency pursuant to Public Act 03-135, <u>An Act Concerning Revisions to the Electric Restructuring Legislation</u> (the Act).

Several aspects of program design required additional input and expertise from parties and participants in the docket. To this end, the Department facilitated the formation of three working groups to further develop the legal and technical details of program design that would be required before the bid process could commence. The ATSO energy efficiency working groups are expected to present consensus documents on an energy efficiency ATSO by the end of 2004. Because the Interim Decision allows energy efficiency ATSO providers to seek C&LM funding to finance a portion of energy efficiency projects, \$250,000 has allocated for such purposes.

Planned 2005 Budgets

Provided in the 2005 Plan are three Tables - a Table A for each Company providing a summary of the 2003 and 2004 C&LM budget previously filed with the Department, and a planned 2005 C&LM budget. Table A1 provides combined Company budgets. The proposed 2005 budget, while initially based on the 3 mills/kWh charge imposed by Conn. Gen. Stat. §16-245m (a), takes into account the reductions effected by recent legislative actions. These include the approximate one-third reduction from the C&LM Fund required to pay interest and principal on Rate Reduction Bonds necessary to sustain funding of C&LM programs (Public Act 03-06) and the additional transfer of \$12 million from the C&LM Fund to the State's General Fund (PA 02-03). The full impact of the 2003 legislative actions is partially offset in the 2005 Plan by additional one-time revenues resulting from the timing of the bond issuance. The full reduced program budgets will be in place for the 2006 program year. Table A-1 is a combination of both Companies' 2005 budget and is provided in response to Order No.15 from Docket No. 01-01-14.

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Table A1 CL&P/UI 2005 C&LM Budget

CLBF/OI 2003	Calm Budge		2005
	2005 CLAP	2005 UI	2005 CL&P/UI
CLEPAN CALM BUDGET	Proposed Budget	Proposed Budget	Total
	11/01/04	1100104	11/01/04
PESIT	DENTIAL	and the second s	
Residential Retail Lighting*	\$ 3,522,000	\$ 906,428	\$ 4,428,428
Energy Star Appliances* (Including Room AC)	\$ 850,000	\$ 405,480	
Appliance Retirement* (Refrigerators & Room AC) Note 1	\$ 2,500,000	\$ 1,181,250	
Customer Initiated Projects*	\$ 500,000	\$ 50,000	\$ 550,000
Total - Consumer Products	\$ 7,372,000	\$ 2,543,158	
Residential New Construction*	\$ 1,300,000	\$ 541,432	\$ 1,841,432
Residential Heating & Cooling*	\$ 2,922,000		\$ 3,872,000
Low income (Energy Care & WRAP) / UI Helps*	\$ 5,000,000		
COMMERCIAL	L & INDUSTRIAL	3 (5 (5 (5 (5 (7)7)29)	E ZHALSESSE TREETER
C&I LOST OPPORTUNITY	£ 7.450.000	Te 0.740.070	41.460.670
Energy Conscious Construction / Energy Blueprint* Custom Services	\$ 7,450,000 \$ 8,056,096	\$ 3,718,673 \$ -	\$ 11,168,673 \$ 8,056,096
Express Services (Cool Choice & Motors Only)	\$ 312,688	\$ -	\$ 312,688
Total - Lost Opportunity	\$ 15,818,784	Contract of the Contract of th	\$ 19,537,457
C&I LARGE RETROFIT			
C&I EARGE RETROFTI	\$ 2,910,000	\$ 422,128	\$ 3,332,128
Energy Opportunities	\$ 2,510,000	\$ 2,800,000	
O&M (RetroCx, BOC, RFP)	\$ 3,393,096	\$ 181,706	\$ 3,574,802
Express (Lighting Rebate)	\$ 827,312	\$ -	\$ 827,312
Municipal Energy & Schools	\$ 2,000,000	\$ 411,000	\$ 2,411,000
State Buildings	\$ -	\$ -	\$ -
Total - C&I Large Retrofit Small Business*	\$ 9,130,408		\$ 12,945,242
Small Business* ATSO	\$ 3,403,000 \$ 200,000	\$ 1,200,000 \$ 50,000	
*Subtotal C&I (**)			
	DUCATION **		SOURCE DESCRIPTION OF THE PERSON OF THE PERS
		e 400.00F	e 670.00c l
Smart Living Center and Displays EESmarts* (K - 12 Education)	\$ 250,000 \$ 251,000	\$ 428,085 \$ 319,466	\$ 678,085 \$ 570,466
Residential Audits-Non WRAP	\$ 30,000	\$ 319,400	\$ 30,000
Community Based Program (SWCT)*	\$ 250,000		\$ 345,641
Subtotal Education	\$ 781,000	\$ 843,192	\$ 1,624,192
OTHER - PROGRA	MS/REQUIREMENT	rs	
Institute for Sustainable Energy (ECSU)	\$ 616,000	\$ 150,000	\$ 766,000
Energy Conservation Loan Fund*	\$ 120,000	\$ 89,250	\$ 209,250
Heat Pump Water Heaters (Hot Shot/WSaver)*	\$ 200,000	\$ -	\$ 200,000
C&LM Loan Defaults	\$ 70,000	\$ 5,000	\$ 75,000
Annual Control of the	\$ 1,006,000	\$ 244,250	\$ 1,250,250
	MANAGEMENT		
ISO Load Response Supplemental Payments ****	\$ 75,000	\$ 50,000	\$ 125,000
ISO Load Response Program Support Demand Reduction	\$ 400,000 \$ 400,000	\$ 113,119 \$ -	\$ 513,119 \$ 400,000
Power Factor	\$ 854,000	\$ -	\$ 400,000 \$ 854,000
Wait Until 8:00	\$ 100,000	\$ 100,000	\$ 200,000
Subtotal Load Management	\$ 1,829,000		
OTHER - RENEV	WABLES & RD&D		
Renewables Incentives	\$ 400,000	\$ 150,000	\$ 550,000
Research, Development & Demonstration	\$ 1,044,000		
Subtotal Renewables & RD&D	\$ 1,444,000		\$ 1,815,860
OTHER - ADMINIST	RATIVE & PLANNI	NG	
Administration	\$ 646,000		\$ 999,759
	\$ 2,276,500		\$ 3,019,511
	\$ 1,925,000	\$ 398,036	
ECMB	\$ 300,000	\$ 210,000	
	\$ 90,000 \$ 2,752,610		
	\$ 2,752,610 \$ 7,990,110		\$ 3,569,471 \$ 40,571,777
PROGRAM SUB-TOTALS	7 (,880,110	\$ 2,581,667	\$ 10,571,777
	\$ 17,695,000	\$ 6,035,436	\$ 23,730,436
		\$ 9,056,371	\$ 39,507,563
Other**		\$ 3,103,527	\$ 13,153,637
TOTAL C&LM BUDGET Note 2	\$ 58,196,302	\$ 17,364,084	\$ 75,560,386
	\$ -	\$ -	
Transfer to State Fund Estimated Funds Carried Forward ***	\$ 5,600,000 \$ (20,455,303)	\$ 1,200,000	\$ 6,800,000
	\$ (20,455,302) \$ 43,341,000		\$ (20,455,302)
	¥ 43,341,000 l	\$ 18,564,084	\$ 61,905,084

^{*} Joint CL&P/UI Programs

^{**} OTHER -EDUCATION is primarily allocated to residential programs.

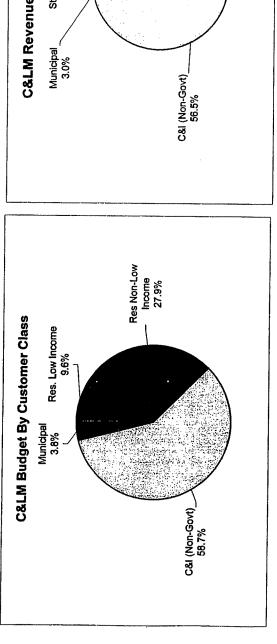
^{***} Includes 2004 Program carryover and carrying charges. Assumes DPUC approval of Settlement Petition dated 9/29/04

^{****} ISO Price Response Supplemental Payment - Pilot

Note 1: UI - Includes anticipated 2004 unexpended funds of \$831,250

CL&P -2004 (8/10/2004) reflects 2004 DPUC Ordered funding of \$3,500,000; \$2,500,000 of which is carried over into 2005 Note 2: UI - Excludes enticipated 2004 unexpended funds of \$831,250

Statewide (CL&P and UI) 2005 C&LM Budget and Parity Analysis



Customer Class	Budget (\$,000)	% of Total C&LM Budget	Residential & C&I Budget	Residential & C&I Revenue	Difference
Res. Low Income Res Non-Low Income	\$6,073,149 \$17,657,287	7.95% 23.11%	9.60% 27.92%	8.40% 30.92%	1.21%
C&I (Non-Govt)	\$37,096,563	48.56%	58.66%	56.51%	2.15%
Municipal State Buildings Non-DPW	\$2,411,000 \$0	3.16% 0.00%	3.81% 0.00%	2.96% 1.22%	0.85% -1.22%

2004 (11/03) May 2003 Jan 2003 Statewide Statewide Statewide Budget % Budget % Budget %

Aug 2004 Statewide Budget % THE PROPERTY OF THE PROPERTY O

	2%	0% 8% 7%
	17.22%	100.00% 76.18% 23.82%
	\$13,153,637	\$76,391,636 \$58, 196,302 \$18, 195,334
		Note 1 CL&P UI
	S S S S S S S S S S S S S S S S S S S	C&LM TOTAL Note 1 CL&P UI
	Other Expenditures Other Expenditures	o
E. K.	O 0 0	

Note 1: UI - Includes anticipated 2004 unexpended funds of \$831,250

Totals may vary due to rounding

Table A

CL&P 2005 Proposed C&LM Budget

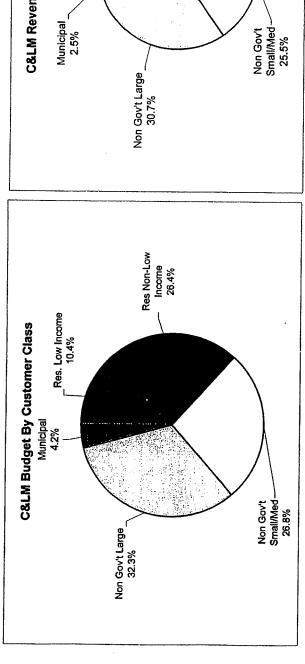
CL&P 200	05	Proposed (C 8	LM Budget			
		2003	1	2004	Т	2004	2005
CLAP CALM BUDGET		CL&P Final Decision		CLER	1	CLAP	CL&P
	ž.	9/17/03		Original Budget 11/3/03	I	Revised Budget 8/10/04	Proposed Budget 11/1/04
	dille	RESIDENTIA	L		-		
Residential Retail Lighting*	\$	2,450,000	1	\$ 2,416,000	Ts	3,300,000	\$ 3,522,000
Energy Star Appliances* (Including Room AC)	\$	1,600,000		\$ 900,000			
Appliance Retirement* (Refrigerators & Room AC) Note 1 Customer Initiated Projects*	\$	500,000		\$ 700,000			
Total - Consumer Projects	╬	4,550,000		\$ 500,000 \$ 4,516,000			
Residential New Construction*	15	1,655,000	unicămie	Obligitary or other property of the same o		and the same of	
Residential Heating & Cooling*	\$	1,500,000					
Low Income (Energy Care & WRAP) / UI Helps*	\$	4,024,000) [\$ 3,000,000	\$	4 250 000	\$ 5,000,000
Subtotal RESIDENTIAL YOUR STREET					13	44,980,000	第 45次 18,694,000
	MM	IERCIAL & IND	US	STRIAL			
C&I LOST OPPORTUNITY							
Energy Conscious Construction / Energy Blueprint* Custom Services	15	5,700,000					
Express Services (Cool Choice & Motors Only)	\$	6,000,000 1,000,000					\$ 8,056,096
Total - Lost Opportunity	۲Ť	12,700,000	_				
C&I LARGE RETROFIT	-L-V		-8	10,100,000	L	14,000,000	10,010,704
C&I RFP *	Ts	4,000,000	1 3	3,850,000	Ts	4,500,000	\$ 2,910,000
Energy Opportunities	Ť	,,555,500	Ť	,000,000	Ť	4,000,000	2,810,000
O&M (RetroCx, BOC, RFP)	\$	1,300,000	3	1,250,000	\$	1,500,000	\$ 3,393,096
Express (Lighting Rebate) Municipal Energy & Schools	 -	4 000 000	+		Ļ		\$ 827,312
State Buildings	\$	1,300,000 40,000		978,000	\$	4,000,000	\$ 2,000,000
Total - C&I Large Retrofit	13	6,640,000	_	-6,078,000	5	10,000,000	\$ 9,130,408
Small Business*	\$	3,800,000			-		\$ 3,403,000
Alternative Standard Offer (ATSO)	I		I				\$ 200,000
Subtotal Calls 1977 1977 1977 1977 1977 1977 1977 197					猪	27,950,000	20 doz. 1921
	_	ER - EDUCATI		N **			
SmartLiving Catalog	\$	1,100,000			Ļ		
Smart Living Center and Displays EESmarts* (K - 12 Education)	\$	500,000 300,000				53,000	\$ 250,000
Residential Audits-Non WRAP	\$	35,000					\$ 251,000 \$ 30,000
Community Based Program (SWCT)*	\$	76,000				250,000	
Contingency from SLC	\$	-	\$	420,000		300,000	
Subtotal Education	\$	2,011,000			\$	848,000	\$ 781,000
		ROGRAMS/REC					
Institute for Sustainable Energy (ECSU) Energy Conservation Loan Fund*	\$	950,000 120,000					\$ 616,000
Heat Pump Water Heaters (Hot Shot/WSaver)*	3	250,000			\$	120,000 250,000	\$ 120,000 \$ 200,000
Billing System Conversion: On-Bill Financing	\$	- 200,000	\$			150,000	\$ 200,000
C&LM Loan Defaults	\$	-	\$	50,000	\$	316,000	\$ 70,000
Subtotal Programs/Requirements	\$	1,320,000			\$	1,552,000	\$ 1,006,000
		- LOAD MANA			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
ISO Load Response Supplemental Payments **** ISO Load Response Program Support	\$	950,000					\$ 75,000
Demand Reduction	\$	675,000 675,000			\$	350,000 100,000	\$ 400,000 \$ 400,000
Power Factor	\$	330,000			\$	350,000	
Walt Until 8:00	\$	175,000				209,000	
Subtotal Load Management	\$	2,805,000			\$	1,009,000	\$ 1,829,000
		RENEWABLE					
Renewables Incentives	3	300,000				50,000	
Research, Development & Demonstration Subtotal Renewables & RD&D	\$	1,870,000 2,170,000				1,200,000	
		A STATE OF THE PARTY OF THE PAR	(bureau	THE PERSON NAMED IN COLUMN 2 I	3	1,250,000	\$ 1,444,000
		MINISTRATIVE		وسيست والمستون والمتال والمتال والمتالة	-		
Administration Planning and Evaluation	\$	2,450,000				620,000	
Information Technology	\$	1,300,000 800,000				1,000,000	
ECMB	\$	330,000			\$	1,033,000 299,000	
Audit	\$	80,000			\$		\$ 90,000
Conversion of Load Management Fund	\$	(250,000)					
Carry Over From 2003	\$	(419,000)	Ļ				
Performance Management Fee		2,357,000	\$	1,848,000 4,353,000	\$	2,383,000	
Admin/Planning Expenditures	\$		9		-	5,425,000	\$ 7,990,110
Admin/Planning Expenditures PROGRAM SUB-TOTALS	\$	6,648,000	\$	4,303,000	<u>.</u>		
Admin/Planning Expenditures PROGRAM SUB-TOTALS Residential		6,648,000			*****		
PROGRAM SUB-TOTALS Residential C&I	\$ \$ \$	6,648,000 14,269,800 25,785,200	\$	11,346,000 21,372,000	\$	16,327,000 29,266,000	\$ 17,695,000
PROGRAM SUB-TOTALS Residential C&I Other**	\$ \$ \$	6,648,000 14,269,800 25,785,200 9,768,000	\$ \$	11,346,000 21,372,000 6,303,000	\$ \$	16,327,000 29,266,000 7,391,000	\$ 17,695,000 \$ 30,451,192 \$ 10,050,110
PROGRAM SUB-TOTALS Residential C&I Other** TOTAL C&LM BUDGET	\$ \$ \$ \$	6,648,000 14,269,800 25,785,200 9,768,000 49,823,000	\$ \$ \$	11,346,000 21,372,000 6,303,000 39,021,000	\$ \$	16,327,000 29,266,000 7,391,000	\$ 17,895,000 \$ 30,451,192 \$ 10,050,110 \$ 58,196,302
PROGRAM SUB-TOTALS Residential C&I Other** TOTAL C&LM BUDGET Securitization	\$ \$ \$ \$	14,269,800 25,785,200 9,768,000 48,823,000 11,590,000	\$ \$ \$ \$	11,346,000 21,372,000 6,303,000 39,021,000 22,080,000	\$ \$ \$	16,327,000 29,266,000 7,391,000 52,984,000	\$ 17,895,000 \$ 30,451,192 \$ 10,050,110 \$ 58,196,302 \$ -
PROGRAM SUB-TOTALS Residential C&I Other** TOTAL C&LM BUDGET	\$ \$ \$ \$	6,648,000 14,269,800 25,785,200 9,768,000 49,823,000	\$ \$ \$	11,346,000 21,372,000 6,303,000 39,021,000 22,080,000	\$ \$	16,327,000 29,266,000 7,391,000 52,984,000	\$ 17,095,000 \$ 30,451,192 \$ 10,050,110 \$ 58,198,302 \$ - \$ 5,600,000
PROGRAM SUB-TOTALS Residential C&I Other** TOTAL C&LM BUDGET Securitization Transfer to State Fund	\$ \$ \$ \$	6,648,000 14,269,800 25,785,200 9,768,000 49,823,000 11,590,000 8,800,000	\$ \$ \$ \$	11,346,000 21,372,000 6,303,000 39,021,000 22,080,000	\$ \$ \$	16,327,000 29,266,000 7,391,000 52,984,000	\$ 17,895,000 \$ 30,451,192 \$ 10,050,110 \$ 58,196,302 \$ - \$ 5,600,000 \$ (20,455,302)

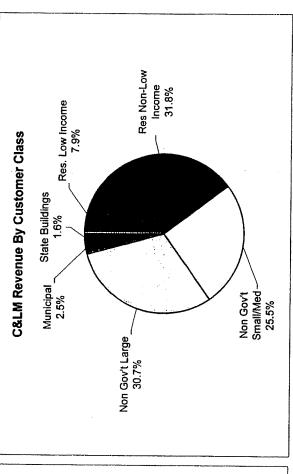
^{*} Joint CL&P/UI Programs
** OTHER -EDUCATION is primarily allocated to residential programs.

^{****} ISO Price Response Supplemental Payment - Pilot

Note 1 - 2004 (8/10/2004) Appliance Retirement Budget reflects 2004 DPUC Ordered funding of \$3,500,000 \$2,500,000 of which is carrried over into 2005

CL&P 2005 C&LM Budget and Parity Analysis





Jifference	2.45%	1.58%	1.65% -1.60%
% of Residential & C C&I Revenue	7.94% 31.76%	25.51% 30.69%	2.50% 1.60%
% of Residential & F C&l Budget		26.83% 32.26%	4.15% 0.00%
% of Total C&LM Budget	8.59% 21.81%	22.20% 26.69%	3.44% 0.00%
Budget	\$5,000,000 \$12,695,000	\$12,916,841 \$15,534,351	\$2,000,000 \$0
Customer Class	Res. Low Income Res Non-Low Income	Non Gov't Large	Municipal State Buildings

10% K. 1. 100 00 00 00 00 00 00 00 00 00 00 00 00		
	17.27%	100.00%
	\$10,050,110	\$58,196,302
SOOM I THE REPORT LEGICAL PROPERTY.	Other Expenditures Other Expenditures	C&LM TOTAL

Table B CL&P 2005 COMPARISON OF CONSERVATION PROGRAMS

			П			П	OHOFCLAP	COMPARISON OF CLAP CONSERVATION	PROGRAMS FOR 2504	38 2004						-	
Program	2005 Esta	2002 E		Customer Costs 2005	Total Resource Costs 2005	-	% of Budget 2005	Electric System B/C Retio 2005		Goats # of Units	Units	Annusized Sevings (MWh)	Lifetime Savings (MWh)	kW Impacd (Y/E)	Demand Cost	Cost Rate Showh Annuelize	Cost Cost Ratio \$7.T-kWh
			1														
		1			1	Ŀ		RESIDENTIAL						::			
Residential Retail Lighting*	"	" [222		-	6.1%	43	5.9	1,008,021	Products	42,897	293,203	3,378	\$ 1,043	\$ 0.082	\$ 0.012
Energy Star Appliances* (Including Room AC)	8	800 \$ 820	%	2,042	\$ 2.892	\$ 2,005	1.5%	2.4	22	11,435	Appliances	2,762	38,602	365	\$ 2,328	\$ 0.308	\$ 0.022
Applance Retirement* (Refrigerators& Room AC) Note 1	\$ 3,500	\$ 2,500	9	(0)	\$ 2,500	\$ 3,368	4.3%	13	1.5	16,622	Units turned in	9,685	48.858	1,645	\$ 1,520	\$ 0.258	\$ 0.051
Customer Initiated Projects*	\$ 800	800 \$ 800	۰		005 \$	•	%6:0	0.0	0.0								
Total -Consumar Products	\$ 8,300	8 7,372	₩	2,274	979'6 \$	\$ 20,39	27,7	97	33			55,344	380,663	5,388	\$ 1,368	\$ 0.133	\$ 0.019
Residential New Construction*	1		9	1,831	\$ 2,931	1.	<u> </u>	197	t.s	932	Homes	1 365	17 707	676	, 63,	000	
Residential Harding & Conjun.	\$ 1,500 \$	1	20	1,074	3,996	_,	4_	33	2.4	4534	Units (Plus 3443	2 700	200.17			605.0	-
history by the second	\$ 4250 \$				1		1			200	tune-upa)	6,130	CX.,P4				\$ 0.086
Low mounts turnelly Carle & WMAP / Util Height			350		12.0	2.5	000	60	91.0	086.9	Customers	9,025	95,925	703	5 7,111	0.554	\$ 0.052
	1				* (**)CL)O(**! *		1 St. O. O.	2 Cart 2 2 145	Æ.	STATE OF THE STATE	STATE	The state of the state of	200	1			25.
CAL LOST OPORTUNITY							COMMER	COMMERCIAL & INDUSTRIAL	STRIAL		•						
Energy Conscious Construction / Energy Blusprint*	\$ 052'8 \$	\$ 7,450	8 0	•	\$ 7,450	\$ 37,788	12.8%	5.1	5.3	218	Projects	31,128	573,896	8.927	\$ 835	\$ 0.239	\$ 0.013
Custom Services	\$ 7,600 \$	\$ 8,056	\$ B	1,947	\$ 10.003	\$ 25,537	13.8%	3.2	4.9	333	Projects	28,245	422,278	5,408	\$ 1,490	-	\$ 0.019
Express Services (Cool Choice & Motors Only)	\$ 1,100 \$		313 \$	(O)	\$ 313	\$ 735	0.5%	23	25	187	Projects	209	7,214	. 269	\$ 1,164	\$ 0.614	\$ 0.043
	\$ 14,930	14,850 \$ 15,619	\$	1,947	\$ 17,788	\$ 64,058	27.2%	6,0	6.1			59,683	1,003,388	14,601	\$ 1,083	\$ 0.264	\$ 0.016
CSI LARGE RETRO FIT													,				
C&I RFP *	\$ 4,500	\$ 2,910		3,102	\$ 6,012	\$ 11,189	5.0%	3.8	20	18	Projects	11,976	202,441	1,973	\$ 1.475	\$ 0243	\$ 0.014
O.S. M (Retro CX, BOC, RFP)	\$ 1,500	\$ 3,393	3	287	\$ 3,660	\$ 6,472	5.8%	1.9	1.9	230	Projects	11,358	106,350	1,714	8 1,979	\$ 0.299	\$ 0.032
Express (Lighting Rebate)		\$ 827	7	577	\$ 1,404	\$ 6,520	1,4%	7.9	6.4	442	Projects	8,464	105,093	1,619	\$ 511	\$ 0.098	\$ 0.008
Municipal Energy & Schools	\$ 4.000 \$	\$ 2,000	\$ 0	1,287	\$ 3,287	\$ 5,216	3.4%	26	1.8	38	Projects	6,747	107.734	629	\$ 3,035	-	\$ 0.019
	•	S	50	٠			0.0%										
Retrofit	\$ 10,000 \$	8 9,130	*	8,233	\$ 14,383	\$ 29,397	13.7%	3.2	2.2			38,544	521,618	996'9	\$ 1,530	\$ 0.237	\$ 0.018
	\$ 3,000 \$	\$ 3,403	50	4,338	\$ 7,741	\$ 11,858	5.8%	3.5	1.6	225	Projects	12,232	199,629		1,654	0.278	1
Atternative Standard Offer (ATSO)		\$ 200	Ļ				0.3%										-
					Hoes.	Section Special Section 1		1				Control of the Contro	1,51.00	1	100	8 0.268	1100
							1	OTHER - EDUCATION	2					No. of the Control of		National Property	
Smart Living Center and Displays	2 2	8 250	*	•	\$ 250		0.4%										
EESmarts* (K - 12 Education)	\$ 210 \$	\$ 251		٠	\$ 251		0.4%										
Residential Audits-Non WRAP	\$ 35 \$	\$ 30	*	•	\$ 30		0.1%										
Community Based Program (SWCT)*	\$ 250 \$	\$ 250	*	,	\$ 250		0.4%										
Controgency from SLC	\$ 300		_				%0'0										
Subtotal Education	\$ 878	157	-		781	*	1.3%										
			-			Б	ER-PROG	OTHER - PROGRAMS/REQUIREMENTS	JIREMENTS						-		
Institute for Sustainable Energy (ECSU)	\$ 718 \$	\$ 616	_				1.1%										
Energy Conservation Loan Fund*	\$ 120 \$	\$ 420	-	•	\$ 120	æ ••	0.2%	0.2	0.5	32	Customers	9	121	0	\$ 477,185	\$ 3.003	\$ 0.185
Heat Pump Water Heaters (Hot Shot/WSaver)*	\$ 250 \$	\$ 200	-	·	\$ 200		0.3%										
Billing System Conversion; On-Bill Financing	\$ 150	8	_				%0.0										
	\$ 316	8 2	_				0.1%										
Total Programa.Requirements	\$ 1,532	\$ 1,006		(666)	320	\$ 26	1.7%	0.03	70			8	121	0	\$ 4,000,397	\$ 23.174 \$	1582

Page 12

Table B CL&P 2005 COMPARISON OF CONSERVATION PROGRAMS

					COMPARISO	NOFCLEPCO	NAERVATION	COMPARISON OF CLEP CONSERVATION PROGRAMS FOR 2005	1 2003							
	Costs	C Gally	Customer	Total Resource Costs	Electric System	% of Budget	Electric System B/C Retjo	Total Resource BVC Retio	Goals		Annualized	Lifetime	W. K	Demand	Cost Parts	E Sell
Ртодпап	2004	4	2005	5002	Benefit (000)	2002	2005	2005	Units	Units	(MWh)	(MWh)	(Y/E)	Snew	Amualte	\$ALT-KWh
						O L OSTATO	OTHER - LOAD MANAGEMENT	CHENT								
ISO Load Response Supplements Payments ****		\$ 75														
ISO Response Program Support	\$ 320	\$ 400	,	\$ 400	\$ 1,535	0.7%	3.8	3.8	8	Customers	•		10,000	\$ 40	WA	WA
Demand Reduction	\$ 100	\$ 400	\$ 303	\$ 703	\$ 1,664	0.7%	42	2.5	88	Customera	2.069	20,690	909	088	\$ 0.193	\$ 0.019
Power Fedor	\$ 320	\$ 854	\$ 734	\$ 1,588	\$ 6,530	1.5%	7.8		Ø	Customers	•			171	*	≰
Wait Until 8:00	\$ 208	\$ 001 \$ 602		\$ 100		0.2%										
Subtotal Load Management	\$ 1,000 \$	\$ 1,829 \$	\$ 1,037	\$ 2,781	\$ 9.729	3.9%	6.3	3.5			2,069	20,690	15,608	\$ 117	\$ 0.884	\$ 0.088
		l			°	THER - REN	OTHER - RENEWABLES & RO&D	& RD&D								
Renewables incentives	09 **	50 \$ 400				0.7%										
Research, Development & Demonstration	\$ 1200 \$	\$ 1,044 \$				1.8%										
Subtotal Renewables & RD&D	\$ 1,250 \$	\$ 1,44	•		•	25%										
	ı				OTHE HTO	R - ADMINIS	OTHER - ADMINISTRATIVE & PLANNING	PLANNING							-	
Administration	\$ 620	\$ 648				*1.7										
Planning and Evaluation	\$ 1,000 \$	\$ 2,277				3.9%										
Information Technology	\$ 1,033 \$	\$ 1,925				3.3%										
ECMB	\$ 538	300				0.6%										
Audit	06 \$	06 \$ 06				0.2%										
Performance Management Fee	\$ 2,383 \$	\$ 2,763				4.7%										
Admin/Plenning Expenditures	\$ 5,425	\$ 7,990				13.7%										
PROGRAM SUB-TOTALS																
Residential	\$ 10,127	\$ 17,695									68,562	538,358	11,347			
180	\$ 29,266	\$ 30,451									112,727	1,745,326	38,513			
Cheri	8 7,391	•									·		•			
TOTAL CALM BUDGET	\$ 52,984	52,984 \$ -58,196									181,289	2,234,684	49,860			
Securitzation													-			
Transfer to State	\$ 9,600	\$ 5,600														
Estimated Funds Carried Forward ***		\$ (20,455)														
GRAND TOTAL	\$ 62,584 \$	\$ 40,341														

• Joint CL&PUJ Programs

• Joint CL&PUJCATION by primarily allocated to residential programs.

• THER. #EDUCATION by primarily prove and carrying charges

•• Incheldes 2004 program carry roves and carrying charges

••• 300 Price Response Supplemental Payment - Pilot

••• 12004 (BY1027004) Applicace Reference Information Payment - Pilot

Note 1 - 2004 (BY1027004) Applicace Reference Info 2005

\$2,500,000 or which is carried ores into 2005

Table C CL&P 2005 C&LM Proposed Budget Details

	S.		Materials	T		_	T		T	T	***************************************		Т	
Clab Cal Wallaces 1600	ź.	CL&P	& Supplies	1	Outside	Contractor	1	Inaantiivaa	Mandradina		O4	Administrative	۱ ـ	
CLAP CEUM BUDGET (\$000)	<u> </u>	abor	Subbues	نال	Services	Labor		Incentives	Marketing		Other	Expenses		TOTAL
Residential Retail Lighting*	T \$	74	\$ 10	T			T	\$ 2,487	\$ 393	Ts	10	S 5	S	3,522
Energy Star Appliances* (Including Room AC)	\$	42			\$ 163			\$ 490	\$ 135	\$	10			850
Appliance Retirement* (Refrigerators & Room AC) Note 1 Customer Initiated Projects*	\$	137 21	\$ - \$ 5		\$ 1,198 \$ 54	\$ 42 \$ 11		\$ 739 \$ 389	\$ 319 \$ 10			\$ 65	5	2,500
Total - Consumer Products	15	274		_	\$ 1,916	\$ 95			\$ 10 \$ 857	5	5 25	\$ 5 \$ 85	\$	7,372
Residential New Construction*	\$	84		_	\$ 441			\$ 631			10	\$ 10	\$	1,300
Residential Heating & Cooling*	\$	142	\$ 80		\$ 600			\$ 1,890			10	\$ 10	\$	2,922
Low Income (Energy Care & WRAP) / ULHelps*	\$	_672			\$ 200			\$ 3,811				\$ 20		5,000
A SUBBRILINESIDENTIALS	1.05%	1,172	\$ State 1 95	÷		IAL & INDUSTRU		\$EX##10,437	\$ 1:070	1.5	45	\$#####################################	121	18,594
C & I LOST OPPORTUNITY					COMMEN	JAL & INDUSTRU	۹.							
Energy Conscious Construction / Energy Blueprint*	\$	560	\$ 10	T	\$ 590	\$ 334	T	\$ 5,847	\$ 60	T \$	25	\$ 24	s	7,450
Custom Services	\$	551							\$ 45		115			8,056
Express Services (Cool Choice & Motors Only) Note 2	\$	4 4 4 4	\$ -	L		\$ -	Ŀ		\$ -	\$		\$ -	\$	-
Total - Lost Opportunity C & I LARGE RETROFIT	\$	1,111	\$ 20	Ŀ	\$ 2,206	\$ 711	Ŀ	\$ 11,164	\$ 105	\$	140	\$ 49	\$	15,506
C&I RFP •	\$	105	S -	T	\$ 200	\$ 32	T	\$ 2,538	\$ 25	s	5	e -	-	0.046
O & M (RetroCX,BOC,RFP)	\$	219		†		\$ 195			\$ 25 \$ 20	\$	25	\$ 5 \$ 38		2,910 3,393
Express Services (Lighting Rebate) Note 2	\$	125	\$ 5	I	\$ 195	\$ -	I	\$ 795	S 10	\$	5	\$ 5		1,140
Municipal Energy & Schools	\$	165	<u>s</u> .	1		\$ 80	I		\$ 5	\$	10	\$ 5	\$	2,000
State Buildings Total - C& Large Retrofit	\$	614	\$ -	Į:		\$ -	Ŀ		<u>s</u> -	5		\$ -	\$	
Small Business*	3	429	\$ 35 \$ 5			\$ 307 \$ 152	1 3		\$ 60 \$ 40	\$	45 10	\$ 53 \$ 16	_	9,443
Alternative Standard Offer (ATSO)	\$	-	\$ -	73	-	\$ -	13	-	\$ -	\$	200	\$ -	\$	3,403 200
PERMITTED TO SELECTION OF THE PERMIT	150.3	2,154	\$	18	4,125	18 WE (19-17170)	1	20,327	\$100 205	_		************		
					OTHER	- EDUCATION **								
Smart Living Center and Displays	15	63				<u>\$</u>	13		\$ 25			\$ -	\$	250
EESmarts* (K - 12 Education) Residential Audits-Non WRAP	\$	37 5		3		\$ <u>-</u>	\$		\$ 5 \$ -	5	5		\$	251
Community Based Program (SWCT)*	\$	63	\$ 5			\$ -	Š		\$ 140	\$	12	\$ - \$ 10	\$	30 250
Subtotal Education	\$	168				\$ -	3		\$ 170	1	17	\$ 15		781
OTHER - PROGRAMB/REQUIREMENTS														
Institute for Sustainable Energy (ECSU) Energy Conservation Loan Fund*	\$		\$ - \$ -	1 5		\$ - \$ -	١		<u>s</u> -	\$	616	\$ -	\$	616
Heat Pump Water Heaters (Hot Shot/WSaver)*	\$	53		1		\$ -	5		\$ -	\$	30	\$ 1 \$ 2	\$	120 200
C&LM Loan Defaults	\$		\$ -	\$		\$ -	Š		\$ -	\$	70	\$ -	\$	70
Subtotal Programs/Requirements	\$	53	\$ -	\$	234	\$ -	\$	-	\$ -	\$	716		\$	1,006
						DAD MANAGEMEN	_							
ISO Load Response Supplemental Payments **** ISO Load Response Program Support	\$	98	\$ -			\$ - \$ 58	\$		<u> </u>	\$			\$	75
Demand Reduction	\$		\$ -	\$		\$ -	3		\$ 20 \$ 10	\$			\$	400 400
Power Factor	\$		\$ 2	\$		\$ 32	Š		\$ -	\$	<u>*</u>		\$	854
Walt Until 8:00	\$:	\$ -	\$		\$ -	\$		\$ 100	\$	•	\$ -	\$	100
Subtotal Load Management	\$	210	\$ 7			\$ 90	3		\$ 130	\$	12	\$ 28	\$	1,829
Renewables Incentives	\$	35	\$ 5	_		NEWABLES & RD	_						_	
Research, Development & Demonstration	\$		\$ 5	*		\$ 5 \$ -	\$ \$		\$ 5 \$ -	\$	5 5		<u>\$</u> \$	1,044
Subtotal Renewables & RD&D	\$		\$ 5			\$ 5	*		\$ 5	\$	10		<u>\$</u>	1,444
						STRATIVE & PLA				<u> </u>			<u></u>	-,,,,,,
Administration	\$		\$ 16	5	-1	\$ 100	\$		\$ -	\$	50	\$ 40	\$	646
Planning and Evaluation	\$	614	\$ 3	\$		\$ 42	S		\$ -	\$	15		\$	2,277
Information Technology	\$		<u> </u>	3		\$ 105	\$		\$ -	\$	64		\$	1,925
ECMB Audh	\$		<u>\$</u>	\$		<u> </u>	\$		\$ -	\$		\$ -	\$	300
Performance Management Fee	\$	- : 	\$ -	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		<u>\$</u> -	- 5		<u>\$</u> -	\$	90			90
Admin/Planning Expenditures	\$	1,095							\$ -	\$	2,753 3,272		<u>\$</u>	2,753 7,990
PROGRAM BUB-TOTALS				Ť			Ť	——— <u>—</u>	·	<u> </u>		· ~ ~	<u> </u>	
Residential -	\$	1,368		\$	3,695	\$ 493	\$	10,463	\$ 1,307	\$	90	\$ 141	\$	17,695
Cai	\$	2,389				\$ 1,260	\$	21,475	\$ 268	\$	479	\$ 148		30,451
Other	\$	1,188									3,898			10,050
TOTAL CALM BUDGET	\$	4,945	⇒ 241	₽	12,382	\$ 2,005	\$	32,238	\$ 1,580	\$	4,467	\$ 339	\$	58,196
PA 03-2 Transfer to State Fund										\$	5,600		\$	5,600
Estimated Funds Carried Forward										\$	(20,455)		\$	(20,455)
				_			_							
GRAND TOTAL													\$	43,341

^{*} Joint CL&P/UI Programs

^{*} Joint CL&P/UI Programs

** OTHER -EDUCATION is primarily allocated to residential programs.

** Includes 2004 Program Carry over and carrying charges

*** ISO Price Response Supplemental Payment - Pilot

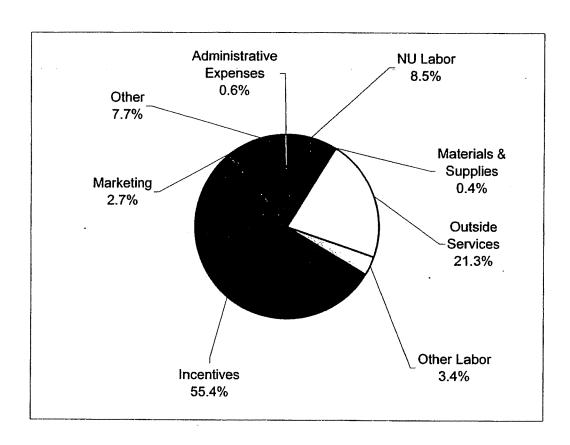
Note 1 - 2004 (8/10/2004) Appliance Retirement Budget reflects 2004 DPUC Ordered funding of \$3,500,000

\$2,500,000 of which is carried over into 2005

Note 2 - Express (Lighting Rebate) contains all Express Services dollars

Dollars for Express Services(Cool Choice and Motors) is combined with Express (Lighting Rebate) and shown as a single line.

CL&P
2005 CONSERVATION & LOAD MANAGEMENT
C&LM Budget By Expense Class



Expense Classes	Budget	% of Budget
NU Labor	\$ 4,945	8.5%
Materials & Supplies	\$ 241	0.4%
Outside Services	\$ 12,382	21.3%
Other Labor	\$ 2,005	3.4%
Incentives	\$ 32,238	55.4%
Marketing	\$ 1,580	2.7%
Other	\$ 4,467	7.7%
Administrative Expenses	\$ 339	0.6%
	\$ 58,196	100.00%

TABLE D CL&P 2005 Marketing/Communications Program Plan

Conservation & Loss Management Programs	Print Advertising [Consumer/Trade]		all Customer Bill	Public Relations	Other Note 1 & 2	Total
		RESIDENTIAL				
	\$ 110,000	\$ 63.0	00 \$	- \$ 160,000	\$ 60,000	\$ 393,000
	\$ 30,000	\$ 25,0	00 \$	- \$ 40,000		\$ 135,000
	\$ 75,000	\$ 80,0	00 \$ 100,000			
	\$ 2,000	\$ 3,0	00 \$	· S -	\$ 5,000	
	\$ 217,000	\$ 171,0	00 \$ 100,000	\$ 219,000		
		\$ 15,0	00 \$	· s -	\$ 25,000	\$ 40,000
	\$ 60,000	\$ 48,0	00 \$. \$ -		
Low Income (Energy Care & WRAP) UI Helps*	\$.	\$ 25,0	00 \$ -	· \$ -	Te .	25 000
COMBUNIATE RESIDENTAL STATE CONTROL OF STREET	3 (5 4) 2(7)00	1 3 - 1 - 2 - 259 N	00,000	1 Sage 219,000	FED: W115218,000	\$ 120,070,000
C&I LOST OPPORTUNITY	COMMER	CIAL & INDUSTR	IIAL.			
	\$ 8,500	\$ 5.0	00 \$ -	\$ 5,500	\$ 41,000	\$ 60,000
	\$ 16,500	\$ 19,0		\$ -		
	\$ -	\$	- \$ -	\$ -	\$ -	
	\$ 25,000	\$ 24,6		\$ 5,500		
CSI LARGE RETROFIT						
	\$ 20,000		- \$	IS -	\$ 5,000	25,000
	\$ 8,000	\$ 8.50		\$ -	\$ 3,500	
	\$ -			S -	\$ 10,000	
Municipal Energy & Schools	\$	S	- \$ -		\$ 5,000	
State Buildings	\$ -	\$	- S -		\$ 5,000	
	\$ 28,000	\$ 8,50	0 5 -			
	\$ -	\$ 10,00	0 5 -		\$ 30,000	
Alternate Standard Offer (ATSO)		T				
Carrier Services Bubtolal C & Programme Control	OTHER	- EDUCATION •	N. P. C. W. W. A. S. P. S.		A SOCIAL DESCRIPTION OF THE PARTY OF THE PAR	ASSESSED VIII
	\$ -	15	- \$ -	S -	\$ 25,000 \$	25.000
	\$ 5,000	\$	- s -		\$ - 1	
	\$ · -	\$	- S -		\$ - 5	
	\$ 100,000				\$ 10,000 \$	
Subtotal Education	\$ 105,000	\$ 25,00	0 \$ 5,000	\$ -	\$ 35,000 \$	
	OTHER - PROC	RAMS/REQUIRE	MENTS	· lainnean		
	S -	\$	- \$ -	S -	\$ - \$	
Energy Conservation Loan Fund*	\$ <u>-</u>	\$	- S -		\$ - 3	
Heat Pump Water Heaters (Hot Shot/Wsaver)*	S -	\$	- \$ -		\$ - 5	
CLM Loan Defaults	\$ -	\$			\$ - 5	
Subtotal Programs/Requirements		\$		CONTROL OF THE PARTY OF THE PAR	š - š	
	OTHER - L	OAD MANAGEMI	NY	<u> </u>		
ISO Load Response Supplemental Payments ***	\$ -	\$	- I S -	S -1	\$ - \$	
	\$ -	\$	- \$ -		\$ 20,000 \$	
	\$-		0 \$ -		\$ 5,000 \$	
Power Factor	\$ -		- \$ -		\$ - \$	
Wait 11 8:00	3 -	\$	- \$ -		\$ 100,000 \$	
Subtotal Load Management :		\$ 5,00	0 \$ -		\$ 125,000 \$	
	OTHER - RE	NEWABLES & R	080	<u> </u>		,
Renewables Incentives			- \$ -	\$ -1	\$ 5,000 \$	5,000
Research, Development & Demonstration	-		- s -		\$ - \$	
	5 _	\$	- \$ -		\$ 5,000 \$	5,000
Subtotal Renewables & RD&D					-,	
Subtotal Renewables & RD&D						
Subtotal Renewables & RD&D S PROGRAM SUB-TOTALS			T	T T	T	
Subtotal Renewables & RD&D S PROGRAM SUB-TOTALS Residential		\$ 279,00	5 104.000	\$ 219,000	\$ 343,000 S	1 307 000
Subtotal Renewables & RD&D S PROGRAM SUB-TOTALS Residential S C&I S	362,000				\$ 343,000 \$ \$ 136,000 \$	
Subtotal Renewables & RD&D PROGRAM SUB-TOTALS Residential	362,000 73,000	\$ 52,50		\$ 5,500	\$ 343,000 \$ \$ 136,000 \$ \$ 5,000 \$	

Notes:

- *** ISO Price Response Supplemental Payment Pilot

Note 1 - Includes Radio Advertising where applicable

Note 2 -

Other Category Descriptions:

Energy Conscious Construction/Energy Blueprint: Lunch meetings with design firms, subscriptions to trade publications (NECN, Clark/Dodge Reports), membership in professional organizations, mass media bitz shared with other programs

Custom Services: Misc. expenses essociated with marketing programs to customers, trade allies, and professional organizations, participation in various trade shows; Seminars with customers

Demand Reduction: Trade Show participation

O&M and Express Services: Misc. Expenses associated with marketing programs to customers, trade allies, professional organizations, participation in various trade shows. Oam and express Services: Indice Expenses associated that infanceing programmes are participation in various trade shows participation in various trade shows @\$2,000 - 3,000 each, givesways, lunch/dinner meetings w/ potential leads Small Business: Participation in at least 6-8 trade shows @\$2,000 - 3,000 each, givesways, lunch/dinner meetings w/ potential leads Small Euripe Center: Trade shows and public area displays eg. OCC Main Hall

Note 3 - Express (Lighting Rebate) contains all Express Services dollars

Dollars for Express Services(Cool Choice and Motors) is combined with Express (Lighting Rebate) and shown as a single line.

Note 4 - 2004 (8/10/2004) Appliance Retirement Budget reflects 2004 DPUC Ordered funding of \$3,500,000 \$2,500,000 of which is carried over into 2005

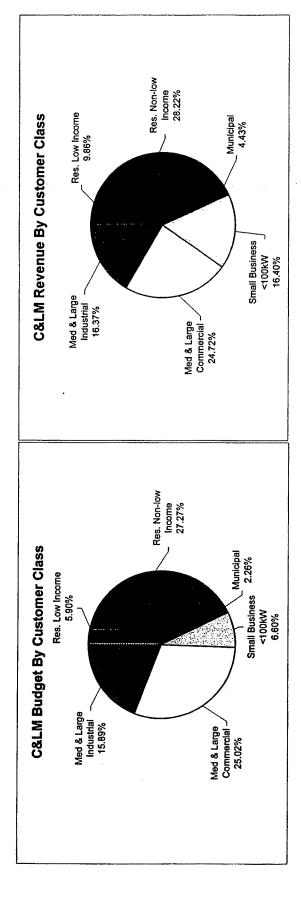
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Table A UI 2005 Proposed C&LM Budget

UI 2005 Proposed (rerial Duaher	dayyayayayayaya
UICALM BUDGET	2004 UI REVISED BUDGET 8/10/04	2005 LH FINAL BUDGET 11/1/04
RESIDENTIAL		
Residential Retail Lighting*	\$ 956,428	\$ 906,428
Energy Star Appliances*	\$ 405,480	
Appliance Retirement* Note 1	\$ 2,045,321	
Customer Initiated Projects*	\$ 50,000	
Total - Consumer Products	\$ 3,457,229	
Residential New Construction*	\$ 541,432	
Residential Heating & Cooling*	\$ 514,036	
Low Income (Energy Care & WRAP) / UI Helps*	\$ 773,149	\$ 1,073,149
Subtotal RESIDENTIAL	3 6285.848	12.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.
COMMERCIAL & INDUSTRIAL C&I LOST OPPORTUNITY Energy Blueprint / Energy Conscious Construction '	\$ 2,347,108	\$ 3,718,673
Total - Lost Opportunity	\$ 2,347,108	
C&I LARGE RETROFIT		
C&I RFP *	16 222 400	e (00.055
Energy Opportunities	\$ 222,128 \$ 2,207,126	
O&M	\$ 2,207,126	\$ 2,800,000
Services (BOC, Training, RetroCx)	\$ 181,706	404 700
RetroCx	161,700	\$ 181,706
RFP		
Express (Lighting Rebate)		
Municipal Energy & Schools	\$ 611,000	\$ 411,000
Total - C&l Large Retrofil	\$ 3,221,960	
Small Business*	\$ 922,604	
ATSO	\$	\$ 50,000
Subtotal Call Total Call Call Total Call Call Total Call Total Call Call Total Call Call Total Call Call Call Call Call Call Call C	6.491.672	8783 507
OTHER -EDUCATION		ALABASIAN STOCK LANDALUS
Smart Living Center	\$ 478,085	100,005
EESmarts* (K - 12 Education)	\$ 319,466	
Community Based Program (SWCT)*	\$ 95,641	
Subtotal Education	\$ 893,192	
OTHER -PROGRAMS/REQUIREMENTS		V 040,102
Institute for Sustainable Energy (ECSU)	101.011	
Energy Conservation Loan Fund*	\$ 134,211 \$ 89,250	
C&LM Loan Defaults	\$ 89,250 \$ 5,000	\$ 89,250 \$ 5,000
Subtotal Programs/Requirements	\$ 228,461	
OTHER - LOAD MANAGEMENT	220,701	244,230
ISO Load Response Program Support		
ISO Load Supplemental Payments	\$ 113,119	
Power Factor	\$ - \$ 35,000	\$ 50,000
Wait Until 8:00		
Subtotal Load Management		
OTHER - RENEWABLES & RD&D	\$ 323,119	\$ 263,119
		4
Renewables Incentives	\$ 190,000	
Research, Development & Demonstration Subtotal Renewables & RD&D	\$ 121,860	
	\$ 311,860	\$ 371,860
OTHER - ADMINISTRATIVE & PLANNING	TOTAL CO	
Administration	\$ 353,759	\$ 353,759
Planning and Evaluation	\$ 543,011	\$ 743,011
Information Technology	\$ 398,036	
ECMB	\$ 172,781	\$ 210,000
Audit .	\$ 60,000	\$ 60,000
2003 Performance Management Fee	\$ 622,130	\$ -
2004 Performance Management Fee	\$ 741,448	\$ -
2005 Performance Management Fee	\$ -	\$ 816,861
Admin/Planning Expenditures	\$ 2,891,165	\$ 2,581,667
PROGRAM SUB-TOTALS		
	\$ 6,328,543	
	\$ 6,759,536	\$ 9,056,371
Other**	\$ 3,337,236	\$ 3,103,527
	\$ 16,425,315	
	\$ 2,400,000	
TOTAL	\$ 18,825,315	\$ 18,564,084
t John CLODIU December		

Note:1 Includes anticipated 2004 unexpended funds of \$831,250 Note:2 excludes anticipated 2004 unexpended funds of \$831,250

^{*} Joint CL&P/UI Programs
** OTHER -EDUCATION is primarily allocated to residential programs.



Customer Class	Budget	% of Total C&LM Budget	% of Residential & C&l Budget	%.of Residential.& C&l Revenue	Difference
Res. Low income \$	1,073,149	2.90%	7.11%	9.86%	-2.75%
Res Non-Low Income	4,962,287	27.27%	32.88%	28.22%	4.66%
	15. de com 148 et		20100	3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3	
Small Business <100kW	1,200,000	6.60%	7.95%	16.40%	-8.45%
Med & Large Commercial \$	4,553,263	25.02%	30.17%	24.72%	5.45%
Med & Large Industrial \$	2,892,109	15.89%	19.16%	16.37%	2.79%
Municipal	411,000	2.26%	2.72%	4.43%	-1.71%
			AND THE PARTY OF T	12619	

\$ 18,195,334 GRAND TOTAL.

Other Expenditures \$ 3,103,527 17,06%

THE STREET OF THE PROPERTY OF

* Includes anticipated 2004 unexpended funds of \$831,250

Page 19

THE UNITED ILLUMINATING COMPANY 2005 CONSERVATION & LOAD MANAGEMENT COMPARISON OF UI CONSERVATION PROGRAMS TABLE B

				Total	Electric	ъ ж		Total				423			Utility Cost	Udility Cost Refe
Program	Utility Coats As Filed 2004	Utility Coots 2005	ğ"	Resource Cost 2005		-	Electric System 1 B/C Ratio	Resource B/C Retto	Gosle/a Units	Units of Measure	Annualizad Sevings Min	Lifetime Serings kWh	Load Savings kW	Demand Cost \$0.00	£ 1	SAWIN
Residential Retail Ughting	\$ 958,428 \$ 908,428 \$	\$ 906,428	15,000		\$ 3,298,725	Ш	3.64	15.		Ures	10,273,000	65,460,000	812	\$ 1,116.886	_	0.014
Note 1	\$ 205,480	405,480	1	1,163,165	\$ 798,652	22%	1.97	1,72	6,685 4	Appliances	1,041,350	14,837,930	183	\$ 2221.738 \$	0.389	0.027
. 6	\$ 60,000	\$0,000		200	0.0000	0.3%			3	- Andreas	3,314,000	00'080'/:	2	1,472,043	ı	000
in Frank II.	\$ 3.457,220	\$ 2,643,168	810,128	\$ 3,303,283 \$ 6,489,456	\$ 6,459,456				Ħ		14,628,350	97,477,930	1,825	ŀ	1	Ī
	CC 1 4 475	CA1175	007 760	1 430 480	300 000	- 100	- 1					al-			П	
	614,038	\$ 850,00	\$ 331,250	1,281,250	\$ 2,481,857	5.1%	261	1.98	3.400	Systems	757.200 948.200	11 075 800	318		4 120	2 0.057
Low Income (Energy Care & WRAP/I/JI Helps*	773,149	\$ 1.073,14	5	\$ 1,073,149	1,073,149 \$ 867,584	5.8%	0.81	1,11	6,500 0	Customers	4,326,725	15,630,550	444	\$ 2,414,374 \$	0.248	
	5,225,846	5,107,73	\$ 2039,125	7,096,864	8 9,608,983	27.5%			1		20,580,476	133,818,680	4,078			
Energy Blueprint/Energy Conscious Construction (a)	\$ 2347,108	\$ 3,718,673 \$	988,772	\$ 4,707,445 \$ 27,498,570	\$ 27.498,570	20.0%	7.39	6.37	150 P	Projects	24,836,699	424.067,090		\$ 523.620 \$	0.150	\$ 0.009
- Cost Orrowing	5 2347,108	ó	988,772	8 4,707,445	\$ 27,498.570						24,836,690	424,067,090	7,502			
	\$ 222,128	5	912,980	1,335,108	\$ 2,986,625	23%	7.08	258	18	rojects	2 984 375	56 703 125		- 1	0 141	0 000
portunities	\$ 2207,128	\$ 2,800,000 \$	3,208,699	\$ 6,008,699	\$ 20,613,996	15.1%	7.36	3.88	150 P	Projects	21,784,692	368,721,496	4,966	\$ 563.889 \$	0.129	
Services (BOC, Training, RetroX) *	\$ 181,708	\$ 181.706	\$ 21,600	303306	S 408 712	1 0%	080	0.50	ľ	Britan	000,000	000 000 0	5	2000 200		
RetroCx	П					20.	20.0	60.0		o)arra	200,002	2000,000		1977.006.7	O.HOS	0.081
Express (Liohting Rebate)					+	$\ \cdot\ $										
Municipal Energy & Schools	1	1	\$ 643,346	1,054,346	2336.925	22%	5.66	257	8	Projects	2 883 950	50 973 750	623	104 704	777	0000
	\$ 3,221,950	\$ 3,814,834	\$ 4,786,625	\$ 8,601,459	\$ 28,038,259	H					77,833,027	476,398,341	6,377	COTAGE		
Small Business *	922.604	\$ 1,200,000	1679.693	\$ 2879.693	S 5 858 747	743 8	4 88	2 33	207	Prolocie	000 308 3	109 001	-	000 000		
	\$	\$0,000			1	2000	207	257		colores	0,030,000	100,927,909	_	1,060,406	0.1/4	1100
SUB-TOTAL C&I	6,491,672	8 8.783,607	\$ 7,455,090	\$ 18,188,597	\$ 59,393,570	47.3%			H		59,584,726	1,011,383,420	14,605	T	T	
	1															
	ı	۰		1	1	23%	1	1	10,000	Customera	1					
Community Based Program (SWCT) *	\$ 95,641	\$ 95,641				0.5%	T	T	2	ill Colonia				1	1	
	П					4.6%										Ī
Institute for Sustainable Energy (ECSU)	\$ 134 211					768 0	1		1							
Energy Conservation Loan Fund *		\$ 69,250				0.5%	T		t				1	1	1	
GALM Loan Delauts	\$ 000.5	П				%0.0										
DIEGERAL STORY OF THE STORY OF		1			1	X 2.7		1	1							
ISO Load Response Program Support	\$ 113,119	\$ 183,119	ľ			%6.0		T	T		1	-		1		T
	П	3				0.0%					_		İ		T	T
War Umil 8:00 '	\$ 175,000 \$	100,000				0.5%										
		1	1		1	7.0X	+		T					1		
Renewables incertives	\$ 190,000 \$	\$ 150,000				0.8%			H							
	İ	1		1	1	1.2%	1		†							
SUB-TOTAL RENEWABLES AND ROLD	\$ 311,860 \$	\$ 371,660				2.0%			T		†			1		
	П														İ	
	1	- 1		1		1.9%	1		1							
Α,	ı	\$ 398,038		Ī		2.1%	İ		t		Ì	ŀ			T	
	\$ 172,781 \$	11				1,1%										
2003 Performance Management Fee		1		1	1	0.3%	1		\dagger							
	l	1				%0.0		†	T		Ī		1	-	Ī	
2005 Performance Management Fee		\$ 818,861														
SUB-TOTAL ABBIN & PLANNING	\$ 2891.185	2891.165 5 2.681.667	1	T	1	18.5%		1	†		1					
	ı	201							t		1		1	\dagger	1	T
	1								Н			-				
COMMERCIAL & INDUSTRIAL	5 6.759.536	8 9056.371		T	1	Ŧ			\dagger		T				1	
	\$ 3337,236 \$	\$ 3,103,827							H					1		
mai celualacet uses	214 267 27 P	14 15 15 14 14 15 17 14 14 14 14 14 14 14 14 14 14 14 14 14														
						-								1	T	T
Transfer to State Fund	\$ 2,400,000	\$ 1,200,000				6.5%										
TOTAL	\$ 18,625,316	18,625,318 \$ 16,084,084 \$ 9,	\$ 9,494,215	123,285,461	494,216 \$ 23,235,461 \$ 69,002,683 100.0%	100.07K	T	1	T		60,126,201	1,145,013,000	18.682 \$	\$ 593,663 \$	1	0.232 \$ 0.016
										7					1	

(a) Energy Blueprint Includes Motors and Cool Choice for 2004 and 2005

Joint CL&P and Ui Programs for 2005
 Other - Education is primerity allocated to Residential Programs

Note 1 - Includes ambicipated 2004 unexpended funds of \$831,250 Note 2 - Excudes ambicipated 2004 unexpended funds of \$831,250

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THE UNITED ILLUMINATING COMPANY 2005 CONSERVATION & LOAD MANAGEMENT TABLE C

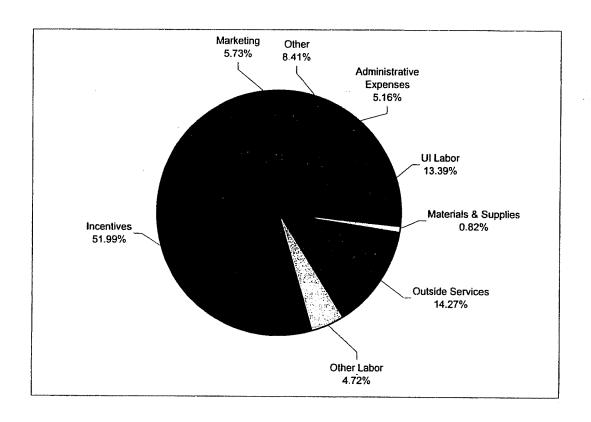
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		1 3 3		sala sala s		d record				1111					100	- 100 - EN		
PROGRAM NAME	1.	Ul Labor		Supplies		Dutside Jervices	GH	her Labor	1.	incentives		larketing		Other		ninistrative moonses		TOTAL
Residential Retail Lighting *	\$	73,209		4,500		123,000		105,350		530,000		61,650	5	-	\$	8,71		
Energy Star Appliances *	\$	45,754		1,888		13,750		52,650		150,000		138,100		-	5	5,36	0 \$	405,480
Appliance Retirement * (b) Customer, initiated Projects	5	111,450	3	11,080	\$	535,000	5	50,000	3	317,500 50,000		147,500	5		3	8,72	0 3	
TOTAL - CONSUMER PRODUCTS	18	230,413		17,448		671,750		208,000		1,047,800		345,260			8	22,79	_	30,000

Residential New Construction * Residential Heating & Cooling *	\$	99,079 103,503		3,500 2,000		70,000		70,000		252,250		40,000			3	6,60		
Low Income (Energy Care & WRAP) / UI Helps *	15	116,432		22,485		133,750 85,000		50,000 85,000		512,500 755,500		140,484	2	-	\$	7,76: 8,73:		
SUB-TOTAL RESIDENTIAL	8	849,427		45,431		.960,500		413,000				825,734			8	45.89		
Energy Blueprint / Energy Conscious Construction * (a)	8	401,697 401,697	8	5,500 8,800		142,000 142,000		75,000 75,000		2,945,476 2,945,476		125,000	8		\$	24,000		
707-2007-017-017-017-01	 •	401,901	۴	0,000	-	142,000	10	75,000	*	2,840,410	-	120,000	-		3	24,000	1 8	3,718,672
C&I RFP •	\$	19,809		319		10,000			3	382,000	5	8,000	s		5	2,000) s	422,128
Energy Opportunities	\$	355,808		2,103		31,000		40,000		2,257,789		93,000		-	\$	20,500	3	2,800,000
O&M Services (RFP, BOC, Training, RetroX) * Municipal Energy & Schools	\$	19,809 58,865		200 485		157,684 26,515		25.000	3	204 405	5	2,500			5	1,533		
TOTAL - CALLARGE RETROFIT	8	454.091		3.107		225.179		25,000 68,000		291,485 2,931,274	\$	3,450			\$	5,200 29,23		
	Ť						L		1		<u> </u>		Ť		 		+	0,014,034
Small Business *	\$	198,158		5,000		88,000		20,000				32,000			\$	15,000		1,200,000
ATSO SUB-TOTAL C&I	8	1,053,946	\$	13,607	\$	455,179	8	160,000	3	50,000		-	\$		1		- \$	
SUB-TOTAL CAP	<u> •</u>	1,000,040	-	13,007	 •	400,170	-	100,000		6,768,592	-	263,960	•	•	8	68,23	5 8	8,783,507
SmartLiving Center *	\$	153,990	\$	8,000	\$	-	5	66,000	\$	8,000	5	55,000	\$	134,000	5	3,095	5 5	428,085
EESmarts (K-12 Education) *	3	86,043		6,000		70,423		100,000			5	50,000	\$	-	\$	7,000	3	319,466
Community Based Program (SWCT) * SUB-TOTAL EDUCATION	8	24,699 264,732		14,000	5	15,000 88,423		168,000	\$	8,600	5	50,000			\$	5,942		
SIGNIFICATION	-	204,132	10	14,000	-	00,423	-	700,000	-	8,400	-	155,000	*	134,000	*-	16,037	13	843,192
Institute for Sustainable Energy (ECSU)	\$		5		\$		\$	-	3	150,000	\$		\$	-	\$		15	150,000
Energy Conservation Loan Fund *	\$		5		\$		5		5	-	\$	-	\$	89,250			. \$	
C&LM Loan Defaults -SUB-TOTAL PROGRAMS/REQUIREMENTS	\$		8		\$	5,000 5,000			8	160,000	\$		8	89,250	3		. \$	5,000 244,260
TOP TOTAL PRODUCTION OF THE PR	1		 -		-	0,000	١-		l °	100,000	•		*	89,200	-	<u> </u>	- 8	244,280
ISO Load Response Program Support	\$	23,604	\$		\$	84,934	5	-	\$	50,000	\$	4,581	\$		5	-	- 3	163,119
Walt Until 8:00 SUB-TOTAL LOAD MANAGEMENT	\$		S		5		\$	-	3	-	\$	100,000			\$. 3	100,000
SDG-TOTAL LOAD MARAGEMENT	8	23,604	8		8	84,934	8		18	. 50,000	\$	104,881	\$		\$		┼	263,119
Renewables Incentives	5		5	1,000	3	27,000	5	-	\$	106,500	\$	15,000	\$		5	500	5	150,000
Research, Development & Demonstration	\$		\$	-	\$	221,860	\$	-	\$	-	S	-	\$	-	5		. 5	221,860
SUB-TOTAL RENEWABLES AND RD&D	\$		\$	1,000	\$	248,860	\$	•	8	106,500	\$	15,000	\$		8	500	1	371,860
Administration	5	275,662	5	5,000	5	71,097	5		5		5	-	•		5	2,000	1 5	353,759
Planning & Evaluation	\$	280,050			\$	455,324			5		\$		\$		3	7,637		743,011
Information Technology	\$	37,794				12,000		136,738					5	138,000			. \$	398,036
ECMB Audit	5		5		\$	210,000 60,000			3				\$	-	\$. 3	210,000
2005 Performance Management Fee	\$		5		\$		5		\$		\$		\$		\$	816,861	5	60,000 816,861
SUB-TOTAL ADMIN & PLANNING	\$	593,506	\$		\$	808,421		138,738			\$.		8	138,000				2,581,687
																	L	
PROGRAM SUB-TOTALS RESIDENTIAL	\$	779 424	\$	57 924	-	1.042.022	4	ECE 000	<u> </u>	2.574.450		700 70	بننية	400.450	سنيا	60.407	4	6.005.406
COMMERCIAL & INDUSTRIAL		778,421 1,113,288		57,831 15,207		1,042,923 548,113		565,800 173,200		2,574,150 6,820,192		759,734 289,531	<u> </u>	196,450 26,800		60,127 70,040		6,035,436 9,056,371
OTHER	5	593,506	\$		\$	1,057,281		136,738		256,500		15,000		138,000		626,998		3,103,527
TOTAL C&LM BUDGET	8 :	2,485,215	\$	182,642	\$	2,648,317	\$	875,738	3	9,650,842	\$,	1,064,265	\$	381,250	\$:	957,160		18,196,334
Transfer to State Fund	s		s		2		5		\$		\$		\$	1,200,000	 		5	1,200,000
									_		<u> </u>						1	
TOTAL "	8	2,485,215	\$	152,542	8	2,648,317	8	876,738	\$	9,880,842	8	1,064,265	\$.	1,631,250	8	987,185	8	18,664,084

Notes:
(a) Energy Blueprint Includes Motors and Cool Choice
(b) Includes anticipated 2004 unexpended funds of \$831,250

Joint CL&P and UI Programs for 2005
 Excludes anticipated 2004 unexpended funds of \$831,250

THE UNITED ILLUMINATING COMPANY 2005 CONSERVATION & LOAD MANAGEMENT C&LM BUDGET BY EXPENSE CLASS



Expense Classes		<u>Budget</u>	% of Budget
UI Labor	\$	2,485,215	13.39%
Materials & Supplies	\$	152,542	0.82%
Outside Services	\$	2,648,317	14.27%
Other Labor	\$	875,738	4.72%
Incentives	\$	9,650,842	51.99%
Marketing	\$	1,064,265	5.73%
Other	\$	1,561,250	8.41%
Administrative Expenses	<u>\$</u>	<u>957,165</u>	<u>5.16%</u>
Total *	\$	18,564,084	104.48%

^{*} Excludes anticipated 2004 unexpended funds of \$831,250

THE UNITED ILLUMINATING COMPANY **2005 CONSERVATION & LOAD MANAGEMENT TABLE D** MARKETING/COMMUNICATIONS PROGRAM PLAN

Conservation & Load Management Programs	Media (b)		rint/Direct I Collateral	T	Customer Bili Inserts		Public Relations		Other (c)		Total
Residential Retail Lighting *	\$ 15,500	\$	18,150	1 5	7,500	\$	5,500	\$		\$	61,650
Energy Star Appliances *	\$ 52,100	\$	49,000	13			10,000		10,000		136,100
Appliance Retirement *	\$ 50,000	\$	-	-			6,000		61,500		147,500
Customer Initiated Projects	\$ -	\$	-	1 \$		18		ŤŠ		Š	1777,000
TOTAL - CONSUMER PRODUCTS	\$ 117,600	\$	67,150	\$	52,500	\$	21,500	\$			345,250
Residential New Construction * .	\$ 11,500	\$	15,000	1 \$	-	\$	6,000	5	7,500	5	40.000
Residential Heating & Cooling *	\$ 31,250	\$	-	1 \$	22,500	\$	6,000	\$	80,734		140,484
Low Income (Energy Care & WRAP) / UI Helps *	\$ •	\$	-	1 \$	-	S	-	\$		Š	130,101
SUB-TOTAL RESIDENTIAL	\$ 160,350	\$	82,150	\$	75,000	\$	33,500	\$	174,734	-	525,734
Energy Blueprint / Energy Conscious Construction * (a)	\$ 3,750	\$	65,000	1 5	-	\$	12,500	\$	43,750	5	125,000
TOTAL - LOST OPPORTUNITY	\$ 3,750	\$	65,000	\$	-	\$	12,500	\$	43,750		125,000
C&I RFP *	\$ *	\$		\$	-	\$	-	\$	8,000	\$	8,000
Energy Opportunities	\$ 6,510	\$	39,990	\$	_	\$	29,760	\$	16,740		93,000
O&M Services (RFP, BOC, Training, RetroX) *	\$ -	\$	-	\$		\$		\$	2,500		2,500
Municipal Energy & Schools	\$ -	\$	-	\$	-	\$	-	\$	3,450		3,450
TOTAL - C&I LARGE RETROFIT	\$ 6,510	\$	39,990	\$		\$	29,760	\$	30,690		106,950
Small Business *	\$ 7,680	\$	16,640	\$		\$	-	\$	7,680	\$	32,000
ATSO	\$ -	\$	-	\$	-	\$	-	\$	_	\$	
SUB-TOTAL C&I	\$ 17,940	\$	121,630	\$		\$	42,260	\$	82,120	\$	263,950
SmartLiving Center *	\$ 23,000	\$	10,000	\$	3,750	\$	3,000	\$	15,250	\$	55,000
EESmarts (K-12 Education) *	\$ 15,000	\$	21,500						3,750		50,000
Community Based Program (SWCT) *	\$ 30,000	\$	-	s		\$	-	\$		\$	50,000
SUB-TOTAL EDUCATION	\$ 68,000	\$	31,500	\$	7,500	\$	9,000	\$		\$	155,000
Institute for Sustainable Energy (ECSU)	\$ _	\$	-	\$		\$	-	\$	-	\$	
Energy Conservation Loan Fund *	\$	\$	-	\$	-	\$	-	\$	-	\$	-
C&LM Loan Defaults	\$ 	\$	-	\$	- :	\$	-	\$	-	\$	_
SUB-TOTAL PROGRAMS/REQUIREMENTS	\$ 	\$		\$		\$	-	\$	-	\$	
ISO Load Response Program Support	\$ -	\$	-	\$	-	\$	-	\$	4,581	\$	4,581
Wait Until 8:00	\$ 100,000	\$	•	\$	-	\$	-	\$	-1	\$	100,000
SUB-TOTAL LOAD MANAGEMENT	\$ 100,000	\$		\$	•	\$		\$	4,581	\$	104,581
Renewables Incentives	\$ -	\$	-	\$	15,000	\$		\$		\$	15,000
Research, Development & Demonstration	\$ -	\$	•	\$	•	\$	-	\$	-	\$	-
SUB-TOTAL RENEWABLES AND RD&D.	\$ 	\$	<u></u>	\$	15,000	\$		\$		\$	15,000
Administration	\$	\$	-	\$	-	\$	-	\$	-	\$	-
Planning & Evaluation	\$		-	69	-	\$	-	\$	-	\$	
Information Technology	\$	\$	-	\$		\$	-	\$	-	\$	-
ECMB	\$	\$	-	69	-	\$	-	\$	-	\$	-
Audit	\$	\$	-	69		\$	-	\$		\$	
2005 Performance Management Fee	\$	\$	-	\$	-	\$		\$	-	\$	-
SUB-TOTAL ADMIN & PLANNING	\$	\$20	ile jira	\$		\$		\$		\$.	
PROGRAM SUB-TOTALS										-	100
RESIDENTIAL	\$	\$	111,650			\$	41,900			\$	759,734
COMMERCIAL & INDUSTRIAL	\$ 28,540		123,630		750		42,860		93,751		289,531
OTHER	\$ 	\$		\$	15,000	\$	-	\$		\$	15,000
TOTAL	\$ 346,290	\$	235,280	\$	97,500	\$	84,760	\$	300,435	\$	1,064,265

- Notes:
 (a) Energy Blueprint includes Motors and Cool Choice
 (b) Ul "Media" is print and radio
- (c) "Other" consists of events, trade shows and signage

^{*} Joint CL&P and UI Programs for 2005

Table E UI Year 2005 Final C&LM Budget SWCT Fairfield County Six Town Planned Focus

UI 2005 Final Fairfield County Focus	Bu	2005 UJ Finat dget 11/5/04	1	Estimated Revenue rom SWCT	Planned SWCT Focus %		Planned SWCT Focus \$	Total Program Demand Savings In KW	SW.CT Demand Sayings In kW
RESIDENTIAL									
Residential Retail Lighting	\$	906,428	\$	394,296	60%	s	543,857	812	487
Energy Star Appliances	\$	405,480	\$		60%		243,288	183	110
Appliance Retirement* Note 1	\$	1,181,250	\$	513,844	44%		519,750	831	365
Customer Initiated Projects	\$	50,000			N/A				
Total - Consumer Products	\$	2,543,158		1,106,274		\$	1,306,895	1,825	962
Residential New Construction	\$	541,432			60%	\$	324,859	318	191
Residential Heating & Cooling	\$	950,000		413,250	60%	\$	570,000	1,490	894
Low Income (UI Helps	\$	1,073,149			75%	\$	804,862	444	333
Subtotal RESIDENTIAL	\$	5,107,739	\$	2,221,866	58.9%	\$	3,006,616	4,078	2,380
COMMERCIAL & INDUSTRIAL			L		١				
C&I LOST OPPORTUNITY	1								
Energy Blueprint / Energy Conscious Construction *	\$	3,718,673	\$	1,483,751	50%	\$	1,859,337	7,102	3,551
Total - Lost Opportunity	\$			1,483,751	50%		1,859,337	7,102	3,551
C&I LARGE RETROFIT			Γ			Ť	.,,	-,,,,,,,,,	0,001
C&I RFP	\$	422,128	\$	168,429	50%	•	244.004		
Energy Opportunities	\$	2,800,000	<u> </u>	1,117,200	50%		211,064 1,400,000	551	276
O&M	╅	2,000,000	٣	1,117,200	30%	Ð	1,400,000	4,966	2,483
Services (BOC, Training, RetroCx)	1 \$	181,706	\$	72,501	50%	•	90,853		
Municipal Energy & Schools	\$		\$	163,989	50%		205,500	23 832	12 416
Total - C&I Large Retrofit	\$	3,814,834		1,522,119	50%		1,907,417	6,371	3,186
Small Business	\$	1,200,000		478,800	50%		600,000	1,132	566
ATSO	\$	50,000	\$	19,950	00,0	\$	- 000,000	1,102	300
Subtotal C&I	\$	8,783,507	\$	3,504,619	50%		4,366,754	14,605	7,302
OTHER -EDUCATION									.,
Smart Living Center	\$	428,085	\$	186,217	N/A				
EESmarts(K - 12 Education)	\$		\$	138,968	60%	\$	191,680		
Community Based Program (SWCT)	\$	95,641		41,604	70%		66,949		
Subtotal Education	\$		\$	366,789	31%		258,628		
OTHER -PROGRAMS/REQUIREMENTS						<u> </u>			
Institute for Sustainable Energy (ECSU)	\$	150,000			0%	\$			
Energy Conservation Loan Fund	\$	89,250	\$	38,824	44%	\$	39,270		
C&LM Loan Defaults	\$		\$	1,995	50%		2,500		
Subtotal Programs/Requirements	\$	244,250	\$	40,819		\$	41,770		***************************************
OTHER - LOAD MANAGEMENT						<u> </u>	7.7		
ISO Load Response Program Support	\$	113,119	\$	45,134	44%	•	40 770		
ISO Load Supplemental Payments	\$	50,000		19,950	44%		49,772 22,000		
Power Factor	\$		Š	- 10,000		_	22,000		
Wait Until 8:00	\$	100,000	Š	43,500	75%	\$	75,000		
Subtotal Load Management	\$	263,119		108,584	56%		146,772		
OTHER - RENEWABLES & RD&D				/ = -					
Renewables Incentives	\$	150,000	\$	59,850	44%	•	66,000		
Research, Development & Demonstration	\$		\$	88,522	44%		66,000 97,618		
Subtotal Renewables & RD&D	\$		\$	148,372	44%		163,618		
PROGRAM SUB-TOTALS	-		<u>-</u>		-1-7 /0	*	103,016		———[
Residential	\$	6,035,436	\$	2,625,415	55.8%	\$	3,366,124	4,078	2,380
C&I	\$	9,056,371	\$	3.617,263	49.2%		4,454,416	14,605	7,302
Other	\$	521,860		148,372	31.4%		163,618	14,000	7,302
PROGRAM TOTAL Note 1		15,613,667			₩ . 1-7 /U	~	100.010		- 1

Note1: Includes anticipated 2004 unexpended funds of \$831,250.

Note 2: SWCT critical six towns include Bridgeport, Easton, Fairfield, Trumbull, Stratford, and Shelton.

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CHAPTER TWO: RESIDENTIAL PROGRAMS

CONSUMER PRODUCTS

ENERGY STAR Retail Products (CL&P & UI)

Objective:

The ENERGY STAR Retail Products Program, a joint program of CL&P and UI, combines the previously separate Appliance and Lighting Programs with the objective of continuing to build awareness, acceptance and market share of ENERGY STAR qualified lighting and appliances. This program incorporates a regional market transformation initiative coordinated by Northeast Energy Efficiency Partnerships ("NEEP"). As such, point of purchase materials and the general marketing platform are consistent throughout New England and Long Island, New York.

Target Market:

CL&P and UI will target residential customers who purchase new lighting and appliances in retail stores, via the internet, and in conjunction with residential remodeling or new construction projects.

Program Description:

Program strategies have been developed to directly address the key market barriers. Specifically, the Companies plan to partner with both manufacturers and retailers to offer training and education on the benefits of energy efficient products to local retail sales staff and consumers. The Companies also intend to work collaboratively with manufacturers and retailers in the design and placement of point-of-purchase display collateral for use at the retail outlets.

"In-store promotions" (including manufacturer events, demonstrations and "How To" clinics), product displays and demonstrations at the UI SmartLiving Center (including new product launches) will be pursued to assist retailers in promoting the program and to educate consumers on the positive benefits and quick payback provided by the energy efficient technologies.

For 2005, the Companies intend to continue with a multi-pronged effort for lighting and appliance market transformation. We will likely continue with the rebate-based approach with the compact fluorescent bulb, interior lighting fixture and clothes washer markets. Additionally, as in 2004, the Companies intend to actively pursue negotiated cooperative promotions (sometimes known as "buydowns") with manufacturers and retailers. In 2004, cooperative promotions made up the bulk of lighting product activity and that trend is expected to continue in 2005. Similar to the lighting program in 2004, a large percentage of the clothes washer rebate program was influenced by an additional manufacturer rebate on select brands over a three month time period. The Companies plan to pursue this same type of co-promotion in 2005 in both the lighting and appliance

arenas and may, depending on the reaction of the market actors, include room air conditioning.

The SmartLiving Catalog was re-introduced in 2004 on a limited mailing basis and with only one issue. Emphasis was placed on promoting internet web based sales through the smartlivingcatalog.com web site. A similar offering will be made for 2005 with one updated Catalog being mailed for the year. The Companies will explore methods to increase manufacturers' and retailers' participation in the Catalog.

Marketing Strategy:

The Marketing Strategy for the ENERGY STAR Lighting and Appliance campaign should continue to focus on building brand awareness of the unique benefits of the energy-efficient products within the Companies' service territories with specific emphasis on SWCT and the towns and the cities participating in the Community Based Program. Specifically:

- Implement mass marketing strategies to support new rebate campaigns and special ENERGY STAR events
- Identify cooperative opportunities with retailers and manufacturers to create general awareness of the ENERGY STAR brand, generate sales and extend the message into the community
- Continue to support the national and regional ENERGY STAR initiatives
- Identify and participate in cross-marketing opportunities with relevant state-wide conservation programs such as
 ENERGY STAR Homes, and the UI SmartLiving Center

Incentive Strategy:

Incentives generally are paid directly to manufacturers and/or retailers who provide high efficiency equipment and provide sufficient store-level sales data, and also as necessary to consumers in the form of rebates. The intent and purpose of the incentive is to be flexible, controllable and strategic, with heavy emphasis on targeted cooperative promotions.

2005 base rebate levels are planned to be:

- \$50 for clothes washers
- Negotiated cooperative promotions on a pilot basis, targeting SWCT to the extent possible, in the room air conditioner market to address primarily marketing and stocking practices
- \$2 for compact fluorescent bulbs (subject to decreases as the program year elapses)
- \$10 for interior lighting, including fixtures, lamps and ceiling fans with lighting kits
- Supplemental or alternate incentives may be provided in conjunction with special cooperative promotional activities

The Companies may change incentive levels as market conditions dictate

Goals:

CL&P Goals: Based on a budget of \$4,372,000, CL&P seeks to rebate the following numbers of products:

11,435	Clothes washers
937,694	Compact Fluorescent Bulbs
70,327	Interior lighting fixtures, lamps and/or ceiling
	fans with light kits
1,635	Maintenance of market share for room air
	conditioners

UI Goals: Based on a budget of \$1,311,908, UI seeks to rebate the following numbers of product:

Clothes Washers
Compact Fluorescent Bulbs
Interior lighting fixtures, lamps and/or ceiling
fans with light kits
Room air conditioners
Refrigerators (via market effects)
Dishwashers (via market effects)

New Program Issues:

Cooperative promotions continue to be the main focus of the lighting program and expansion of the cooperative promotions to the SmartLiving® Catalog and appliances will be explored through discussions and possible negotiations with the appropriate market actors.

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CL&P Standard Filing Requirement

Residential Retail Lighting

All dollar values are in \$000

Budget Projections	200	2 Actuals	200	3 Actuals	2004 E	ludget*	2005 I	Budget	
Labor		range la la ser a d e la la la							
NU Labor	\$	62	\$. 111	\$	105	\$	74	
Contractor Staff	\$	27	\$	-	.\$	<u>_</u>	\$	42	
Total Labor	\$	89	\$	111	\$	105	\$	116	•
Materials & Supplies	\$	-	\$	37	\$. 10	\$	10	
Outside Services	\$	639	\$	438	\$	500	\$	501	a)
Incentives	\$	2,004	\$	557	\$	2,315	\$	2,487	
Marketing									
Joint CL&P / UI Market	\$		\$	-	\$	-	\$	47	
CL&P Market	\$	-	\$		`\$	152	\$	129	b)
Misc Marketing	\$	401	\$	78	\$	200	\$	217	c)
Sub-total marketing	\$	401	\$. 78	\$	352	\$	393	
Administrative Expenses	\$	-	\$	33	\$	8	\$. 5	d)
Other	\$	17	\$	1	\$	10	\$	10	-
Total	\$	3,149	\$	1,255	\$	3,300	\$	3,522	

^{*} Revised Budget as filed on 8/18/04

- a) Vendors: Duties include retail implementation, circuit riders, sales staff training, rebate processing and fulfillment; Reasons: Selected through competitive bid process; NEEP membership for Res. Prog.
- b) Includes bill inserts, print ads, radio and direct mail/collateral.
- Represents NEEP allocation to CL&P of consumer education initiatives for lighting and appliances which includes point of purchase display materials and coupons.
 Also, the new lighting direct mail (catalog) initiative is included here.
- d) Employee expenses including mileage, training, conference attendance and misc.

2005 Goals and Metrics Information

Demand Savings (kW reduction Goal)		3,378.3		
Annual Energy Savings (KWh Reduction Goal)		42,896,888		
Lifetime Energy Savings (kWh Reduction Goal)	293,203,018			
Annual Cost Rate (\$/kWh)	\$	0.082		
Lifetime Cost Rate (\$/kWh)	\$	0.012		
Electric b/c ratio		4.26		
Total Resource b/c ratio		5.89		

CL&P Standard Filing Requirement

Retail Lighting

		Program Costs					
Year	Budget	Actual	% of Budget	Cost/participant	\$/LT-kWh		
2000	\$2,463,000	\$4,016,000	163%	*\$17	0.009		*
2001	\$2,831,000	\$4,828,000	171%	\$12	0.008		
2002	\$2,700,000	\$3,484,000	129%	\$10	0.009		
	-	(\$335,000)					
	Net 2002	\$3,149,000	1				
2003	\$2,450,000	\$1,256,000	51%	\$12	0.016		
2004 ²	\$3,300,000	n/a	n/a	n/a	n/a		
2005	\$3,522,000	n/a	n/a	n/a	n/a		
							,
		<u> Soal - Participation</u>	_		:		
Year	Goal	Actual	% of Goal				
2000	150,000	233,558	156%				
2001	171,731	410,908	239%				
2002	325,557	340,560	105%				
2003	235,394	104,246	44%				
2004 ²	776,473	n/a	n/a				
2005	1,008,021	n/a	n/a				
Goal - Lifetime MWh savings					Goal - In:	stalled kW	Savings
Year	Budget	Actual	% of Budget	Year	Goal	Actual	%of Goal
2000	152,772	438,631	287%	2000	n/a	n/a	n/a
2001	244,030	610,545	250%	2001	n/a	n/a	n/a
2002	366,566	398,613	109%	2002	n/a	n/a	n/a
2003	201,631	78,468	38.9%	2003 ⁵	1,391	607	43.6%
2004 ²	354,614 ³	n/a	n/a	2004 ²	2,970	n/a	n/a
2005 ⁴	293,203	n/a	n/a	2005	3,378	n/a	n/a
		Program Ratios					
	\$/Lifetime kWh		\$/Ann	ualized kW	•		
Year	Plan	Actual	Plan	Actual			
2000	0.016	0.009	n/a	1688			
2001	0.012	0.008	n/a	1279			
2002	0.007	0.008	n/a	1158			
2003	0.011	0.016	1,663	2,069			

- Reflects transfer of 2001 Load Management funds per Docket No. 02-01-22.
- Based on revised budgets and goals filed on 8/18/04.

n/a

n/a

- Impact evaluation which decreased savings assumptions.
- Lower lifetime savings per unit is a result of shorter bulb life.
 - Annual savings from 2004 to 2005 increased from 37.714 MWH in 2004 to 42.897 MWh in 2005.

1,111

1,043

n/a

n/a

Demand saving goals reflect 1/13/03 goals.

2004²

2005

0.009

0.012

Retail Lighting

CL&P Program Notes

Budget/FTE

• .7 FTE for program administration, vendor interaction, sales and field support

Goal

- Goal is 1,008,021 lighting products including bulbs, fixtures and portables.
- Note that the 2005 lifetime savings reflects a 6 year bulb life compared to 9 years in 2004 (see metric changes below). Because of the change in expected life, annual savings is a better gauge of program performance: 2004 annual cost rate (plan) = 14 cents per annual kWh. 2005 annual cost rate = 8 cents per annual kWh.

Cost/Unit

• The overall cost per unit is \$3.49. The average incentive cost per unit is \$2.47 and includes products from the catalog component of the program, coupons and buy-downs. The average product wattage is 22 watts (approximately 90 watt incandescent equivalent).

Goal Setting Methodology

 Average weighted incentive cost was calculated based on desired product mix and delivery mechanism; goal was calculated based on available incentive dollars divided by average incentive cost.

Metric Changes

- Assumed product life decreased from 9 to 6 years to reflect recent independent testing of products.
- Program will continue to move towards more specialty (higher wattage, dimmables, three-ways, etc) products in 2005. Note that average product wattage is 22 watts.
- This is a market transformation program and the long term benefits of marketing and education cannot be overlooked in favor of short-term savings.

Other

 Based on recent ECMB potential study, we are barely scratching the surface in terms of residential lighting savings. However, there are clearly still some barriers to overcome in terms of product acceptance, price, availability (especially specialty products), and reliability. This page intentionally left blank.

Energy Star Appliances

All dollar values are in \$000

Budget Projections	2002 A	<u>ctual</u>	2003	Actuals	2004 Bu	udget*	2005	Budget	
Labor	-								
NU Labor	\$. 13	\$	28	\$	53	\$	42	
Contractor Staff	\$	53	\$.\$		\$		
Total Labor	\$	66	\$	28	\$	53	\$	42	
Materials and Supplies	\$	-	\$.	77	\$		\$	-	
Outside Services	\$	466	\$	290	\$	300	\$	163	a)
Incentives	\$	530	\$	379	\$	430	\$	490	b)
Marketing Administrative	\$	454	\$	73	\$	107	\$	135	c)
Expenses	\$	9	\$	12	\$	-	\$	10	
Employee Expenses	\$	-	\$	1	\$	10	\$	10	
Total	\$	1,524	\$	860	\$	900	\$	850	

^{*} Revised Budget as filed on 8/18/04

- a) Retail implementation of program (secured through competitive bidding process)
 - POP and marketing materials through vendor
 - 2) Coupon fulfillment through vendor
 - 3) Vendor Duties include:
 - *Visit, enroll, support and train retailers on an on going basis. Stock stores with POP and marketing materials.
 - *Plan and implement special events and promotions with retailers and manufacturers.
 - * Create retailer packets with training materials
 - *Toll free program number to address questions from customers and retailers.
 - *Collect sales data and inventory from retailers
- b) Incentives are \$50 for washers x 98,000 units.

Will pursue cooperative promotions with retailers and/or manufacturers

 c) Special events and promotions with retailers and manufactures will be planned to maximize SW Connecticut impact. Marketing may include print ads, radio and direct mail.

2005 Goals and Metrics Information

Demand Savings (kW reduction Goal)		365.5
Annual Energy Savings (KWh Reduction Goal)		2,761,772
Lifetime Energy Savings (kWh Reduction Goal)	3	8,601,798
Annual Cost Rate (\$/kWh)	\$.308
Lifetime Cost Rate (\$/kWh)	\$.022
Electric b/c ratio		2.36
Total Resource b/c ratio		2.23

Energy Star Appliances (including window AC)

Pr	oq	rai	m	Co	sts

Year		Budget	Actual	% of Budget	Cost/Partic.	\$/LT-kWh
2000	-\$	1,416,000	\$1,259,000	89%	\$171	0.049
2001	\$	863,000	\$732,000	85%	\$15 5	0.045
2002	\$	1,260,000	\$1,674,000	133%	\$64	0.041
2003	\$	1,600,000	\$860,000	54%	\$33	0.053
2004 4	\$	900,000	n/a	n/a	n/a	n/a
2005	\$	850,000	n/a	n/a	n/a	n/a

Goal - Participation

Year	Goal (Units)	Actual	% of Goal
2000	8,320	7,383	89%
2001	5,451	4,714	86%
2002	16,444	26,000	158%
2003	22,160	13,813	62%
2004 4	11,900	n/a	n/a
2005	11,435 ¹	n/a	n/a²

Goal - Lifetime MWh Savings

Goal - Installed kW Savings

Year	Goal (MWh)	Actual (MWh)	% of Goal	Year	Goal	Actual	%of Goal
2000	23,016	25,736	112%	2000	n/a	n/a	n/a
2001	21,322	16,244	76%	2001	n/a	n/a	n/a
2002	32,945	41,111	125%	2002	n/a	n/a	n/a
2003	51,655	29,791	58%	2003 5	4,772	815	17.1%
2004 4	23,799	n/a	n/a³	2004 4	586	n/a	n/a
2005	38,602	n/a	n/a	2005	365	n/a	n/a

Program	Ratios
1 TOGICALII	· lauos

	\$/Lifetin	ne kWh	\$/Annua	lized kW
Year	Plan	Actual	Plan	Actual
2000	0.074	0.058	n/a	10458
2001	0.053	0.053	n/a	9643
2002	0.038	0.037	n/a	1568
2003	0.038	0.029	594	1,055
2004 4	0.038	n/a	1,535	n/a
2005	0.022	n/a	2,326	n/a

Goal consists of 9,800 washers, 1,635 window AC units.

Reflects increased goal for clothes washers and reduction for room air conditioners.

Lower MWh goal reflects smaller budget, focus on AC units, and elimination of refrigerators and dishwashers.

Based on revised budgets and goals filed on 8/18/04.

Demand saving goals reflect 1/13/03 goals.

Retail Appliances

CL&P Program Notes

Budget/FTE

• 0.4 FTE for program administration, vendor interaction, sales and field support

Goal

• Goal is 9,800 washers (through coupons) and 1,635 Window AC (cooperative promotion). The window AC units will be targeted to SW Connecticut.

Cost/Unit

- The overall cost per unit is \$74 and is comparable to the 2004 (filed) cost of \$76. Note that the 2005 plan has a higher number and percentage of washers which tends to increase the average unit cost; however cooperative promotion will be used for window AC units which helps offset the higher cost of washers.
- Incentive cost for washers is $50 \times 9,800 = 490,000$. Cooperative promotion will be sought to help in promoting washers. AC promotion cost is $20 \times 1,635 = 32,700$. In addition, manufacturer and/or retailer matching funding will be sought.

Goal Setting Methodology

- 2003 washer goal was 5,300 washers. 2004 projections are heading towards year-end totals of 8,500 units. Market share is nearing 50%, and it's expected that growth will flatten out. Therefore, a goal of 9,800 is an appropriate stretch for 2005.
- AC unit goal was a function of available dollars. Units will be targeted to southwest Connecticut/critical towns.

Metric Changes

• Since market share of window AC units is near/over 50%, there will not be window AC coupons offered in the program for 2005. Note that window AC coupons will be a component of the Appliance Retirement program. Cooperative promotion will be used to increase sales of window AC units in SW Connecticut/critical towns. This is the first time that cooperative promotion ("buy-downs") will be used within the appliance program, so market response and effect is unknown.

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Residential Retail Lighting *

Baseline Assumptions:

Market - All residential customers

Budget Projections	2003 Act	2004 Bud	2005 Bud
UI Labor (a)	\$ 107,889	\$ 102,288	\$ 73,209
Materials & Supplies	\$ (3,641)	\$ 5,000	\$ 4,500
Outside Services (b)	\$ 68,597	\$ 115,000	\$ 123,000
Other Labor (c)	\$ (18,300)	\$ -	\$ 105,350
Incentives (d)	\$ 124,125	\$ 612,500	\$ 530,000
Marketing (e)	\$ 46,614	\$ 117,143	\$ 61,650
Other	\$ 531	\$ -	\$
Administrative Expenses	\$ 3,315	\$ 4,497	\$ 8,719
Total	\$ 329,130	\$ 956,428	\$ 906,428
All Other Charges	\$	\$	<u> </u>
Total	\$ 329,130	\$ 956,428	\$ 906,428

^{*} Joint CL&P and UI Programs for 2005

- (a) .75 FTE UI oversight, down by .25
- (b) Incentive processing
- (c) Field support
- (d) 250,000 CFL's and 3,000 Fixtures
- (e) POP and marketing campaigns

Goals and Metrics Information:

Savings		<u>2005</u>
Demand Savings (kW)		812
Annual Energy Savings (kWh)	10,27	73,000
Lifetime Energy Savings (kWh)	65,46	60,000
Annual Cost Rate (\$/kWh)	\$	0.088
Lifetime Cost Rate (\$/kWh)	\$	0.014
Lifetime Energy Savings (kWh) Annual Cost Rate (\$/kWh)	65,46 \$	0.088

Residential Retail Lighting

Goal - Program Costs (000's)

Year	Budget	Actual	% of Goal Achieved
2000	\$ 79 7	\$917	115.1%
2001	\$871	\$901	103.4%
2002	\$664	\$792	119.3%
2003	\$519	\$329	63.4%
2004	\$956	\$0	0.0%
2005	\$906	\$0	0.0%

Goal - Number of Bulbs & Fixtures

Year	Goal	Actual	% of Goal Achieved
2000	9,951	17,175	172.6%
2001	43,000	72,480	168.6%
2002	48,565	70,944	146.1%
2003	34,000	35,676	104.9%
2004	229,000	-	0.0%
2005	253,000	-	0.0%

Goal - Installed kWh Savings (000's kWh)

Goal - Installed kW Savings

% of Goal Achieved	Actual	Goal		Year	% of Goal Achieved	Actual	Goal	Year
0.0%	-		-	2000	182.9%	5,420	2,963	2000
0.0%	-		-	2001	156.8%	7,513	4,792	2001
0.0%	-		-	2002	170.7%	5,617	3,291	2002
84.2%	223	5	265	2003	97.1%	2,653	2,731	2003
0.0%	-	3	846	2004	0.0%	-	10,743	2004
0.0%	-	2	812	2005	0.0%	-	10,273	2005

Residential Retail Lighting

Goal - Lifetime kWh Savings (000's kWh)

Year	Goal	Actual	% of Goal Achieved
2000	45,581	83,378	182.9%
2001	49,837	78,136	156.8%
2002	30,851	52,565	170.4%
2003	29,654	23,879	80.5%
2004	97,129	-	0.0%
2005	65,460	-	0.0%

Program Ratios

Year	\$/kWh Target	Actual	\$/LT kWh Target	Actual	\$/kW Target	Actual	Cost/ Socket
2000	\$0.269	\$0.169	\$0.017	\$0.011	\$0.000	\$0.000	\$53.392
2001	\$0.182	\$0.120	\$0.017	\$0.012	\$0.000	\$0.000	\$12.431
2002	\$0.202	\$0.141	\$0.022	\$0.015	\$0.000	\$0.000	\$11.164
2003	\$0.190	\$0.124	\$0.018	\$0.014	\$1,958.491	\$1,475.336	\$9.222
2004	\$0.089	\$0.000	\$0.010	\$0.000	\$1,130.504	\$0.000	\$4.177
2005	\$0.088	\$0.000	\$0.014	\$0.000	\$1,116.886	\$0.000	\$3.583

Retail Lighting

UI Program Notes

Budget/FTE

- 2002 budget scaled back due to across-the-board cuts.
- 2003-2004 budgets assume strong financial participation by industry.
- 2004 staffing includes one FTE for administration and field support.
- 2005 UI staffing drops to .75 due to re-emergence of vendor field support.

Goal

- Program goals entirely sensitive to fluctuating budgets.
- 2002 goal is relatively high based on past performance and regional initiatives.
- 2003 goal includes redesigned, downsized direct mail initiative.
- 2005 builds off the success of 2004 foray into negotiated industry promotions.

Cost/Unit

- Cost per unit is a function of rebate levels and measure mix.
- 2003 emphasis on fixtures and torchieres drives up unit cost.
- 2004 target cost per unit driven down by redesigned marketing strategy and bulb emphasis.
 Impact of 2004 redesign dampened by decline in lighting savings versus 2003 (per RLW study).
- 2005 target cost ratios are generally consistent with 2004, though measure life and kW adjustments were dictated by evaluation results and analysis of available data from other jurisdictions.
- 2005 measure life is six years, versus nine in years prior.
- 2005 annual kWh/unit down to 40 versus 80 in 2002.

Metric Changes

- 2001 saw a switch from counting sales to specific products delivered. (Data not readily available on a retro-active basis to recalculate.)
- 2002-2004 RLW impact evaluation results drive down savings.

Energy Star Appliances *

Budget Projections		2003 Act		2004 Bud	!	2005 Bud
Ul Labor (a)	\$	37,143	. \$	31,243	\$	45,754
Materials & Supplies	\$	1,499	\$	5,000	\$	1,866
Outside Services (b)	\$	40,209	\$	71,500	\$	13,750
Other Labor (c)	\$		\$	-	\$	52,650
Incentives (d)	\$	133,004	\$	182,500	\$	150,000
Marketing (e)	\$	49,046	\$	109,144	\$	136,100
Other	\$	-	\$	-	\$	-
Administrative Expenses	\$_	1,994	\$	6,093	\$	5,360
Total	\$	262,895	\$	405,480	\$	405,480
All Other Charges	\$		\$.\$	•
Total	\$	262,895	\$	405,480	\$	405,480

^{*} Joint CL&P and UI Programs for 2005

- (a) .5 FTE UI oversight, up from .25
- (b) Incentive processing
- (c) Field support
- (d) 2,500 Washers and 1,250 Room Air
- (e) POP and campaigns, Room AC promotions, 1,520 refrigerators, 1,415 dishwashers (via market effects)

Goals and Metrics Information:

Savings		<u>2005</u>
Demand Savings (kW)		183
Annual Energy Savings (kWh)		1,041,350
Lifetime Energy Savings (kWh)		14,937,930
Annual Cost Rate (\$/kWh)	· \$	0.389
Lifetime Cost Rate (\$/kWh)	\$	0.027

Energy Star Appliances (Including Room AC)

Goal - Program Costs (000's)

Year	Budget	Actual	% of Goal Achieved
2000	\$749	\$914	122.0%
2001	\$794	\$688	86.6%
2002	\$715	\$511	71.5%
2003	\$551	\$263	47.7%
2004	\$405	\$0	0.0%
2005	\$405	\$0	0.0%、

Goal - Number of Appliances

Year	Goal	Actual	% of Goal Achieved
2000	10,848	11,845	109.2%
2001	19,823	29,668	149.7%
2002	12,894	24,51 2	190.1%
2003	10,073	5,060	50.2%
2004	4,800	-	0.0%
2005	6,685	-	0.0%

Goal - Installed kWh Savings (000's kWh)

Goal - Installed kW Savings

Year	Goal	Actual	% of Goal Achieved	Year	Goal	Actual	% of Goal Achieved
2000	1,524	1,658	108.8%	2000	-	, .	0.0%
2001	2,332	2,050	87.9%	2001	-	-	0.0%
2002	1,232	2,380	193.2%	2002	-	-	0.0%
2003	1,016	812	79.9%	2003	139	416	299.3%
2004	821	-	0.0%	2004	297	-	0.0%
2005	1,041	•	0.0%	2005	183	-	0.0%

Goal - Lifetime kWh Savings (000's kWh)

Year	Goal	Actual	% of Goal Achieved
2000	30,484	33,164	108.8%
2001	41,852	36,791	87.9%
2002	17,999	34,771	193.2%
2003	17,593	10,329	58.7%
2004	10,979	-	0.0%
2005	14,938		0.0%

Energy Star Appliances (Including Room AC)

Program Ratios

11.41.4	- 1			*			
Year	\$/kWh Target	Actual	\$/LT kWh Target	Actual	\$/kW Target	Actual	Cost/Appl
2000	\$0.491	\$0.551	\$0.025	\$0.028	\$0.000	\$0.000	\$77.163
2001	\$0.340	\$0.336	\$0.019	\$0.019	\$0.000	\$0.000	\$23.190
2002	\$0.580	\$0.215	\$0.040	\$0.015	\$0.000	\$0.000	\$20.847
2003	\$0.542	\$0.324	\$0.031	\$0.025	\$3,964.029	\$632.212	\$54.701
2004	\$0.494	\$0.000	\$0.037	\$0.000	\$1,363.133	\$0.000	\$84.475
2005	\$0.389	\$0.000	\$0.027	\$0.000	\$2,221.738	\$0.000	\$60.655

Retail Appliances

UI Program Notes

Budget/FTE

- Significant program design changes in 2003-2004 affect budgets:
 - o Promised regional industry initiatives for 2003
 - o Elimination of dishwasher rebate; addition of room a/c and refrigerator turn-ins in 2003
 - o Further elimination of refrigerator rebates in 2004, shift of turn-ins to Appliance Retirement Program
 - o For 2005 only clothes washers will be actively rebated, though room a/c promotional incentives will be sought.
 - o Staffing budgeted at .5 FTE for oversight and administration.

Goal

- Metric changes make comparison difficult.
- 2005 program will see only clothes washer rebates, as well as very conservative goal of 1,250 room air conditioners via negotiated promotions.

Cost/Unit

- Factoring metric change, cost per unit actually declines from \$76 to \$55 from 2002 to 2003.
- Impact of regional partnerships and potential availability of load management drives down cost per unit.
- 2003 experience dictates that clothes washer incentive must double to \$50.
- Cost rates, expressed relative to measurable savings, increase as the program shifts to only rebating washers and counting limited number of room air conditioners via promotions.

Metric Changes

- Radical overhaul of metric to be consistent with CL&P:
 - o 2002 and prior metric was market share of Energy Star
 - o 2003 metric is rebates paid times 1.33 to reflect breakage
 - o 2004 metric is raw numbers of units rebated
 - o 2005 metric includes only washers and a conservative estimate of room ac via promotions

Appliance Retirement Program (CL&P & UI)

Objective:

The objective of the joint CL&P and UI Appliance Retirement Program is to remove older, secondary refrigerators and freezers from customers' homes while preventing them from entering the secondary (used appliance) market, and to incent customers to replace older room air conditioners with ENERGY STAR units.

Target Market:

The Program will target residential customers who have second and third refrigerators and/or freezers in use in their homes, and customers who have room air conditioners greater than ten years old. Marketing will continue to focus on SWCT; however, customers throughout Connecticut may be invited into the program as dictated by goal attainment.

Program Description:

The Companies learned considerably from the inaugural 2004 program year and plan on incorporating many of the lessons learned into the 2005 program. In particular, the focus of the program, with respect to room air conditioners, may shift away from an "open" bounty turn-in approach to events that offer incentives for the purchase of new Energy Star units. This shift is driven by preliminary data that shows 32% of turn-in participants participated in the rebate program to purchase new room air conditioners, and anecdotal survey evidence that shows significant numbers of stored, unused units were turned in. Under the revised program design events may be held at the locations of major room air conditioner retail outlets and upon filling out paperwork and verification of both the customer's and the air conditioners' eligibility, customers will be given one signed, control-coded rebate coupon for the purchase of one new ENERGY STAR unit per old unit turned in. These coupons may be for a specific retailer when a cooperative promotion agreement is signed with that retailer. 2004 experience with events in New Haven and Southington in particular demonstrate this approach to be appealing in that they generated significant cooperative support in the form of co-op advertising, product specialist availability and matching manufacturer rebates from retailers and manufacturers, and led to demonstrably higher sales of new units. An alternative approach is a mail-in rebate for the purchase of an ENERGY STAR A/C at any participating retail outlet. In either case the Companies may take advantage of the opportunity to educate the thousands of customers that attend these events on all the C&LM offerings.

The 2005 refrigerator/freezer program begins as exclusively an in-home pick-up program. Customers will have the opportunity to utilize an online scheduling facility or a toll-free telephone number in order to schedule pick-up of their working secondary refrigerators and/or freezers. Pre-screening of customers and education of retailers can be enhanced to minimize ineligible participation in the program. Room air conditioners and dehumidifiers should no longer be eligible for pick-up.

Marketing Strategy:

The 2004 experience proved that bill inserts and public relations activity are viable means of generating adequate awareness of and participation in the program, and thus will be continued in 2005 to the extent possible. Bill inserts may be paced to ensure that the appliance retirement vendor maintains full capacity to achieve program goals without building too large of a back-log. In addition, to the extent necessary, print ad campaigns may be utilized.

The above activities will be pursued to the extent funding allows with a total marketing budget of \$319,000 for CL&P and \$147,500 for UI.

Incentive Strategy:

For the refrigerator/freezer program, the \$50 cash payment to the customer will be retained, subject to review and adjustment, while for the room air conditioner turn-in events customers will receive a \$35 instant or mail in for use in purchasing a new ENERGY STAR unit. With respect to room air conditioners, the Companies plan to seek cooperative promotions to bring retailers and manufacturers more fully into the program through, for example, advertising, staff support and/or additional incentives. The Companies may change incentive levels as market conditions dictate.

Goals:

CL&P Goals: CL&P's funding level of \$2,500,000 for 2005 indicates the following goals:

14,479

Refrigerators and/or Freezers via pick-up

2,143

Air Conditioners

UI Goals: UI's funding level of \$1,181,250 for 2005 indicates the following goals:

4,600

Refrigerators and/or Freezers via pick-up

2,500

Air Conditioners

New Program Issues:

The room air conditioner turn-in events should now be tied to purchase of ENERGY STAR via a rebate rather than a cash incentive. In addition, as with central air conditioning, the key stocking decisions are made in the fourth quarter of the year preceding the upcoming cooling season so efforts will be undertaken coincident with the program filing process to enlist stocking support from key market actors.

Appliance Retirement

All dollar values are in \$000

Budget Projections	2003 A	ctuals	2004 Budget*		2005 E	Budget	
Labor							
NU Labor	\$	-	\$	185	\$	137	
Contractor Staff	\$	-	\$	10	\$	42	
Total Labor	\$	-	\$	195	\$	179	
Outside Services	\$	-	\$	1,422	\$	1,198	a)
Incentives	\$	-	\$	1,400	\$	739	b)
Marketing	\$	-	\$	400	\$	319	c)
Administrative Expenses	\$	-	\$	80	\$	65	
Other	\$	_	\$	3	\$	-	_
Total	\$	•	\$	3,500	\$	2,500	-

^{*} Revised Budget as filed on 8/18/04

- a) Average cost per unit for outside services is \$74. This includes picking up and recycling of unit and coupon redemption fees where applicable.
- b) Incentive for AC units is \$35 and tied to an Energy Star model purchase.

Total incentive for AC units = \$35 x 2143 = \$75,000

Incentive for refrigerators/freezers = \$50 in the form of a mailed check. Total incentive for picked up units = $$50 \times 13,279 = $663,950$

c) Focus will be geared towards SWCT.

Marketing will include bill inserts, print ads and possibly direct mail.

Joint marketing will be pursued through retailers that choose to participate in the A/C program.

2005 Goals and Metrics Information

Demand Savings (kW reduction Goal) Annual Energy Savings (kWh Reduction Goal) Lifetime Energy Savings (kWh Reduction Goal)		1,644.8 9,685,424 48.858.277
Annual Cost Rate (\$/kWh) Lifetime Cost Rate (\$/kWh)	\$ \$	0.258 0.051
Electric b/c ratio Total Resource b/c ratio		1.35 1.47

Appliance Retirement

49,323

48,858

Program Costs

Year 2003 2004.1 2005	Budget \$700,000 \$3,500,000 \$2,500,000	Actual n/a n/a n/a	% of Budget n/a n/a n/a	cost/partic. n/a n/a n/a	\$/LT-kWh n/a n/a n/a		
		Goal - Participation					
Year	Goal (units)	Actual	% of Goal				
2003	3,952	n/a	n/a				
2004 1	6,258	n/a	n/a²				
2005	16,622	n/a	n/a				
	Goal	- Lifetime MWh Sav	rings		Goal - I	nstalled kW	<u>Savings</u>
Year	Goal (MWh)	Actual (kWh)	% of Goal	Year	Goal	Actual	%of Goal
2003	25,374	0	0.0%	2003 ³	699	0	0.0%

n/a

n/a

580

1,645

2004 1

2005

n/a

n/a

n/a

n/a

Program I	Ratios
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n/a

n/a

	\$/Lifeti	me kWh	\$/Annualized kW		
Year	Plan	Actual	Plan	Actual	
2003	0.035	n/a	1,528	n/a	
2004 1	0.067	n/a	1,726	n/a	
2005	0.051	n/a	1,520	n/a	

- Based on revised budgets and goals filed on 8/18/04 2004 Budget reflects 2004 DPUC Order Funding of \$3,500,000. 2004 Goals based on anticipated program expenditures of \$1,000,000.
- Goal is comprised of 14,479 refrigerators or freezers and 2,143 A/C's (Old unit turned in, new ENERGY STAR unit purchased)
- Demand saving goals reflect 1/13/03 goals.

Goal Methodology:

2004 ¹

2005

Since this program was new for 2004, limited historical performance data is available. The goals were based on the available budget and the estimated costs of running the program. Market response to this type of program is unknown.

Appliance Retirement

CL&P Program Notes

Budget/FTE

• 1.3 FTE for program administration, vendor interaction, sales and field support.

Goal

- 2005 participation goal represents higher refrigerator percentage than in previous year.
- Lifetime MWh goal is higher based on added savings assumed from ENERGY STAR A/C purchase and a twelve month program.

Cost/Unit

- 2005 estimated cost per A/C Turn-in is slightly higher due to higher rebate for A/C turned in and E-star purchase (2004 \$25 rebate, 2005 \$35 rebate)
- Final cost per unit will depend on mixture of appliances.

Goal Setting Methodology

- Fixed costs were estimated and balance of program dollars were divided by projected mix of appliances and based on 2004 results.
- 2005 marketing budget sized relative to 2004.

Metric Changes

• 2005 A/C Turn-in rebate will be contingent upon ENERGY STAR purchase.

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Appliance Retirement (Refrigerators) *

Budget Projections	<u>20</u>	03 Act		2004 Bud		2005 Bud **
UI Labor (a)	\$	-	\$	104,671	\$	111,450
Materials & Supplies	\$	-	\$	4,000	\$	11,080
Outside Services (b)	\$	-	\$	1,399,750	\$	535,000
Other Labor (c)	\$	-	\$	-	\$	50,000
Incentives (d)	\$	-	\$	312,500	\$	317,500
Marketing (e)	\$	-	\$	211,900	\$	147,500
Other	\$	-	\$	-	\$	_
Administrative Expenses	\$	-	\$	12,500	\$	8,720
Total	\$	-	\$	2,045,321	, \$	1,181,250
All Other Charges	\$		_\$_	-	\$	-
Total	\$	-	\$	2,045,321	\$	1,181,250

^{*} Joint CL&P and UI Programs for 2005

- (a) 1.1 FTE of UI oversight
- (b) Pick-up, recycling, incentive processing
- (c) Room AC event labor
- (d) 3,500 Fridge, 1,100 Freezer, 2,500 Room AC
- (e) Bill inserts, newsletters, internet and print

Goals and Metrics Information:

Savings	<u>2005</u>
Demand Savings (kW)	831
Annual Energy Savings (kWh)	3,314,000
Lifetime Energy Savings (kWh)	17,080,000
Annual Cost Rate (\$/kWh)	\$ 0.356
Lifetime Cost Rate (\$/kWh)	\$ 0.069

^{**} Includes anticipated 2004 unexpended funds of \$831,250

Appliance Retirement

Goal - Program Costs (000's)

Year	Budget	Actual	% of Goal Achieved
2000	\$0	\$0	0.0%
2001	\$0	\$0	0.0%
2002	\$0	\$0	0.0%
2003	\$219	\$0	0.0%
2004	\$2,045	\$0	0.0%
2005	\$1,181	\$0	0.0%

Note: Anticipated carryover to 2005: \$831,250

Goal - Number of Customers Served

Year	Goal	Actual	% of Goal Achieved
2000	-	-	0.0%
2001	-	-	0.0%
2002	-	-	0.0%
2003	750	-	0.0%
2004	7,500	-	0.0%
2005	7,100	-	0.0%

Goal - Installed kWh Savings (000's kWh)

Goal - Installed kW Savings

Year	Goal	Actual	% of Goal Achieved	Year	Goal	Actual	% of Goal Achieved
2000	-	-	0.0%	2000	-	-	0.0%
2001	-	-	0.0%	2001	•	-	0.0%
2002	~	-	0.0%	2002	-	-	0.0%
2003	762	-	0.0%	2003	114	-	0.0%
2004	3,393	-	0.0%	2004	723	-	0.0%
2005	3,314	-	0.0%	2005	831	•	0.0%

Appliance Retirement

Goal - Lifetime kWh Savings (000's kWh)

Year	Goal	Actual	% of Goal Achieved
2000	-	-	0.0%
2001	-	-	0.0%
2002	-	-	0.0%
2003	4,815	-	0.0%
2004	16,643	-	0.0%
2005	17,080	-	0.0%

Program Ratios

Year	\$/kWh Target	Actual	\$/LT kWh Target	Actual	\$/kW Target	Actual	Cost/ Customer
2000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
2001	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
2002	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
2003	\$0.287	\$0.000	\$0.045	\$0.000	\$1,921.053	\$0.000	\$292.000
2004	\$0.358	\$0.000	\$0.073	\$0.000	\$1,678.359	\$0.000	\$161.876
2005	\$0.356	\$0.000	\$0.069	\$0.000	\$1,422.048	\$0.000	\$166.373

Appliance Retirement

UI Program Notes

Budget/FTE

- 2003 program design called for single-track, refrigerators with external labor only.
- 2004 multi-track, multi-appliance design utilizes 1 FTE of UI labor for ramp-up and administration.
- Labor increases slightly in 2005 based on intensity of clerical effort required in 2004

Goal

- 2003 goal called for refrigerators only via retirement with \$100 bounty.
- 2004 design includes "open" incentive for refrigerators, freezers, room a/c and dehumidifiers.
- 2005 program goals are driven by budget and 2004 experience/market response:
 - o 3,500 Refrigerators
 - o 1,100 Freezers
 - o 2,500 Room AC

Cost/Unit

- 2003 design costs reflect high bounty and now re-thought savings assumptions.
- 2004 design costs reflect mix of appliances and realization rates to reduce savings.
- 2005 revised design (a/c tied to purchase) has little impact on cost ratios

Metric Changes

N/A

Residential Customer Initiated Project (CL&P and UI)

Objective:

The objective of the Residential Customer Initiated Project Program (CIP) is to promote competitive market development in the C&LM industry by encouraging third parties to bid to undertake Residential C&LM projects on a competitive basis. The CIP Program is aimed at residential projects with energy efficiency potential that are not participating through other existing C&LM programs.

The CIP Program was a new program for 2004. The program has a stand alone budget of \$500,000. In order to encourage residential participation without losing any of the benefits gained by delivering these opportunities through the RFP, the program may be delivered independently and/or in conjunction with the C&I RFP, however with its own budget and qualifications. Implementing this program with C&I RFP should reduce the overhead and increase the CIP visibility. Many of the CIP bidders are expected to be the same energy service companies that already participate in the RFP. Customers that own large residential complexes and energy service companies that focus on residential measures have been added to the mailing list. This program is being marketed on CL&P's website, www.cl-p.com/clmbus/target/indextarget.asp, and UI is likely to develop a link to its website as well.

Target Market:

The target market is residential projects with a minimum of approximately \$25,000 project incentive request (can be aggregated sites). Customers of the Companies, energy service companies and other third party service providers representing customers are eligible to participate in this program. Special emphasis will be made in SWCT by offering special bidding rounds during 2005. The Companies intend to continue to evaluate market trends and responsiveness and make adjustments to participation requirements accordingly.

The respondents to this CIP can be any customer, organization, group or individual who contracts with CL&P or UI to provide energy savings for an approved energy efficiency project. It is expected that bidders will be customers allied with firms that specialize in implementing energy efficiency projects and that have a staff of professionals trained to identify energy efficiency opportunities, calculate potential savings, design system modifications, manage construction and installation of energy efficiency measures, and measure energy savings.

Program Description:

The program offers incentives for measurable energy savings achieved by the installation of energy efficiency measures as specified in a project agreement. Eligible improvements include energy efficient equipment, products, and measures that are cost effective. The estimated savings are verified using approved protocols. The estimated savings are measured from a baseline that is established either by the minimum code efficiency or what the customer would install without utility intervention.

Some eligible measures include replacing standard lighting with high efficiency fluorescent lighting, installing lighting controls to reduce lighting operating hours, replacing low efficiency air conditioning equipment with high efficiency equipment (Window Air Conditioner, heat pumps, Package Terminal Air Conditioner, Package Terminal Heat Pump, etc.), domestic hot water heating and cooling measures, and energy efficient appliances (refrigerators, washers, etc.).

Measures that are not eligible include any new construction projects, any power producing project such as cogeneration, and switching from electric energy to another fuel (fuel switching).

Because one of the program's goals is to assess the degree to which projects require incentives, this program should not have published incentives. Each proposal will need to identify the required incentive amount. All bids are evaluated based upon a comparison of energy savings and other price and non-price variables with other residential projects.

The following criteria are assessed to determine a project's ranking:

- Requested Utility Participation (Incentive)
- Cost-Effectiveness
- Number of Customer's accounts reduced
- Environmental Benefit
- Project Timeline

Marketing Strategy:

CL&P and UI are developing a list of potential bidders including residential efficiency implementing companies and key customers (apartment building owners) with whom the Companies communicate by mail, in person and by phone. The Companies also market through newspapers and their websites. Collateral materials are available to educate these groups on the Residential CIP Program. Potential bidders are invited to "informational meetings" and "bidders conferences" to learn how to participate in the program.

Incentive Strategy:

Incentives are intended to be market driven in that bidders (or potential participants) request the incentive level that is needed to implement a retrofit or replacement energy efficiency project. This strategy, competition is achieved by having a bidder's project compete for the available incentive dollars which typically results in the incentive requests exceeding the budgeted funding. However, customers are required to pay a portion of the project's implementation costs. The maximum incentive allowed for qualifying projects is 75% of the project cost.

For C&I participants financing may be offered with this program as described in the C&LM Financing section.

Goals:

The goals of the CIP Program are to save energy, to reduce demand in the residential sector and to increase cost-effective residential projects that are

not addressed in other energy efficiency programs.

CL&P's target budget is \$500,000. For UI the budget of \$50,000 will be spent on cost effective projects. As a new program, kWh and kW goals

have not been set.

New Program Issues:

The Companies continue to promote this new approach to achieve maximum participation. The Companies intends to focus on SWCT in 2005. This is a new program and it will take time to penetrate the market. The minimum incentive request level was reduced from \$50,000 to \$30,000 to increase participation.

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Customer Initiated Projects

All dollar values are in \$000

Budget Projections	Projections 2004 Budget*		2005 Bu	ıdget	
Labor	_				
NU Labor	\$	41	\$	21	-
Contractor Staff	\$	_	\$	11	
Total Labor	\$	41	\$	32	
Materials & Supplies	\$	5	\$	5	
Outside Services	\$	89	\$	54	a)
Incentives	\$	430	\$	389	
Marketing	\$	20	\$	10	b)
Administrative Expenses	\$	5	\$	5	c)
Other	\$	10	\$	5	
Total	\$	600	\$	500	

^{*} Revised Budget as filed on 8/18/04

- a) Outside services include QA reviews, project inspections and customer studies.
- b) Marketing of the CIP program takes place over the twelve-month calendar year at specific intervals directed by the availability of funding. The marketing plan is designed to be flexible in order to maximize results. Marketing expenditures are minimal, covering any direct mail costs, advertising and meeting facilities. Marketing tools used: Direct Mail, Legal Notices, Web Site, Informational Meetings, Bidders' Conferences, Phone, Email & in Person.
- c) Employee expenses including mileage, training, conference attendance and misc.

Note: Separate budget proposed for residential. To increase success, residential proposals will compete only against other submitted residential proposals within the C&I RFP program in a "residential Track"

2005 Goals and Metrics Information

Demand Savings (kW reduction Goal)	N/A
Annual Energy Savings (KWh Reduction Goal)	N/A
Lifetime Energy Savings (kWh Reduction Goal)	N/A
Annual Cost Rate (\$/kWh)	N/A
Lifetime Cost Rate (\$/kWh)	N/A
Electric b/c ratio	N/A
Total Resource b/c ratio	N/A

Customer Initiated Projects

		Program Costs	2	
Year	Budget	Actual	% of Budget	\$/LT-kWh
2004 ¹	\$600,000	n/a	n/a	n/a
2005	\$500,000	n/a	n/a	n/a

Goal - Participation

Year	Goal (units)	Actual	% of Goal
2004	n/a	n/a	n/a
2005	n/a	n/a	n/a

<u>Goal</u>	<u>- Lifetime MWh</u>	savings		<u>Goa</u>	l - Installed I	kW Savings
Budget	Actual	% of Budget	Year	Goal	Actual	%of Goal
19,708	n/a	n/a	2004 1,2,3	289	n/a	n/a
n/a	n/a	n/a	2005	n/a	n/a	n/a
	Budget 19,708	Budget Actual 19,708 n/a	19,708 n/a n/a	Budget Actual % of Budget Year 19,708 n/a n/a 2004 12.3	Budget Actual % of Budget Year Goal 19,708 n/a n/a 2004 1,2,3 289	Budget Actual % of Budget Year Goal Actual 19,708 n/a n/a 2004 1.2.3 289 n/a

Program Ratios

	\$/Lifetime kvvn		\$/Annualized kvv	
Year	Plan	Actual	Plan	Actual
2004 1,2,3	0.030	n/a	2,074	n/a
2005	n/a	n/a	n/a	n/a

Based on revised budgets and goals filed on 8/18/04.

² CIP was a new program for 2004.

The results from 2004 are expected to be less than planned. These results are due to the programs' newness and slow and market responsiveness. During 2004, to encourage increased participation, the minimum incentive was reduced and the final round was extended.

Customer Initiated Projects

CL&P Program Notes

Budget/FTE:

• Staffing includes .20 FTE for program administration and oversight.

Goal

• N/A

Cost/kWh (Cost/Unit)

• N/A.

Goal Setting Methodology

• N/A

Metric Changes:

• N/A.

Customer Initiated Projects

Budget Projections	2003 Act	2004 Bud	2005 Bud
UI Labor	\$ -	\$ -	\$ -
Materials & Supplies	\$ -	\$ -	\$ -
Outside Services	\$ -	\$ -	\$ -
Other Labor	\$ -	\$ -	\$ -
Incentives	\$ •	\$ 50,000	\$ 50,000
Marketing	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -
Administrative Expenses	\$ -	<u>\$ -</u>	<u>\$</u>
Total	\$ -	\$ 50,000	\$ 50,000
All Other Charges	\$ -	<u>\$</u>	<u>\$</u>
Total	\$ -	\$ 50,000	\$ 50,000

RESIDENTIAL NEW CONSTRUCTION

Residential New Construction (CL&P & UI)

Objective:

The objective of the joint CL&P and UI Residential New Construction Program is to increase builder and consumer awareness and understanding of the benefits of energy efficient building practices, and to effect permanent market movement to more energy efficient residential construction in the State of Connecticut. Adoption of high-efficiency, ENERGY STAR qualifying central air conditioning equipment has also emerged as an important energy saving tool given Connecticut's transmission constraints and the significant kW savings involved.

There will also be an increased emphasis placed on the installation of energy efficient lighting and programmable thermostats. Reduction in the overall cost per home via utilization of Builder Option Packages ("BOPs") as opposed to the traditional, Home Energy Rating System ("HERS") and/or reductions to the cost of HERS is also an objective. Another key objective is to encourage the implementation of the building energy code and to develop and maintain the linkage between energy efficiency programs and building energy code upgrades in residential new construction.

Target Market:

The Companies will target new residential construction projects of 1-3 family detached dwellings through the ENERGY STAR Homes program. Multi-family projects of four or more units are targeted through the "Code Plus" option piloted in 2004. Lastly, there is the HERS-based ENERGY STAR certification. The Companies believe that energy efficient home construction provides long-term demand as well as energy reduction. With that in mind, marketing efforts may be focused in SWCT, especially with respect to multi-family construction.

In addition to prospective new home-buyers; developers, builders, real estate agents, and building officials will continue to be targeted for participation. Furthermore, the Companies may enhance their targeting of appropriate agents of single and multi-family housing for low-income families, including Public Housing Authorities and community development entities.

Program Description:

The ENERGY STAR Homes Program is part of a national energy efficiency campaign sponsored by the Environmental Protection Agency (EPA) and the Department of Energy (DOE). It was created to help home builders and buyers construct homes that use substantially less energy than homes built with standard construction practices. Beyond utilizing the marketing logos and program guidelines provided by the above federal agencies, the Companies' activities center on active, ongoing participant recruitment

and training (covered below in the Marketing Strategy section), home certification, and the provision of incentives.

In 2004, the Companies began providing three different tracks to the Residential New Construction program and will continue with this approach in 2005. The first track is the original ENERGY STAR Homes program, which involves a Home Energy Rating System (HERS) rating approach which has been marketed by the Companies for several years now. It involves the use of proprietary software and a detailed plan review to qualify a home as ENERGY STAR. This track has the highest cost due to the cost of the rating and the plan review, however it remains preferred by many builders since it allows considerable flexibility and customization as opposed to the more prescriptive alternative approaches.

The second track is a Builder Option Package (BOP). In 2004, the Companies hired a consultant to develop Connecticut specific BOPs. These are prescriptive EPA-approved packages that do not involve the time consuming energy analysis of each home. By building to a prescriptive standard, homes will be automatically qualified as ENERGY STAR. Both of the above tracks still involve blower door and duct tightness testing.

As discussed above in the Target Market section, the third track targets residential buildings of four or more units. Utilization of the HERS ENERGY STAR rating software is time consuming and its ability to accurately model the energy savings of multi-family building units is the subject of current debate among program directors nationwide. The Companies have decided to forego ENERGY STAR ratings on these projects and use the existing Model Energy Code (MEC) compliance software for the pilot program if the builder/partner is so inclined. The MEC is a tool that Connecticut uses to verify a building meets the state energy code. This new offering has been streamlined from the existing ENERGY STAR Homes rating procedure by relying on the state's existing building code standards. To lower costs, HERS ratings, individual plan reviews and performance testing will not be offered under this program track. Multifamily homes will be required to attain a state MEC score which is approximately 10% higher than the minimum required in homes already. Should builders prefer to pursue the traditional HERS-based ENERGY STAR approach, they may be allowed to do so.

Marketing Strategy:

The marketing strategy for the Residential New Construction program will remain focused on builder outreach. The program is heavily marketed to developers and builders through face-to-face contact. This contact may involve presentations, field training and demonstrations, and seminars. In addition, targeted marketing may include newspapers, magazines and electric bill inserts. The following are envisioned to be

featured as part of the overall marketing budget, to the extent funding allows:

- Trade advertising for 2005 in Builder specific trade publications in SWCT
- Builder outreach to introduce the 2005 program and incentive levels
- Utilization of ENERGY STAR Homes section of the Companies' websites to generate awareness and provide updates on the program
- Co-promote the program with participating builders via cooperative advertising initiatives
- Utilization of the SmartLiving Center for informational seminars on topics that may range from marketing of ENERGY STAR homes (for the builders and realtors) to general code awareness and enforcement (for the code officials and inspectors)

Incentive Strategy:

Incentives are designed to overcome market barriers and to increase the awareness of the benefits of ENERGY STAR Homes among consumers, builders, lenders, realtors and other market actors. In addition, incentives help to increase the number of builders who participate in ENERGY STAR Homes, thus growing the market share of the program.

Financial Incentives:

The Companies plan to offer a base incentive of \$500 for an ENERGY STAR home with a 13 SEER/11 EER central air conditioning unit installed. Homes using the BOP track will have a base incentive of \$600 with a 13 SEER/11EER central air conditioning unit. Fluorescent fixtures will be rebated at \$10 each with a cap of \$200 and ENERGY STAR compact fluorescent light bulbs may be provided free of charge to these homes in quantities agreed upon by the builder and the Companies. In addition, programmable thermostats may be provided to builders in those cases where they were not already specified for installation. The multi-family projects will be eligible for lighting and HVAC incentives. The Companies will continue to evaluate market trends and responsiveness and make adjustments to participation requirements and incentive levels accordingly.

Goals:

CL&P Goals: Based on the 2005 budget of \$1,300,000, the goal is 932 total units. This will be a mix, based on market response and overall activity in residential construction, of ENERGY STAR 1-3 unit homes and larger multi-family projects in the pilot program.

UI Goals: Based on the 2005 budget of \$541,432, the goal is 42 percent of new residential housing units, which will be a mix, based on market response and overall activity in residential construction, of ENERGY STAR 1-3 unit homes and larger multi-family projects in the pilot program. Market share is based on Connecticut DECD data for July 1 through June

30 adjusted by an 85 percent completion factor and equates to 500 homes based on 2003-2004 data.

New Program Issues:

The Companies have recently begun offering compact fluorescent light (CFL) packages to builders during construction. In an effort to get more CFLs into new homes, the Companies are offering an assortment of bulbs to builders to be installed by the electrician at the time of fixture installation. This saves the cost of taking apart a recently installed fixture, removing the incandescent bulb, and installing a CFL.

With the ENERGY STAR Homes Program firmly established, the Companies are exploring new factors which may influence the future of efficient new construction. For example, there is a potential for federal tax credits for efficient construction practices.

Residential New Construction

All dollar values are in \$000

Budget Projections	200	2 Actuals	200	3 Actuals	200	4 Budget*	200	5 Budget	
Labor:					•				
NU Labor	\$	314	\$	148	\$	158	\$	84	
Contractor Staff	\$	176	\$	55	\$		\$	84	
Total labor	\$	489	\$	203	\$	158	\$	168	
Materials & Supplies	\$	-	\$	12	\$	-	\$	-	
Outside Services	\$	257	\$	130	\$	334	\$	441	a)
Incentives	\$	-	\$	487	\$.	-	\$	-	
Geo Incentive	\$	339	\$	- ,	\$	4	\$	-	
EnergyStar Incentive	\$	371	\$	-	\$	325	\$	631	b)
Marketing									
Joint CL&P / UI Market	\$	-	\$	-	\$	20	\$	-	
CL&P Market	\$	-	\$	-	\$	20	\$	20	c)
Misc Marketing	\$	143	\$	114	_\$	20	\$	20	<u>d)</u>
Sub-total marketing	\$	143	\$	114	\$	60	\$	40	
Administrative Expenses	\$	3	\$	159	\$. 10	\$	10	
Other	\$	44	\$	10	\$	10	\$	10	<u>e)</u>
Total	\$	1,646	\$	1,115	\$	900	\$	1,300	

^{*} Revised Budget as filed on 8/18/04

- a) Includes services such as outsourcing of program implementation to a vendor and builder training.
- b) Lighting fixtures and cfis, central AC, etc. Estimated 842 homes.
- c) Includes print ads and bill inserts.
- d) Program guidelines literature, newspaper ads, co-op builder advertising.
- e) Employee expenses including mileage, training, conference attendance and misc.

2005 Goals and Metrics Information

Demand Savings (kW reduction Goal) Annual Energy Savings (KWh Reduction Goal)		676.1 1,355,309
Lifetime Energy Savings (kWh Reduction Goal)	17	7,706,886
Annual Cost Rate (\$/kWh)	\$	0.959
Lifetime Cost Rate (\$/kWh)	\$	0.073
Electric b/c ratio		1.57
Total Resource b/c ratio		1.55

Residential New Construction

		Program Costs					
Year	Budget	Actual	% of Budget	Cost/participant	\$/LT-kWh		
2000	\$1,744,000	\$1,508,000	86%	\$1,797	0.068		
2001	\$1,315,000	\$1,283,000	98%	\$3,534	0.116		•
2002	\$1,400,000	\$1,275,000	91%	\$2,087	0.038		
2003	\$1,655,000	\$1,116,000	67%	\$1,622	0.051		
2004 ⁵	\$900,000	n/a	n/a	n/a	n/a		
2005	\$1,300,000	n/a	n/a	n/a	n/a		٠
	Goal - No. o	f New Homes Built	to Standard				
Year	Goal	Actual	% of Goal				
2000	686	839	122%¹				
2001	734	363	49%²				
2002	605	611	101%				
2003 ³	1,005	688	68.5%				
20 04 ⁵	600	n/a	n/a				
2005	932	n/a	n/a				
	<u>Goal</u>	- Lifetime MWh say	<u>vings</u>		Goal - In	stalled kW	Savings
Year	<u>Goal</u> Budget	- Lifetime MWh sa Actual	<u>vings</u> % of Budget	Year	<u>Goal - In</u> Goal	stalled kW Actual	Savings %of Goal
2000.			% of Budget 41%	2000		Actual n/a	%of Goal n/a
	Budget	Actual	% of Budget		Goal	Actual	%of Goal
2000.	Budget 54,082	Actual 22,226	% of Budget 41%	2000 2001 2002	Goal n/a	Actual n/a	%of Goal n/a
2000 2001 2002 2003	Budget 54,082 24,924 27,799 12,969	Actual 22,226 11,091	% of Budget 41% 44%	2000 2001 2002 2003 ⁶	Goal n/a n/a	Actual n/a n/a	%of Goal n/a n/a
2000 2001 2002	Budget 54,082 24,924 27,799	Actual 22,226 11,091 33,911	% of Budget 41% 44% 122%	2000 2001 2002	Goal n/a n/a n/a	Actual n/a n/a n/a	%of Goal n/a n/a n/a
2000 2001 2002 2003	Budget 54,082 24,924 27,799 12,969	Actual 22,226 11,091 33,911 21,782	% of Budget 41% 44% 122% 82%	2000 2001 2002 2003 ⁶	Goal n/a n/a n/a n/a 229	Actual n/a n/a n/a 476	%of Goal n/a n/a n/a 207.9%
2000 2001 2002 2003 2004 ⁵	Budget 54,082 24,924 27,799 12,969 10891 ⁴ 17,707	Actual 22,226 11,091 33,911 21,782 n/a n/a Program Ratios	% of Budget 41% 44% 122% 82% n/a	2000 2001 2002 2003 ⁶ 2004 ⁵	Goal n/a n/a n/a 229 343	Actual n/a n/a n/a 476 n/a	%of Goal n/a n/a n/a 207.9% n/a
2000 2001 2002 2003 2004 ⁵ 2005	Budget 54,082 24,924 27,799 12,969 10891 ⁴ 17,707	Actual 22,226 11,091 33,911 21,782 n/a n/a	% of Budget 41% 44% 122% 82% n/a n/a	2000 2001 2002 2003 ⁶ 2004 ⁵	Goal n/a n/a n/a 229 343	Actual n/a n/a n/a 476 n/a	%of Goal n/a n/a n/a 207.9% n/a
2000 2001 2002 2003 2004 ⁵ 2005	Budget 54,082 24,924 27,799 12,969 10891 ⁴ 17,707 \$/Lifetir	Actual 22,226 11,091 33,911 21,782 n/a n/a Program Ratios ne kWh Actual	% of Budget 41% 44% 122% 82% n/a n/a Plan	2000 2001 2002 2003 ⁶ 2004 ⁵ 2005 ualized kW	Goal n/a n/a n/a 229 343	Actual n/a n/a n/a 476 n/a	%of Goal n/a n/a n/a 207.9% n/a
2000 2001 2002 2003 2004 ⁵ 2005 Year 2000	Budget 54,082 24,924 27,799 12,969 10891 ⁴ 17,707 \$/Lifetir Plan 0.032	Actual 22,226 11,091 33,911 21,782 n/a n/a Program Ratios ne kWh Actual 0.068	% of Budget 41% 44% 122% 82% n/a n/a	2000 2001 2002 2003 ⁶ 2004 ⁵ 2005 ualized kW Actual 5470	Goal n/a n/a n/a 229 343	Actual n/a n/a n/a 476 n/a	%of Goal n/a n/a n/a 207.9% n/a
2000 2001 2002 2003 2004 ⁵ 2005 Year 2000 2001	Budget 54,082 24,924 27,799 12,969 10891 ⁴ 17,707 \$/Lifetin Plan 0.032 0.031	Actual 22,226 11,091 33,911 21,782 n/a n/a Program Ratios me kWh Actual 0.068 0.081	% of Budget 41% 44% 122% 82% n/a n/a Plan n/a n/a	2000 2001 2002 2003 ⁶ 2004 ⁵ 2005 ualized kW Actual 5470 5359	Goal n/a n/a n/a 229 343	Actual n/a n/a n/a 476 n/a	%of Goal n/a n/a n/a 207.9% n/a
2000 2001 2002 2003 2004 ⁵ 2005 Year 2000 2001 2002	Budget 54,082 24,924 27,799 12,969 10891 ⁴ 17,707 \$/Lifetir Plan 0.032 0.031 0.030	Actual 22,226 11,091 33,911 21,782 n/a n/a Program Ratios ne kWh Actual 0.068 0.081 0.027	% of Budget 41% 44% 122% 82% n/a n/a \$/Ann Plan n/a n/a n/a	2000 2001 2002 2003 ⁶ 2004 ⁵ 2005 ualized kW Actual 5470 5359 2012	Goal n/a n/a n/a 229 343	Actual n/a n/a n/a 476 n/a	%of Goal n/a n/a n/a 207.9% n/a
2000 2001 2002 2003 2004 ⁵ 2005 Year 2000 2001 2002 2003	Budget 54,082 24,924 27,799 12,969 10891 ⁴ 17,707 \$/Lifetin Plan 0.032 0.031 0.030 0.093	Actual 22,226 11,091 33,911 21,782 n/a n/a Program Ratios me kWh Actual 0.068 0.081 0.027 \$0.051	% of Budget 41% 44% 122% 82% n/a n/a Plan Plan n/a n/a n/a 4,814	2000 2001 2002 2003 ⁶ 2004 ⁵ 2005 ualized kW Actual 5470 5359 2012 2,345	Goal n/a n/a n/a 229 343	Actual n/a n/a n/a 476 n/a	%of Goal n/a n/a n/a 207.9% n/a
2000 2001 2002 2003 2004 ⁵ 2005 Year 2000 2001 2002	Budget 54,082 24,924 27,799 12,969 10891 ⁴ 17,707 \$/Lifetir Plan 0.032 0.031 0.030	Actual 22,226 11,091 33,911 21,782 n/a n/a Program Ratios ne kWh Actual 0.068 0.081 0.027	% of Budget 41% 44% 122% 82% n/a n/a \$/Ann Plan n/a n/a n/a	2000 2001 2002 2003 ⁶ 2004 ⁵ 2005 ualized kW Actual 5470 5359 2012	Goal n/a n/a n/a 229 343	Actual n/a n/a n/a 476 n/a	%of Goal n/a n/a n/a 207.9% n/a

Actual included signups.

Actual did NOT include signups.

Beginning in 2003 shell savings decreased by 40% as a result of baseline evaluation.

Very little Geo savings are assumed. Previous years had substantial amounts, savings will go down as a result.

⁵ Based on revised budgets and goals filed on 8/18/04.

⁶ Demand saving goals reflect 1/13/03 goals.

Residential New Construction

CL&P Program Notes

Budget/FTE

• .8 FTE for program administration, vendor interaction, sales and field support

Goal

Goal is 932 homes completed in 2005.

Cost/Unit

- The average cost per home in 2005 is projected to be \$1,395. Note that many surrounding states with comparable programs have average costs that are double this number.
- CL&P will continue to push the innovative and nationally recognized Connecticut specific builder option packages (BOP) with 13 SEER air conditioning. Note that without the BOP approach and 13 SEER savings, the program would not be cost effective (0.8 b/c ratio instead of the current 1.6).

Goal Setting Methodology

- 2004 expected completions should be close to 600. Therefore, a goal of 932 homes for 2005 is appropriate.
- Note that the average kW savings per home is 0.73 largely due to the success that the company is having with the BOP/13 SEER packages.

Metric Changes

- The direct installation of CFL bulbs (started in 2004) has been very successful and will continue in 2005.
- As 2006 approaches (13 SEER becomes the federal standard), work will be done to continue to refine the program and keep it cost-effective.

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Residential New Construction •

Baseline Assumptions:

Market - Residential new construction

Budget Projections		2003 Act	2004 Bud	2005 Bud
UI Labor (a)	\$	102,716	\$ 96,656	\$ 99,079
Materials & Supplies	\$	8,076	\$ 3,766	\$ 3,500
Outside Services (b)	\$	57,862	\$ 98,417	\$ 70,000
Other Labor (c)	\$	-	\$ -	\$ 70,000
Incentives (d)	\$	167,528	\$ 320,000	\$ 252,250
Marketing (e)	\$	12,511	\$ 15,344	\$ 40,000
Other	\$	-	\$ -	\$ -
Administrative Expenses	\$	7,892	\$ 7,249	\$ 6,603
Total	\$	356,585	\$ 541,432	\$ 541,432
All Other Charges	<u>\$</u>	-	\$ -	\$
Total	\$	356,585	\$ 541,432	\$ 541,432

^{*} Joint CL&P and UI Programs for 2005

- (a) 1.0 FTE of UI oversight
- (b) HERS and BOP services
- (c) Field support
- (d) 500 Homes, 42% of market
- (e) Coop for builders, trade publications, ally training

Goals and Metrics Information:

Savings	<u>2005</u>
Demand Savings (kW)	318
Annual Energy Savings	
(kWh)	757,200
Lifetime Energy Savings (kWh)	9,435,300
Annual Cost Rate (\$/kWh)	\$ 0.715
Lifetime Cost Rate (\$/kWh)	\$ 0.057
(Assumes 45% of 1,100 unit market, subject to change with market size)	

Residential New Construction

Goal - Program Costs (000's)

Year	Budget	Actual	% of Goal Achieved
2000	\$359	\$513	142.9%
2001	\$536	\$497	92.7%
2002	\$424	\$520	122.6%
2003	\$523	\$357	68.3%
2004	\$541	\$0	0.0%
2005	\$541	\$0	0.0%

Goal - Number of Homes

% of Goal Achieved	Actuals	Goal No of Units	Market Penetration Goal	Year
110.0%	110	100	8.30%	2000
100.0%	127	127	12%	2001
133.0%	141	106	8.6	2002
230.0%	276	120	6%	2003
0.0%	-	400	35%	2004
0.0%	-	500	42%	2005

Goal - Installed kWh Savings (000's kWh)

Goal - Installed kW Savings

Year	Goal	Actual	% of Goal Achieved	Year	Goal	Actual	% of Goal Achieved
2000	202	226	111.9%	2000	•,	•	0.0%
2001	208	208	100.0%	2001	•	-	0.0%
2002	174	230	132.2%	2002	-	-	0.0%
2003	108	297	275.0%	2003	23	25	108.7%
2004	378	-	0.0%	2004	170	-	0.0%
2005	757	-	0.0%	2005	318	•	0.0%

Residential New Construction

Goal - Lifetime kWh Savings (000's kWh)

Year	Goal	Actual	% of Goal Achieved
2000	3,365	3,753	111.5%
2001	4,338	4,338	100.0%
2002	3,816	5,044	132.2%
2003	2,029	5,940	292.8%
2004	7,283	-	0.0%
2005	9,435	-	0.0%

Program Ratios

Year	\$/kWh Target	Actual	\$/LT kWh Target	Actual	\$/kW Target	Actual	Cost/Home
2000	\$1.777	\$2.270	\$0.107	\$0.137	\$0.000	\$0.000	\$4,663.636
2001	\$2.577	\$2.389	\$0.124	\$0.115	\$0.000	\$0.000	\$3,913.386
2002	\$2.437	\$2.261	\$0.111	\$0.103	\$0.000	\$0.000	\$3,687.943
2003	\$4,843	\$1.202	\$0.258	\$0.060	\$22,739	\$14,280.000	\$1,293.478
2004	\$1.431	\$0.000	\$0.074	\$0.000	\$3,178.601	\$0.000	\$1,353.580
2005	\$0.715	\$0.000	\$0.057	\$0.000	\$1,702.231	\$0.000	\$1,082.864

Residential New Construction

UI Program Notes

Budget/FTE

- 2003 budget gutted mid-year.
- Cost control emerged as a fundamental 2003 goal.
- Staffing includes one FTE of program administration, sales and field support.

Goal

- 2002 goal was reduced due to across-the-board budget reductions.
- 2003 goal was originally set based on budget and production from 2002.
- 2004 goal is based on program redesign described in Plan text.
- 2005 continues refinements to the program launched in 2004 to yield more homes with more savings at lower contractor costs.
- Goal is 42% of market, which equates to 500 at current market size, however market size changes.
- Market size defined as 85% of total residential permits in prior July-June period per CT-DECD.

Cost/Unit

- Program redesign for 2004 leads to reductions in cost per unit.
- Example: 50% of units assumed to install SEER 13 air conditioning.
- Lighting savings decline of 42% versus 2003, per impact evaluation, offsets this benefit.
- Improvement in cost ratios reflects modification of incentive to more heavily emphasize SEER 13 a/c.

Metric Changes

- 2002-2004 impact evaluation dictated reduction in lighting savings.
- 2004 program design heavily emphasizes central air conditioners and resulting kWh.
- 2005 metric is percent of market rather than absolute number of homes.

RESIDENTIAL HEATING AND COOLING

Residential Heating and Cooling (CL&P & UI)

Objective:

The objective of the joint CL&P and UI Residential Heating and Cooling Program is to reduce energy use and system peak demand through residential central air conditioning system equipment upgrades, commissioning of new installations, best practice installation, and tuning-up existing systems.

Target Market:

This program targets residential HVAC installations in new and existing homes statewide. Equipment efficiency upgrades will be promoted to customers purchasing new systems or replacing existing central air conditioning units that are failing or have failed. Maintenance tune-ups will be promoted to customers with existing systems. National Association for Technical Excellence (NATE) or other best practice training and certification will be promoted to contractors.

Program Description:

Historically the program has solely been a prescriptive equipment program, which will transition in 2005 to a more comprehensive program actively involved in best practice installation, treatment of existing systems and customer and contractor education.

The rebate aspect of the program is prescriptive in nature. CL&P and UI jointly offer incentives for ENERGY STAR (13 SEER/ 11 EER) or higher efficiency central air conditioning equipment. Incentives have been set to help offset the incremental price of upgrading a new or replacement air conditioning or heat pump system.

In 2005, the Companies plan to directly engage and negotiate with manufacturers and their distributors to develop cooperative promotions designed to leverage program investments and access the resources and marketing expertise of these industry/market actors. These promotions may focus primarily on marketing, contractor training, and the tune-up initiative.

A Tune-up track for existing equipment was added to the program in mid 2004 and is planned to be continued in 2005. There are a large percentage of older machines in the marketplace with problems such as over or under charge of refrigerant and substantial savings may be realized by correcting these measures. Additionally, the initial testing and diagnostics performed on many of these older units may prove them to be "beyond repair" and create a sales opportunity to replace them with incentive-eligible, high efficiency equipment.

Best practice installation may be pursued on the contractor side by way of enhanced training and recognition provided by the Companies alone, or in conjunction with trade associations such as the CT Heating and Cooling Contractors (CHCC) and NATE.

Marketing Strategy:

The equipment rebates may be marketed to residential customers with ducted central air conditioning systems through mass media, direct mail and through contractors supported by program marketing messages and materials. The Companies may pursue cooperative arrangements with manufacturers and distributors that may lead to industry initiated promotions.

Program marketing may focus on cooperative efforts with the contractor community and will be statewide. To the extent that budgets allow marketing may include some or all of the following: distributor and contractor outreach to introduce the 2005 program and incentive levels

- Utilize the HVAC section of the Companies' websites to generate awareness of the program
- Co-promote the equipment rebate and tune-up programs with participating contractors via cooperative advertising initiatives
- Direct mail to stressed capacity areas
- Localized campaigns in the Community Based Program areas

Incentive Strategy:

The rebate for 2005 will be \$350 per central air conditioning unit regardless of the tonnage since the incremental cost between 10 SEER and ENERGY STAR is similar for the various sizes. On new installations and retrofit installations, if the installing contractor commissions the new equipment with the Honeywell Digital Assistant or similar pre-approved tool, there will be an additional \$50 incentive to the contractor upon successful download of the data from the Honeywell tool. This additional \$50 incentive to the contractor will encourage those who already own the tool to use it correctly and those who do not have the tool to purchase one and get trained to use it. Rebates will also be the same as above for installation of an Air Source Heat Pump with 13 SEER/8.0 HSPF/11 EER and Ground Source Heat Pump with 13 SEER/3.3 Coefficient of Performance (COP). Incentives directly to customers versus to contractors may be considered. The Companies will continue to evaluate market trends and responsiveness and make adjustments to participation requirements accordingly.

Goals:

CL&P Goals: CL&P's goal for the 2005 Residential Heating and Cooling Program based on the funding level of \$2,922,000 is 4,525 units. This includes the contractor commissioning incentive, tune-up incentive and customer rebates.

UI Goals: UI's goal for the 2005 Residential Heating and Cooling Program based on the funding level of \$950,000 is 3,400 units. This

includes the contractor commissioning incentive, tune-up incentive and customer rebates.

New Program Issues:

Engaging the manufacturers and distributors needs to begin immediately to provide them with (and negotiate) the program plans early enough to influence equipment production, ordering and ultimately stocking of eligible equipment.

The tune-up track is still relatively new and evolving and changes to the structure of this program aspect may be made throughout the year as needs warrant. The Companies plan to pilot low or no cost air conditioner tune-ups to the community-based towns in their respective territories.

As budgets allow, the Companies may also explore performance testing of systems on a random basis and tie additional incentives to contractor certification training in order to boost proper system installations.

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Residential Heating and Cooling (HVAC)*

All dollar values are in \$000

Budget Projections	ctions 2002 Actuals		200	2003 Actuals 2004 Budg			Budget** 2005 Bud		_
Labor									
NU Labor	\$	53	\$	85	. \$	53	\$	142	
Contractor Staff	\$	-	\$		\$		\$	42	
Total Labor	\$	53	\$. 85	\$	53	\$	184	
Materials & Supplies			\$	1					
Digital HVAC Assistant	\$	-	\$	-	\$	-	\$	60	a)
Other M&S	\$	-	\$	-	\$	5	\$	20	b)
Outside Services	\$	300	\$	144					
Vendor Administration Vendor Application	\$	-	\$		\$	300	\$	425	c)
Processing	\$		\$	-	\$	75	\$	75	d)
Other Outside Services	\$	-	\$		\$	<u>86</u>	\$	100	e)
Sub-total Outside Svcs	\$	300	\$	144	\$	461	\$	600	
Incentives	\$	640	\$	790	\$	761	\$	1,890	f)
Marketing									
Joint CL&P / UI Market	\$	-	\$	-	\$	60	\$	43	g)
CL&P Market	\$	-	\$	-	\$	100	\$	70	h)
Misc Marketing	\$	45	\$	28	\$	45	\$	35	i)
Sub-total Marketing	\$	45	\$	28	\$	205	\$	148	
Administrative Expense	\$	-	\$	38	\$	5	\$	10	j)
Other	\$	*	\$	1	\$	10	\$	10	
Total	\$	1,037	\$	1,087	\$	1,500	\$	2,922	

^{*} Also known as the Residential HVAC Program for SWCT

- a) Subsidy of purchase of more testing tools
- b) Miscellaneous materials for trainings. (includes palm pilot and Digital Assistance training).
- c) Vendor duties to be increased from 2004. Includes contractor outreach and training.
- d) Vendor check processing fees.
- e) Website maintenance, contractor training sessions for tune-up device, etc.
- f) Rebates include equipment, commissioning, and tune-ups
- g) Includes Collateral and print ads.
- h) To focus on SWCT, CL&P will use various targeted marketing efforts which may include direct mail and bill inserts.
- Miscellaneous includes co-op contractor advertising.
- j) Employee expenses including mileage, training, conference attendance and misc.

2005 Goals and Metrics Information

Demand Savings (kW reduction Goal)	4,578.9
Annual Energy Savings (KWh Reduction Goal)	2,797,639
Lifetime Energy Savings (kWh Reduction Goal)	44,335,134
Annual Cost Rate (\$/kWh)	\$ 1.044
Lifetime Cost Rate (\$/kWh)	\$ 0.066
Electric b/c ratio	3.26
Total Resource b/c ratio	2.43

^{**} Revised Budget as filed on 8/18/04

Residential Heating and Cooling (HVAC)

		Program Costs					
Year	Budget	Actual	% of Budget	Cost/participant	\$/LT-kWh		
2000	. \$0	\$0	0%	\$0	0.000		
2001	\$500,000	\$262,000	52%	\$488	0.096		
2002	\$660,000	\$760,000	115%	\$321	0.051		
2003	\$1,500,000	1,086,000	72%	\$ 659	0.104		
2004 ⁵	\$1,500,000	n/a	n/a	n/a	n/a		
2005	\$2,922,000	n/a	n/a	n/a	n/a		
		Goal - Participation	าก				
Year	Goal	Actual	% of Goal				
2000	0	0	0%¹				
2001	1,269	537	42% ²				
2002	1,423	2,366	166%	•			
2003	16,372	1,647	10%³				
2004 5	2,029	n/a	n/a⁴				
2005	4,525	n/a	n/a				
	Goal	- Lifetime MWh s	avings		Goal - Ir	stalled kW	Savings
Year	Budget	Actual	% of Budget	Year	Goal	Actual	%of Goal
2000	0	0	0%	2000	n/a	n/a	n/a
2001	6,034	2,735	45%	2001	n/a	n/a	n/a
2002	8,196	14,846	181%	2002	n/a	n/a	n/a
2003	18,944	10,490	55%	2003 ⁶	3,371	972	28.8%
2004 5	16,016	n/a	n/a	2004 ⁵	1,481	n/a	n/a

2005

4,579

n/a

n/a

n/a

		Program ratios		
	\$/Lifeti	me kWh	\$/An	nualized kW
Year	Plan	Actual	Plan	Actual
2001	0.083	0.096	n/a	1002
2002	0.081	0.321	n/a	698
2003	0.128	0.104	721	1117
2004 5	0.094	n/a	1,013	n/a
2005	0.066	n/a	638	n/a

n/a

44,335

2005

No program in 2000.

² Program launched in June, 2001.

³ Goal included tune-ups.

Separate tune-up program has been dropped for 2004. Goal is # units only Average unit size is 3 tons, based on historical average.

Based on revised budgets and goals filed on 8/18/04.

⁶ Demand saving goals reflect 1/13/03 goals.

Residential Heating and Cooling (HVAC)

CL&P Program Notes

Budget/FTE

• 1.35 FTE for program administration, vendor interaction, sales and field support

Goal

 Goal is 4,525 equipment rebates (includes ECM motors) and 3,825 commissionings/tuneups.

Cost/Unit

Average cost per unit equals \$350.

Goal Setting Methodology

- There were approximately 2,400 equipment rebates the last full year of program (2002).
- The tune-up goal is based on the initial response we had with tune-ups in 2003 and the current number of diagnostic tools that are in the marketplace.
- ECM goal is based on participation in Massachusetts HVAC program which started ECM motor rebates in 2004.

Metric Changes

- Program will be high profile and aggressive. Program elements will include training on installation practice including tune-ups, duct design and installation, air flow, refrigerant charge, and proper sizing.
- Tune-up component of program began in 2003 and saw success before program stoppage.
- ECM motor rebate will be instituted in 2004. Limited work has been done nationally to help build momentum for this measure, however, there is a large savings potential with ECM furnace fan motors including summer peak savings (for homes that have air conditioning). See "Electricity Use by New Furnaces, A Wisconsin Field Study", Scott Pigg, http://www.doa.state.wi.us/pagesubtext_detail.asp?linksubcatid=561&linkcatid=288&linkid=8).

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Residential Heating and Cooling (HVAC) *

Baseline Assumptions:

Market - Unitary replacement HVAC equipment < tons

Budget Projections		2003 Act		2004 Bud		2005 Bud
Ul Labor (a)	\$	36,692	\$	95,754	\$	103,503
Materials & Supplies	\$	896	\$	10,000	\$	2,000
Outside Services (b)	\$	7,123	\$	115,479	\$	133,750
Other Labor (c)	\$	-	\$	-	\$	50,000
Incentives (d)	\$	221,441	\$	201,900	\$	512,500
Marketing (e)	\$	490	\$	85,310	\$	140,484
Other	\$	-	\$	-	\$	-
Administrative Expenses	\$	1,467	<u>\$</u>	5,593	_\$_	7,763
Total	\$	268,109	\$	514,036	\$	950,000
All Other Charges	\$_	-	\$		<u>\$</u>	•
Total	\$	268,109	\$	514,036	\$	950,000

^{*} Joint CL&P and UI Programs for 2005

- (a) 1.25 FTE of UI oversight
- (b) Incentive processing, tune-up analysis, training
- (c) Field support
- (d) 950 AC, 75 ECM, 375 Comm., 2,000 Tune-Up
- (e) Coop ads, co-op promotions, print ads

Goals and Metrics Information:

Savings	· <u>2005</u>
Demand Savings (kW)	1,490
Annual Energy Savings (kWh)	848,200
Lifetime Energy Savings (kWh)	11,075,800
Annual Cost Rate (\$/kWh)	\$ 1.120
Lifetime Cost Rate (\$/kWh)	\$ 0.086

Residential Heating and Cooling (HVAC)

Goal - Program Costs (000's)

Year	Budget -	Actual	% of Goal Achieved
2001	\$104	\$229	220.2%
2002	\$248	\$286	115.3%
2003	\$366	\$268	73.2%
2004	\$514	\$0	0.0%
2005	\$950	\$0	0.0%

Goal - Number of

<u>Units</u>

Year	Goal	Actual	% of Goal Achieved
2001	250	176	70.4%
2002	235	804	342.1%
2003	500	610	122.0%
2004	634	-	0.0%
2005	3,400	-	0.0%

Goal - Installed kWh Savings (000's kWh)

Goal - Installed kW Savings

Year	Goal	Actual	% of Goal Achieved	Year	Goal	Actual	% of Goal Achieved
2001	62	75	121.0%	2001	-	-	0.0%
2002	58	1,216	2096.6%	2002		-	0.0%
2003	186	231	124.2%	2003	345	. 368	106.7%
2004	279	-	0.0%	2004	491	-	0.0%
2005	848	-	0.0%	2005	1,490		0.0%

Goal - Lifetime kWh Savings (000's kWh)

			% of Goal
Year	Goal	Actual	Achieved
2001	932	1,125	120.7%
2002	876	18,240	2082.2%
2003	3,534	4,389	124.2%
2004	5,108	•	0.0%
2005	11,076	-	0.0%

Program Ratios

	\$/kWh		\$/LT kWh		\$/kW		
Year	Target	Actual	Target	Actual	Target	Actual	Cost/ Unit
2001	\$1.677	\$3.053	\$0.112	\$0.204	\$0.000	\$0.000	\$1,301.136
2002	\$4.276	\$0.235	\$0.283	\$0.016	\$0.000	\$0.000	\$355.721
2003	\$1.968	\$1.160	\$0.104	\$0.061	\$1,060.870	\$728.261	\$439.344
2004	\$1.840	\$0.000	\$0.101	\$0.000	\$1,046.866	\$0.000	\$810.782
2005	\$1.120	\$0.000	\$0.086	\$0.000	\$637.461	\$0.000	\$279.412

Residential Heating and Cooling (HVAC)

UI Program Notes

Budget/FTE

- 2003 budget and program design originally included the tune-up component.
- 2004 program involves equipment rebate and commissioning incentive only.
- Budget includes 1.25 FTE of oversight, administration and contractor support.

Goal

- SWCT reliability concerns in 2002 led to mid-year program design changes.
- 2002 concerns also dictated that budget be allowed to be exceeded if demand warranted.
- 2003-2004 goals driven by budget constraints.
- 2005 goal and metrics reflect shift to strong tune-up orientation:
 - o 2,000 Tune-Ups
 - o 950 SEER 13+ A/C's
 - o 375 Commissionings
 - o 75 ECM Motors

Cost/Unit

- Cost per unit difficult to assess year-over-year as program design and rebate levels evolve.
- 2003 cost per unit driven by increased SEER 13 rebate of \$150 per ton.
- 2004 cost per unit driven by flat \$350/unit rebate rather than a per-ton framework.
- 2002 savings per unit was 365% of the 2004 value due to high concentration of inefficient equipment.
- 2005 cost ratios benefit from revised program design and measure mix as well as larger overall budget over which to spread non-incentive related costs.

Metric Changes

- Production and savings are tracked consistently.
- Mix of 12 versus 13+ SEER units is an uncontrollable variable.
- 2004 program drops 12 SEER equipment from eligibility.

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CHAPTER THREE: COMMERCIAL AND INDUSTRIAL PROGRAMS

C&I NEW CONSTRUCTION

Energy Conscious Construction/Energy Blueprint (CL&P & UI)

Objective:

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The objective of CL&P's Energy Conscious Construction(ECC)/UI's Energy Blueprint Program(EB) is to maximize opportunities in new construction, major renovation, tenant fit-out and equipment replacement. These opportunities are captured by: 1) introducing energy efficiency concepts to architect/engineering firms, trade allies, building contractors, commercial realtors, actual customers, etc., 2) demonstrating the benefits of selecting efficient options during the design stage, and 3) convincing the design community that there is more to be gained for customers by designing for the whole building operation over all the expected operating conditions.

Target Market:

The Energy Conscious Construction/Energy Blueprint Program specifically targets C&I customers of all sizes that are planning projects involving new construction, major renovation, tenant fit-out and major equipment replacement, including municipalities.

Program Description:

The Program promotes energy-efficient construction for C&I new construction, renovation, tenant fit-outs and equipment replacement. The program seeks to increase the energy efficiency design for lighting systems, HVAC systems, motors, process and other energy components of commercial and industrial buildings. This program offers a series of services and incentives, including technical and financial assistance from design through construction, based upon the proposed building's complexity, energy savings potential, scope of work, and the desire of the owner and his or her design team to participate.

There are two tracks that a project can follow: either Prescriptive or Comprehensive. The Prescriptive track is generally for smaller, non-residential buildings--usually less than 50,000 sq. feet in size or smaller projects with limited conservation opportunities. The Comprehensive track is generally available for larger, nonresidential buildings in early design stages with numerous conservation opportunities and complex energy efficiency options.

Marketing Strategy:

ECC and EB are marketed directly to engineers, architects, building owners, equipment suppliers, contractors, realtors, service companies, and other trade allies of the construction business community and to customers. It is expected that efforts to reach customers should focus on the prescriptive components of the program, while efforts to reach professionals should focus on the comprehensive portions of the program.

Each of the Companies relies on personal contacts and presentations at professional meetings for architects, engineers, and construction managers. Utility representatives attempt to contact the key decision makers of a project as early in the design/development process as possible.

The Companies also use general contacts in the form of periodic phone calls, formal and informal presentations, and media events such as grand openings/open houses for completed projects. Use of construction activity reports allow the Companies to have direct contact with designers or other construction business professionals at an early stage of the project when it is timely to incorporate energy efficiency.

The Companies use various other methods to advance their marketing efforts. Successful case studies are highlighted in limited direct mailings and focused advertising is used in appropriate trade publications. All marketing materials and publications stress the benefits of energy-efficient building design and construction and outline the design assistance and financial incentives available through the program.

CL&P Specific Marketing Strategy: Marketing for CL&P's Energy Conscious Construction Program occurs throughout the year. CL&P designs the marketing plan to be flexible in order to maximize results. The strategies to be used include brochure/handouts, construction reports, direct mail, selected advertising, business/trade shows, association, sponsorship, and promotional items. Program marketing needs dictate schedule and cost. The overall budget for marketing expenditures is approximately \$60,000.

CL&P employs low value giveaway items such as pens, pencils, or golf balls. The intent of these giveaways is to create a continuous presence and awareness for the program's name.

Strategy / Items	<u>Timing</u>
Construction Reports	On-going
Direct Mail	As needed
Selected Advertising	Intermittently
Trade Shows	Intermittently
Association /promotions	On-going
Promotional Items	On a continual basis
Brochure revision	As needed
Case Studies (Code Change)	On-going
Newsletter	As needed

UI Specific Marketing Strategy: Marketing for UI's Energy Blueprint occurs over the twelve-month calendar year at specific intervals. UI designs the marketing plan to be flexible in order to maximize results.

The following represents the anticipated strategies and timing for marketing Energy Blueprint. The overall budget for marketing expenditures is approximately \$.

Strategy / Items	Timing
Brochure revision	TBD
Guidebook revision	TBD
Direct Mail	TBD
Newsletter	Quarterly
Selected Advertising	Intermittently
Trade Shows (1)	TBD
Association /promotions	As needed
Promotional Items	On-going
Mini-Case Studies	On-going
Construction Reports	On-going

Energy Blueprint employs a variety of low value giveaway items such as, but not limited to pocket screwdrivers, rulers or pens. The intent of these giveaways is to create a continuous presence and awareness for the program's name.

Incentive Strategy:

Incentives are based on the difference between a less efficient measure that would typically have been installed (with no utility involvement) and the more efficient measure which will be installed (with utility involvement). Further, such incentives can be prescriptive, comprehensive or custom.

Design Team Incentives – The Companies use a variety of incentive mechanisms such as Brainstorming Honorariums and Design Incentives to compensate the Design Team. These mechanisms accomplish two important strategies in energy efficient design: (1) they encourage a customer and the customer's Design Team to involve the utility at the earliest possible stage of construction, and (2) they encourage the customer's Design Team to improve the overall energy efficiency of the project by using high efficiency alternatives. These interactions provide opportunities to encourage better standard practices of these key market players.

Customers' monetary investments vary significantly, depending upon the size of the facility and the comprehensiveness of the efficiency measures being employed. Generally, the average incremental investment for a comprehensive energy-efficient new facility ranges from \$.80 to \$1.00 per sq. ft. The customer's final net incremental cost depends upon how cost-effectively the design team can meet the Energy Conscious Construction/Energy Blueprint standards.

In addition, the Companies offer incentives for implementing measures that create peak load reduction such as fluorescent lighting with dimmable ballasts, adding load management capability to standard energy management systems and thermal energy storage systems.

Incentives are also offered for mature renewable technologies. The two renewable technologies being considered are photovoltaic and wind power. The Companies will work with customers interested in "Green" buildings to provide incentives for measures that save electrical energy, within the guidelines of the program.

The recent adoption of ASHRAE 90.1 – 2001 as Connecticut's energy code will affect the Energy Conscious Construction/Energy Blueprint program. This change codifies many energy efficient technologies, which may be beneficial to energy consumers in Connecticut. The code changes may cause the Companies to review and modify their program offerings. The scope and magnitude of the impacts are currently under review by the Companies. However preliminary investigations indicate that potentially up to 70% of the addressable energy load will be impacted. The Companies intend to use this opportunity to refocus the programs to achieve higher levels of energy efficiency. Despite these changes, these programs remain extremely cost effective delivery vehicles for Connecticut's consumers.

CL&P Specific Incentive Strategy: Incentives are available to architects and engineers, to help defray any additional expenditures of providing cost estimates, designing and complying with energy efficient options. The design team is eligible to receive incentives for the comprehensive path of Energy Conscious Construction. The Design Team incentives are calculated based on energy savings achieved by the design.

CL&P plans to offer direct cash incentives that provide from 50-100% of the incremental equipment cost. The program includes a prescriptive incentive for each energy component standard (e.g. lighting, motors, HVAC) that is met. Customers can qualify for bonus incentives if they participate at a comprehensive level by exceeding the prescriptive energy-efficiency standards. This provides a larger incentive to encourage customers to go beyond the standards, recognizing the increased difficulties and cost of doing so.

The following example using an 82,000 sq. ft. office building illustrates how the incentive is calculated. The incentives are calculated using the prescriptive energy efficiency standards for lighting, lighting controls, HVAC, motors and variable speed drives. Project specifics include:

Lighting	\$17,220.00
Lighting Controls - Occupancy Sensors	\$1,650.00
HVAC Motors	\$2,110.00

HVAC Variable Speed Drives	\$40,500.00
Total	\$61,480.00

Total Incentive/sq. ft

\$0.75

UI Specific Incentive Strategy: Grants are available to architects and engineers to help defray any additional costs of modeling, analyzing, designing and complying with energy-efficient options. The design team is eligible to receive incentives based on either the comprehensive or the prescriptive paths of Energy Blueprint. The design incentives are calculated on a declining "cents per square foot" scale for each project. In a non-comprehensive project, this total is then pro-rated by end use.

Customers are eligible for direct cash incentives that provide up to 90% of the incremental equipment or construction cost. The program includes a prescriptive (base compliance) incentive for each energy component standard (e.g. lighting, envelope, HVAC) that is met. Customers qualify for additional cash incentives by exceeding the prescriptive energy efficiency standards or by including additional measures described in the Energy Blueprint Program. In addition, customers can qualify for bonus incentives by participating at a comprehensive level. This provides a larger incentive to encourage customers to go beyond the standards, recognizing the increased difficulties and cost of doing so.

The incentive structure described above may continue to be supplemented by integrating incentives, up to \$500 per kW, for peak demand reduction.

The following example illustrates how the incentive is calculated for a sample office space:

A customer decides to build a 50,000 sq. ft office building. The incentives are calculated using the prescriptive energy efficiency standards for lighting, envelope, HVAC, motors and variable speed drives. In addition the project includes occupancy sensors to provide more control of the lighting. The project also qualifies for a comprehensive bonus.

Project specifics include:

Lighting	\$12,000.00		
Lighting Controls - Occupancy Sensors	\$ 3,000.00		
HVAC	\$ 9,875.00		
*Envelope -ASHRAE 90.1 2001	0.00		
*Heating -ASHRAE 90.1 2001	0.00		
Variable Speed Drives	\$11,300.00		
Motors	\$ 0.00		
Subtotal	\$36,175.00		
Bonus (33% * base incentive total)	\$11,937.75		
Total	\$48,112.75		

Total Incentive/sq. ft before bonus
Total Incentive/sq. ft with bonus

\$ 0.72

\$ 0.96

*Required to qualify for comprehensive bonus

Goals:

CL&P Goals: The 2005 goal for Energy Conscious Construction is to reduce the C&I energy consumption by 31,128,418 kWh annually and 573,896,439 kWh lifetime with an anticipated target budget of approximately \$7,450,000 dollars

UI Goals: The 2005 goal for UI's Energy Blueprint is to reduce the C&I energy consumption by 24,836,699 kWh annually and 424,067,090 kWh lifetime with an anticipated target budget of approximately \$3,718,673 dollars.

New Program Issues:

The Companies plan on continuing to emphasize this lost opportunity program in 2005 anticipating its activity level to keep pace with changes in the new construction market. As in the past the Companies intend to promote emerging technologies where feasible and applicable. Also the program will continue to review the new building code and assess the potential impacts to the current program structure. Potential impacts from external sources such as Leadership in Energy and Environmental Design (LEED) or Advanced Building Guidelines are also reviewed and monitored for appropriate inclusion in the program. In 2005 any municipal construction or renovation in UI service territory will be accounted for in the Energy Blueprint budget and goals.

The Program can also promote and quantify non-electric benefits for the customer where appropriate. This may be facilitated by offering bonus incentives for non-electric measures. Currently, the feasibility of a bonus incentive is being reviewed.

The State Building Code change will affect how the program is delivered and incentive qualified/calculated. The following summarizes the appropriate changes.

- The Good News: The code change is a substantial improvement in the minimum efficiency baseline for all future commercial/industrial buildings and represents an important step forward in market transformation by Connecticut's energy efficiency programs.
- The Challenge: Improvement in efficiency construction standards inevitably result in the need to re-set the baselines against which incentive levels and C&LM program savings are established. This means at least a near-term depressing effect on net new construction program savings and program cost-effectiveness, although the programs will remain very cost-effective.

The Opportunity: The natural ratcheting effect of periodic upgrades in building/equipment standards now provides the opportunity to take building design and construction practices to the next level of performance. The Companies, in consultation with the ECMB, are exploring a variety of program strategies for raising the bar on energy efficient commercial buildings.

Additionally CL&P plans to promote energy efficiency at the design stage and to ensure new building codes and the most advanced building designs are being utilized during new construction of high profile projects such as science centers, museums and large public gathering places such as Adrien's Landing. Another objective is to leverage the high profile nature of these buildings, their architects and the large volume of visitors to convey and showcase the building design concept in a manner which incorporates the greatest impact.

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Energy Conscious Construction

All dollar values are in \$000

Budget Projections	2002 A	<u>ctual</u>	200	3 Actuals	2004 B	udget*	2005 B	udget	
-Labor thannes et earliese am	1000		ester ex						
NU Labor	\$	518	\$. 371	\$	400	\$	560	
Contractor Staff	\$	249	\$	41	\$	100	\$	334	
Total Labor	\$	768	\$	412	\$	500	\$	894	a)
Outside Services	\$	305	\$	102	\$	330	\$	590	b)
Materials & Supplies	\$	-	\$.	3	\$	10	\$	10	
Incentives	\$	7,024	\$	4,865	\$	5,311	\$	5,847	c)
Marketing	\$	-	\$	12	\$	62	\$	60	d)
Administration Expenses	\$	92	\$	37	\$	15	\$	24	e)
Other	\$	_	\$	2	<u>`\$</u>	22	\$	<u>25</u>	
Total	\$	8,189	\$	5,433	\$	6,250	\$	7,450	

^{*} Revised Budget as filed on 8/18/04

- a) Labor budget increased from 2004 because a larger number of projects are anticipated to be completed and inspected in 2005. The program shut down in 2003 created a decrease in the number of total projects in 2004.
- b) Services include technical assistance, analysis, quality control, and inspections. Increase in budget reflects the need for additional engineering and design expertise anticipated to address recent building code changes with the design and contractor community Also includes \$200,000 for the promotion and marketing of advanced building design.
- c) Incentives paid directly to customers for the installation of cost effective energy conservation measures
- d) Includes marketing to customers, trade allies and professional organizations to restore program momentum.

 Marketing is thru construction reports, direct mail, advertising, associations, and promotional items
- e) Employee expenses including mileage, training, conference attendance and misc.

2005 Goals and Metrics Information

Demand Savings (kW reduction Goal)		8,926.9
Annual Energy Savings (KWh Reduction Goal)	3	31,128,418
Lifetime Energy Savings (kWh Reduction Goal)	5	73,896,439
Annual Cost Rate (\$/kWh)	\$	0.239
Lifetime Cost Rate (\$/kWh)	\$	0.013
min at the contra		
Electric b/c ratio		5.07
Total Resource b/c ratio		5.31

Energy Conscious Construction

	Program Costs						
Year	Budget	Actual	% of Budget	\$/LT-kWh1			
2000	\$7,770,000	\$6,884,000	89%	0.013			
2001	\$7,878,000	\$8,193,000	104%	0.011			
2002	\$7,435,000	\$8,189,000	110%	0.011			
2003	\$5,700,000	\$5,431,000	95%	0.007			
2004 ³	\$6,250,000	n/a	n/a	n/a			
2005	\$7,4 50,000						
	Goal - Participation						
Year	Goal ²	Actual	% of Goal				
2000	6,174	5,719	93%				
2001	6,362	6,986	110%				
2002	5,937	6,897	116%				
2003	210	111	53%				
2004 ³	117	n/a	n/a				
2005 4	216	n/a	n/a				
	Goal - Lifetime MWh Savings				<u>G</u> c	al - Instal Saving	
Year	Goal (MWh)	Actual (MWh)	% of Goal	Year	Goal	Actual	%of Goal
2000	412,230	511,001	124%	2000	n/a	n/a	n/a
2001	739,115	7 12,952	96%	2001	n/a	n/a	n/a
2002	605,194	728,424	120%	2002	n/a	n/a	n/a
2003	582,130	355,076	61%	2003 ⁵	8,878	4,025	45.3%
2004 ³	357,198	n/a	n/a	2004 ³	5,682	n/a	n/a
2005 ⁴	573,896	n/a	n/a	2005 4	8,927	n/a	n/a
	Program Ratios						
Year	\$/Lifetime kWh		\$/Annuali	zed kW			
Year	Plan	Actual	Plan	Actual			
2000	0.019	0.013	n/a	1,003			
2001	0.011	0.011	n/a	1,083			
2002	0.012	0.011	n/a	768			
2003	0.013	0.015	870	1,349			
2004 ³	0.017	n/a	1,100	n/a			
2005 4	0.013	n/a	835	n/a			

Actual Dollars spent divided by actual life time kWh savings achieved for 2000 to 2002 inclusive.

Goal for 2000-2002 is incentive dollars. Goal for 2003-2005 is number of projects.

Based on revised budgets and goals filed on 8/18/04, reduced to reflect the start-up issues due to the 2003 shutdown.

Includes committed projects reserved in 2004 and completed in 2005.

Demand saving goals reflect 1/13/03 goals.

Energy Conscious Construction (ECC)

CL&P Program Notes

Budget/FTE

- 5.3 FTEs 100% dedicated to ECC, additional employees as needed.
- 1 part-time college intern.
- 2005 Budget increased compared to 2004 Budget.
- State building code changes will require an increased effort in marketing and project review with design and contractor community

Goal

- Demand Savings (kW Reduction Goal) = 8,927 kW.
- Lifetime Energy Savings (kWh Reduction Goal) = 573,896,439 kWh.

Cost/kWh (Cost/Unit)

- Annualized kW = \$835/kW.
- \$/Lifetime kWh = \$0.013/kWh.

Goal Setting Methodology

- The 2005 planning model is based on 2002 actual results.
- Changes were made to incorporate differences in evaluation results (realization rates), program rules changes, baseline changes (codes), and coincidence factors.
- Goal reflects projects committed in 2004 that will be installed in 2005, as well as projects that will be committed in 2005 but installed in later years.

Metric Changes

• Not applicable.

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Energy Blueprint * (1,2)

Baseline Assumptions:

Market - C&I new construction, renovation and tenant fit-out program

Budget Projections	2003 Act		2004 Bud	2005 Bud
UI Labor	\$ 326,353	\$	361,776	\$ 401,697
Materials & Supplies	\$ 1,500	\$	3,000	\$ 5,500
Outside Services (a)	\$ 43,737	\$	127,000	\$ 142,000
Other Labor (b)	\$ -	\$	•	\$ 75,000
Incentives (c)	\$ 1,559,879	\$	1,740,432	\$ 2,945,476
Marketing (d)	\$ 13,320	\$	86,000	\$ 125,000
Other	\$ -	\$	-	\$.
Administrative Expenses (e)	\$ 17,809	\$	28,900	\$ 24,000
Total	\$ 1,962,598	\$	2,347,108	\$ 3,718,673
All Other Charges	\$ ***	_\$	-	\$
Total	\$ 1,962,598	\$	2,347,108	\$ 3,718,673

- * Joint CL&P and UI Program for 2005
- (1) Energy Blueprint includes Motors and Cool Choice
- (2) Energy Blueprint will include municipal new construction and major renovation projects in 2005
- (a) Consultant services, NEEP contract services
- (b) Engineering services
- (c) Customer incentives, Design Grants
- (d) Brochure revision, selected advertising, public relations
- (e) Employee training, mileage, etc.

Goals and Metrics Information:

<u>2005</u>
7,102
24,836,699
424,067,090
\$ 0.150
\$ 0.009

Energy Blueprint (1)

Goal - Program Costs (000's)

		un-gran	% of Goal
Year	Budget	Actual	Achieved
2000	\$2,812	\$2,768	98.4%
2001	\$2,313	\$2,304	99.6%
2002	\$2,083	\$2,019	96.9%
2003	\$2,390	\$1,977	82.7%
2004	\$2,347	\$0	0.0%
2005	\$3,719	\$0	0.0%

Goal - Installed kWh Savings (000's)

Goal - Installed kW Savings

Year	Goal	Actual	% of Goal Achieved	Year	Goal	Actual	% of Goal Achieved
2000	11,022	22,113	200.6%	2000	-	-	0.0%
2001	14,815	25,568	172.6%	2001	-	-	0.0%
2002	12,540	18,731	149.4%	2002	-	-	0.0%
2003	16,908	10,994	65.0%	2003	4,327	3,815	88.2%
2004	20,579	-	0.0%	2004	5,891	, - ,	0.0%
2005	24,837	-	0.0%	2005	7,102	-	0.0%

Goal - Lifetime kWh Savings (000's)

Year	Budget	Actual	% of Goal Achieved
2000	165,338	331,701	200.6%
2001	222,225	383,520	172.6%
2002	188,100	280,965	149.4%
2003	253,620	164,910	65.0%
2004	308,685	-	0.0%
2005	424,067	-	0.0%

Program Ratios

	\$/kWh		\$/LT kWh		\$/kW	
	Target	Actual	Target	Actual	Target	Actual
2000	\$0.255	\$0.125	\$0.017	\$0.008	\$0.000	\$0.000
2001	\$0.156	\$0.090	\$0.010	\$0.006	\$0.000	\$0.000
2002	\$0.166	\$0.108	\$0.011	\$0.007	\$0.000	\$0.000
2003	\$0.141	\$0.180	\$0.009	\$0.012	\$552.346	\$518.258
2004	\$0.114	\$0.000	\$0.007	\$0.000	\$398.404	\$0.000
2005	\$0.150	\$0.000	\$0.009	\$0.000	\$523.620	\$0.000

Notes

^{1.} Energy Blueprint includes Motors and Cool Choice for 2003 - 2005

Energy Blueprint

UI Program Notes

Budget/FTE

- 2005 final is the largest budget since 2000 for lost opportunity programming
- 2005 final budget is 58% greater than the '04 revised budget, being impacted by carry-over and securitization
- 2005 final budget is 55% greater than the '03 budget
 - '05 incentives include demand reduction
 - Budget includes 3.1 FTEs for staffing

Goal

- Target = 150 projects for 2005
- Greater focus on mid-market customers (100-250 kW), capturing more "lost opportunities"
- Greater focus on higher performance alternatives
- Greater focus on lean manufacturing and process optimization
- All municipal "lost opportunity" projects are included in Energy Blueprint
- ASHRAE 90.1-2001 implemented in September 2004, elevates the baseline for calculating savings; less kWh potential
- The new energy code adversely impacts the kWh savings potential relative to 2005 without any changes; therefore:
 - o The methodology utilizes a 30% loss of kWh in lighting
 - o The methodology also utilizes 45% loss of kWh in cooling
 - o The methodology used end use percentages from combined '03 and '04 data
 - o the methodology used an estimated 5M kWh for committed projects; '04 commitment '05 completion
 - The kWh estimates for '05/'06 commitments were adjusted by applying the impact percentages to lighting and cooling
- Ratios between the budget and kWh saved in 2003
 - o '05 final budget is 55% greater than '03 budget
 - o '05 final kWh target is 47% higher than '03 kWh target
 - o '05 final kWh target is 26% greater than '03 actuals; 33% greater than '02 actuals
 - o '05 final budget is 58% greater than '04 revised budget
 - o '05 final kWh target is 21% greater than '04 revised kWh target
- Methodology adopted a 99% realization rate to be consistent with CL&P

Cost/Unit

- Targeted \$.31 /kWh as the overall incentive level
- 2005 projected cost rates: annual = \$.1497/kWh, lifetime = \$.0088/kWh, \$/kW = \$523.62
- 2003 actual cost rates: annual = \$.1798/kWh, lifetime = \$.0120/kWh
- Adopting CL&P measure life values for end uses; for example lighting increases to 19 years
- It's anticipated that the program will experience higher costs due to:
 - o Increased standard incentives less kWh saved per incentive dollar
 - o Increased incentives for emerging technologies like Super T-8s which can recover lost kWh
 - Higher costs due to more carryover dollars going into marketing and outside services
 - o Higher costs due to more training and education on ABG, HPS, and LEEDs

Metric Changes

kWh saved is the basic metric for all C&I programs

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C&I EXISTING BUILDINGS

C&I Express Services (CL&P)

Objective:

The objective of CL&P's Express Services Program is to encourage energy efficiency by being involved in the initial equipment purchase decisions in order to identify and support the implementation of selected cost effective measures.

Target Market:

All C&I customers

Program Description:

Retrofit:

Lighting Rebate: For all customers the targeted 2005 budget for the retrofit segment of the program is \$827,312.

Lost Opportunities:

Motor Rebate: For new or replacement 3-phase motors from 1-200 horsepower.

HVAC Program: For new or replacement rooftop, split systems, terminal A/C units and heat pumps with up to 30 tons of cooling capacity.

The targeted 2005 budget for the lost opportunities segment of the program is \$312,688.

Contractors, distributors, and trade allies, as well as CL&P, can deliver this program. Installation has traditionally been by the customer, but the Company may institute a direct-install component for small customers.

Marketing Strategy:

CL&P plans on marketing the Express Services Program both to trade allies and to customers in a mass marketing approach where trade allies are encouraged to "up sell" energy efficient measures to customers. CL&P designs the marketing plan to be flexible in order to maximize results.

For trade allies, CL&P plan on stepping up personal contacts and presentations at meetings. The motors and HVAC components are promoted through initiatives such as NEEP offers. CL&P markets lighting through installing contractors and directly to customers. The strategies to be used include brochures/handouts, direct mail, selected advertising, attendance and providing promotional items at local business/trade shows and sponsorship of selected meetings with trade allies and related technical organizations.

For customers, CL&P may tie this marketing effort with cooperative advertising with trade allies and link to general advertising and advertising with regional initiatives such as NEEP.

Incentive Strategy:

Incentives are prescriptive under the Express Services Program intended to pay for up to 100% of the incremental cost of installing an energy efficient piece of equipment versus that of standard efficiency subject to cost-effectiveness constraints. The following are examples of typical incentives that would be available under each program segment.

Lighting - Replace (24) 4-lamp T-12 (40 watts/lamp) with (24) 4-lamp T-8 (32 watts/lamp) and electronic ballasts.

Incentive = 24 fixtures X \$15.00/fixture = \$360

Motors – Purchase and install a new 10 horsepower OPD (open drip-proof) motor, 460 volt-3P, nominal 1800 RPM and 94% efficiency. Incentive = 1 motor X \$90 = \$90

HVAC – Purchase and install a new 10-ton (120,000 BTUH) unitary rooftop air conditioning unit having an EER – 11.4. Incentive = \$73/ton X 10 ton = \$730

Goals:

The 2005 goal for C&I Express Services is to reduce C&I electrical energy consumption by 8,972,822 kWh annually and 112,307,374 kWh lifetime with an anticipated target budget of \$1,140,000 with the following breakdown by program segment:

Lighting - Retrofit

Annual Energy Savings: 8,463,835 kWh

Budget: \$827,312

Motor Rebate & HVAC Program - Lost Opportunities

Annual Energy Savings: 508,987 kWh

Budget: \$312,688

New Program Issues:

CL&P may evaluate costs and methods used to provide each program segment and consider alternate cost effective marketing and methods.

Express Services

All dollar values are in \$000

All C&I customers

Budget Projections	2002 A	ctual	2003	Actuals	2004 B	ludget*	2005 E	udget	
Labor			\						
NU Labor	\$	54	\$	78	\$	53	\$	125	
Contractor Staff	\$	15	\$	3	\$		\$		
Total Labor	\$	68	\$	81	\$	53	\$	125	
Outside Services	\$	159	\$	106	\$	155	\$	195	a)
Materials & Supplies	\$	1	\$	4	\$	5	\$	5	
Incentives	\$	823	\$	603	\$.	861	\$	795	b)
Marketing Administrative	\$	-	\$	1	\$	10	\$	10	c) .
Expenses	\$	1	\$	(31)	\$	5	\$	5	d)
Other	\$	<u> </u>	\$	2	\$	11	\$	5	
Total	\$	1,052	\$	766	\$	1,100	\$	1,140	

^{*} Revised Budget as filed on 8/18/04

- a) Optimize use of consulting services including Applied Proactive Technologies and MaGrann Assoc.
 to promote program to dealers and trade allies. Includes half of NEEP membership fee.
- b) Incentives for Lighting Rebate, MotorUp and Cool Choice
- c) Market program to customers, trade allies and professional organizations through mailings, telephone calls, and representation at events such as ASHRAE meetings.
- d) Includes participation in industry and trade association conferences (e.g., NEEP, etc.).

2005 Goals and Metrics Information

Demand Savings (kW reduction Goal)		1,887.4
Annual Energy Savings (KWh Reduction Goal)		8,972,822
Lifetime Energy Savings (kWh Reduction Goal)	11	12,307,374
Annual Cost Rate (\$/kWh)	\$	0.127
Lifetime Cost Rate (\$/kWh)	\$	0.010
Electric b/c ratio		6.36
Total Resource b/c ratio		4.44

Express Services ³

		Program Costs					
Year	Budget	Actual	% of Budget	\$/LT-kWh1			
2000	\$1,849,000	\$947,000	51%	0.010			
2001	\$1,500,000	\$1,189,000	79%	0.011			
2002	\$1,327,000	\$1,052,000	79%	0.009			
2003	\$1,000,000	\$766,000	77%	0.008			
2004 4	\$1,100,000	n/a	n/a	n/a			
2005	\$1,140,000	n/a	n/a	n/a			
		Goal - Participation					
Year	Goal 2	Actual	% of Goal	x			
2000	1,447	695	48%				
2001	1,154	799	69%				
2002	952	846	89%				
2003	522	385	74%				
2004 4	659	n/a	n/a				
2005 5	609	n/a	n/a				
	Goa	al - Lifetime MWh Sav	ings		Goat -	Installed k	W Savings
Year	Goal (MWh)	Actual (MWh)	% of Goal	Year	Goal	Actual	%of Goal
2000	172,339	96,749	56%	2000	n/a	n/a	n/a
2001	166,070	109,757	66%	2001	n/a	n/a	n/a
2002	129,441	123,330	95%	2002	n/a	n/a	n/a
2003	148,237	96,507	65%	2003 ⁶	2,064	1,286	62.3%
2004 4	125,460	n/a	n/a	2004 4	2,263	n/a	n/a
2005 ⁵	112,307	n/a	n/a	2005 5	1,887	n/a	n/a
		Program Ratios					
	\$/Lifet	ime kWh	\$/Annuali:	zed kW			
Year	Plan	Actual	Plan	Actual			
2000	0.011	0.010	n/a	748			
2004	0.000	0.044	- la	020			

Year	Plan	Actual	Plan	Actual
2000	0.011	0.010	n/a	748
2001	0.009	0.011	n/a	820
2002	0.010	0.009	n/a	477
2003	0.010	0.008	697	596
2004 ⁴	0.009	n/a	486	n/a
2005 ⁵	0.010	n/a	604	n/a

- Actual Dollars spent divided by actual life time kWh savings achieved for 2000 through 2002 inclusive.
- Goal for 2000-2002 is incentive dollars. Goal for 2003-2005 is number of projects.
- Combines: Express Services (Cool Choice & Motors) and Express Services (Lighting Rebate)
- Based on revised budgets and goals filed on 8/18/04.
- Goal decrease \$/kWh and \$/kW increase due to Code changes.
- ⁶ Demand saving goals reflect 1/13/03 goals.

Express Services

CL&P Program Notes

Budget/FTE

- 1.2 FTE's for program administration, vendor interaction, sales and field inspections and program support.
- Late 2004 program changes to raise maximum Lighting Rebate incentive cap per account to \$25K will allow for larger projects creating the need for additional project reviews and inspections in 2005

Goal

- Demand Savings (kW Reduction Goal) = 1,887kW.
- Lifetime Energy Savings (kWh Reduction Goal) = 112,307,374 kWh.

Cost/Unit

- \$/Annualized kW = \$604/kW.
- $\frac{\text{S/Lifetime kWh}}{\text{S/Lifetime kWh}} = \frac{0.010}{\text{kWh}}$.

Goal Setting Methodology

- 2005 Goals were based upon 2002 actuals.
- Changes were made to incorporate differences in baseline changes (codes), and coincidence factors.

Metric Changes

• Not applicable.

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C&I RFP (CL&P & UI)

Objective:

The objective of the joint CL&P and UI C&I Request for Proposal (RFP) Program is to promote competitive market development in the C&LM industry by encouraging third parties to bid to undertake C&LM projects on a competitive basis. The C&I RFP program is aimed at energy efficiency potential from C&I and residential projects that are not participating through other existing C&LM programs.

Target Market:

The minimum C&I customer size is 200 kW of demand and the minimum project energy saving is 100,000 kWh per year or 100 kW per year (can be aggregated sites). Customers of the Companies, energy service companies and other third party service providers representing customers are eligible to participate in this program. Special emphasis will continue to be made in SWCT by offering special bids during 2005.

The respondents to the RFP may be any customer, organization, group or individual who contracts with the Companies to provide energy savings from an approved energy efficiency project. It is expected that bidders typically may be of two types: 1) customers with significant in-house technical capability, or 2) customers allied with firms that specialize in implementing energy efficiency projects and have a staff of professionals trained to identify energy efficiency opportunities, calculate potential savings, design system modifications, manage construction and installation of energy efficiency measures, and measure energy savings.

Program Description:

The C&I RFP program offers incentives for measurable energy savings achieved by the installation of energy efficiency measures as specified in a project agreement. The Companies may change incentive levels as market conditions dictate. Eligible improvements include energy efficient equipment, products, and measures that are cost-effective. The estimated savings are measured from a baseline that is established either by the minimum code efficiency or what the customer would install without utility intervention. The estimated savings are verified using approved protocols.

Some eligible measures include replacing standard fluorescent lighting with high efficiency fluorescent lighting, installing variable speed drives on motors, installing lighting controls to reduce lighting operating hours, and replacing low efficiency air conditioning equipment with high efficiency equipment.

Measures that are not eligible include any new construction or major renovation projects, any power producing project such as cogeneration, and, except for renewable energy, switching from electric energy to another fuel (fuel switching). Because the goal of the C&I RFP program is to assess the degree to which projects require incentives, this program does not intend to have published incentives. Each proposal needs to identify the required incentive amount. All bids are evaluated based upon a comparison of energy (kWh) and demand (kW) savings and other price and non-price variables. Non-price variables include such factors as whether the project includes items other than lighting (HVAC and process) and whether the environmental impacts reduce on-site emissions or waste stream impacts. Projects must be qualified on the basis of established cost-effectiveness criteria.

The following criteria are assessed to determine a project's ranking:

- Requested Utility Participation
- Cost-Effectiveness
- Comprehensiveness: System Design and Technology
- Environmental Benefit
- Project Timeline

The RFP solicits responses for proposals in two tracks, a Project Track and a Study Track. The Project Track seeks proposals that can be developed in a short period of time and still have sufficient detail to accurately estimate energy savings, project costs and other parameters. The Study Track seeks proposals for projects that appear to have sufficient energy savings but need additional study due to complexity, engineering study costs or other reasons.

Marketing Strategy:

The Companies have a list of potential bidders and key customers whom the Companies contact through the mail, in person and over the phone. The Companies also market through newspapers and their websites. Collateral materials are available to educate these groups on the RFP Program. Potential bidders are invited to "informational meetings" and "bidders' conferences" to learn how to participate in the program. Once the determination of how many cycles or rounds will be offered in the current year, marketing begins.

Marketing for the RFP program occurs over the twelve-month calendar year at specific intervals dictated by the availability of funding. The marketing plan is designed to be flexible in order to maximize results. Typically, marketing expenditures are minimal, covering any direct mail costs, advertising and meeting facilities.

The following table represents the anticipated strategies and event timing for marketing this program with an overall estimated joint budget of \$33,000; (CL&P; \$25,000, UI; \$8,000).

Legal Notices 2-3 weeks prior to Bidders' Conference 2-3 weeks prior to Start of new budget year Bidding rounds Bidders' Conference 6 weeks prior to Bid Due date Bids Due 6-8 weeks after Bidders'

Strategy

In addition to the above marketing strategies, the Companies may utilize direct mailings.

Conference

Timing

Incentive Strategy:

Incentives are intended to be market driven such that bidders (or potential participants) request the incentive level that is needed to implement a retrofit or replacement energy-efficient project. In this strategy, competition is achieved by having a bidder's project compete for the available incentive dollars. This competition typically results in the incentive requests exceeding the budgeted funding. The maximum incentive allowed for qualifying projects is 75% of the project cost. Projects installed in CL&P and UI territories need to meet minimum program requirements.

Goals:

Increase participation and success of the RFP program, especially in the areas of proposals containing commercially available renewable technologies and certain residential projects meeting the kW and kWh reduction thresholds. Projects installed in both service territories will have to meet the required evaluation criteria as stated in the RFP documentation. Each eligible project will have a BCR greater than 2.25.

CL&P Goals: CL&P's 2005 goal for the C&I RFP program is to reduce large C&I energy consumption in CL&P's territory by 11,975,505 kWh annually and 202,440,633 kWh lifetime with a target budget of approximately \$2,910,000.

UI Goals: UI's 2005 goal for the C&I RFP program is to reduce large C&I energy consumption UI's territory by 2,984,375 kWh annually and 56,703,125 kWh lifetime with a target budget of approximately \$422,128 dollars.

New Program Issues:

CL&P and UI began to implement this program jointly in 2000 and continue joint implementation in 2005. In 2005, the Companies intend to be conduct joint bidding rounds that shall be focused solely on SWCT. In addition, CL&P may conduct two non SWCT bidding rounds. UI anticipates that the prospect of two SWCT rounds will stimulate

additional interest in the RFP program among UI customers and trade allies and promote greater competition. The projects accepted in SWCT will need to meet the minimum kW reduction as well as the kWh requirement.

In 2005, commercially available renewable technologies may be eligible for consideration and residential projects meeting the kW and kWh reduction thresholds may compete with the C&I projects on an equal footing. Further, the Companies may be examining ways to increase the amount of competition in each round.

By lowering the eligibility size to 200 kW, it is anticipated that the Companies may have more mid size projects take advantage of the RFP program. The program may also make an effort to promote and quantify non-electric benefits for the customer.

C&! RFP

All dollar values are in \$000

Budget Projections	2002 A	ctual	<u>2003</u>	Actuals	2004	Budget*	200	5 Budget	
Labor:									
NU Labor	\$	101	\$	104	\$	105	\$	105	
Contractor Staff	\$	<u>51</u>	\$	17	\$		\$	32	
Total Labor	\$	152	\$	121	\$	105	\$	137	
Materials & Supplies	\$	17	\$	4	\$	-	\$	-	
Outside Services	\$	197	\$	125	\$	325	\$	200	a)
Incentives	\$	3,899	\$	1,770	\$	4,025	\$	2,538	b)
Marketing	\$	-	\$. 3	\$	30	\$	25	c)
Administrative Expenses	\$	3	\$	25	\$	5	\$	5	
Other	\$		\$	2	\$	10	\$	5	
Total	\$	4,268	\$	2,050	\$	4,500	\$	2,910	

^{*} Revised Budget as filed on 8/18/04

- a) Outside services include QA reviews, project inspections and customer studies. Decrease reflects corresponding decrease in incentive budget.
- b) Incentives paid to customers for the installation of cost effective energy conservation measures. Incentive budget decreased due to decrease in total program budget.
- c) Marketing of the C&I RFP program takes place over the twelve-month calendar year at specific intervals directed by the availability of funding. The marketing plan is designed to be flexible in order to maximize results. Typically, marketing expenditures are minimal, covering any direct mail costs, advertising and meeting facilities. Marketing tools used: Direct Mail, Legal Notices, Web Site, Informational Meetings, Bidders' Conferences, Phone, Email & in Person.

2005 Goals and Metrics Information

Demand Savings (kW Reduction Goal)		1,973.5
Annual Energy Savings (kWh Reduction Goal		11,975,505
Lifetime Energy Savings (kWh Reduction Goal	2	02,440,633
Annual Cost Rate (\$/kWh)	\$	0.243
Lifetime Cost Rate (\$/kWh)	\$	0.014
Electric b/c ratio		3.85
Total Resource b/c ratio		2.02

C&I RFP (Request for Proposal)

	<u> </u>	Program Costs					
Year	Budget	Actual	% of Budget	\$/LT-kWh			
2000	\$4,500,000	\$2,978,000	66%	0.000			
2001	\$5,700,000	\$6,320,000	111%	0.000			
2002	\$4,194,000	\$4,269,000	102%	0.000			• •
2003	\$4,000,000	\$2,050,000	51%	0.034			
2004 1	\$4,500,000	n/a	n/a	n/a			
2005	\$2,910,000	n/a	n/a	n/a			
	Go	al - Participation 2					
Year	Goal	Actual	% of Goal				
2000	3,810	2711	71%				
2001	5,003	6487.9	130%				
2002	3,720	3898	. 105%				
2003	5,449	33	1%				
2004 1	4,025	n/a	n/a				
2005	2,538	n/a	n/a				
	Cool	ifatima BANA/h aguin			Cool	installed b	AAI Covings
Voor		_ifetime MWh savir		Voor			W Savings
Year	Budget	Actual	% of Budget	Year	Goal	Actual	%of Goal
2000	Budget 411,020	Actual 297,256	% of Budget 72%	2000	Goal n/a	Actual n/a	%of Goal n/a
2000 2001	Budget 411,020 573,050	Actual 297,256 670,581	% of Budget 72% 117%	2000 2001	Goal n/a n/a	Actual n/a n/a	%of Goal n/a n/a
2000 2001 2002	Budget 411,020 573,050 278,250	Actual 297,256 670,581 310,941	% of Budget 72% 117% 112%	2000 2001 2002	Goal n/a n/a n/a	Actual n/a n/a n/a	%of Goal n/a n/a n/a
2000 2001 2002 2003	Budget 411,020 573,050 278,250 422,510	Actual 297,256 670,581 310,941 60,381	% of Budget 72% 117% 112% 14%	2000 2001 2002 2003 ³	Goal n/a n/a n/a 4,501	Actual n/a n/a n/a -642	%of Goal n/a n/a n/a 14.3%
2000 2001 2002 2003 2004	Budget 411,020 573,050 278,250 422,510 317,848	Actual 297,256 670,581 310,941 60,381 n/a	% of Budget 72% 117% 112% 14% n/a	2000 2001 2002 2003 ³ 2004 ¹	Goal n/a n/a n/a 4,501 3,098	Actual n/a n/a n/a 642 n/a	%of Goal n/a n/a n/a 14.3% n/a
2000 2001 2002 2003	Budget 411,020 573,050 278,250 422,510	Actual 297,256 670,581 310,941 60,381	% of Budget 72% 117% 112% 14%	2000 2001 2002 2003 ³	Goal n/a n/a n/a 4,501	Actual n/a n/a n/a -642	%of Goal n/a n/a n/a 14.3%
2000 2001 2002 2003 2004	Budget 411,020 573,050 278,250 422,510 317,848 202,441	Actual 297,256 670,581 310,941 60,381 n/a	% of Budget 72% 117% 112% 14% n/a	2000 2001 2002 2003 ³ 2004 ¹	Goal n/a n/a n/a 4,501 3,098	Actual n/a n/a n/a 642 n/a	%of Goal n/a n/a n/a 14.3% n/a
2000 2001 2002 2003 2004	Budget 411,020 573,050 278,250 422,510 317,848 202,441	Actual 297,256 670,581 310,941 60,381 n/a n/a	% of Budget 72% 117% 112% 14% n/a	2000 2001 2002 2003 ³ 2004 ¹ 2005	Goal n/a n/a n/a 4,501 3,098	Actual n/a n/a n/a 642 n/a	%of Goal n/a n/a n/a 14.3% n/a
2000 2001 2002 2003 2004	Budget 411,020 573,050 278,250 422,510 317,848 202,441	Actual 297,256 670,581 310,941 60,381 n/a n/a	% of Budget 72% 117% 112% 14% n/a n/a	2000 2001 2002 2003 ³ 2004 ¹ 2005	Goal n/a n/a n/a 4,501 3,098	Actual n/a n/a n/a 642 n/a	%of Goal n/a n/a n/a 14.3% n/a
2000 2001 2002 2003 2004 ¹ 2005	Budget 411,020 573,050 278,250 422,510 317,848 202,441 F \$/Lifetime	Actual 297,256 670,581 310,941 60,381 n/a n/a	% of Budget 72% 117% 112% 14% n/a n/a \$/Annualiz	2000 2001 2002 2003 ³ 2004 ¹ 2005	Goal n/a n/a n/a 4,501 3,098	Actual n/a n/a n/a 642 n/a	%of Goal n/a n/a n/a 14.3% n/a
2000 2001 2002 2003 2004 ¹ 2005 Year 2000 2001	Budget 411,020 573,050 278,250 422,510 317,848 202,441 Figure Plan 0.011 0.010	Actual 297,256 670,581 310,941 60,381 n/a n/a Program Ratios kWh Actual 0.010 0.009	% of Budget 72% 117% 112% 14% n/a n/a \$/Annualiz Plan n/a n/a	2000 2001 2002 2003 ³ 2004 ¹ 2005 ed kW Actual 1,264 914	Goal n/a n/a n/a 4,501 3,098	Actual n/a n/a n/a 642 n/a	%of Goal n/a n/a n/a 14.3% n/a
2000 2001 2002 2003 2004 ¹ 2005 Year 2000 2001 2002	Budget 411,020 573,050 278,250 422,510 317,848 202,441 Flan 0.011 0.010 0.015	Actual 297,256 670,581 310,941 60,381 n/a n/a Program Ratios kWh Actual 0.010 0.009 0.014	% of Budget 72% 117% 112% 14% n/a n/a Plan n/a n/a n/a	2000 2001 2002 2003 ³ 2004 ¹ 2005 ed kW Actual 1,264 914 1,411	Goal n/a n/a n/a 4,501 3,098	Actual n/a n/a n/a 642 n/a	%of Goal n/a n/a n/a 14.3% n/a
2000 2001 2002 2003 2004 ¹ 2005 Year 2000 2001 2002 2003	Budget 411,020 573,050 278,250 422,510 317,848 202,441 Figure Plan 0.011 0.010	Actual 297,256 670,581 310,941 60,381 n/a n/a Program Ratios kWh Actual 0.010 0.009	% of Budget 72% 117% 112% 14% n/a n/a \$/Annualiz Plan n/a n/a	2000 2001 2002 2003 ³ 2004 ¹ 2005 ed kW Actual 1,264 914	Goal n/a n/a n/a 4,501 3,098	Actual n/a n/a n/a 642 n/a	%of Goal n/a n/a n/a 14.3% n/a
2000 2001 2002 2003 2004 ¹ 2005 Year 2000 2001 2002	Budget 411,020 573,050 278,250 422,510 317,848 202,441 Flan 0.011 0.010 0.015	Actual 297,256 670,581 310,941 60,381 n/a n/a Program Ratios kWh Actual 0.010 0.009 0.014	% of Budget 72% 117% 112% 14% n/a n/a Plan n/a n/a n/a	2000 2001 2002 2003 ³ 2004 ¹ 2005 ed kW Actual 1,264 914 1,411	Goal n/a n/a n/a 4,501 3,098	Actual n/a n/a n/a 642 n/a	%of Goal n/a n/a n/a 14.3% n/a

Based on revised budgets and goals filed on 8/18/04.

² Goal represents incentive dollars.

Demand saving goals reflect 1/13/03 goals.

C&I RFP

CL&P Program Notes

Budget/FTE:

- 2004 Incentive budget decreased due to decrease in total program budget.
- Staffing includes 1 FTE for program administration and oversight.

Goal

- Demand Savings (kW Reduction Goal) = 1,973 kW.
- Lifetime Energy Savings (kWh Reduction Goal) = 202,440,633 kWh.

Cost/kWh (Cost/Unit)

- $\frac{1}{475}$ \$\text{kW}.
- \$/Lifetime kWh = \$0.014/kWh.

Goal Setting Methodology

- The 2005 planning model is based on 2002 actual results.
- Changes were made to incorporate differences in coincidence factors.

Metric Changes:

• Not applicable.

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RFP *

Baseline Assumptions:

Market - C&I customers with demand > kW (2,3)

Budget Projections	2003 A	ct (1)	2	004 Bud	2005 Bud
UI Labor	\$	-	\$	19,245	\$ 19,809
Materials & Supplies	\$	-	\$	-	\$ 319
Outside Services (a)	\$	-	\$	5,500	\$ 10,000
Other Labor	\$	-	\$	-	\$ -
Incentives (b)	\$	-	\$	190,939	\$ 382,000
Marketing (c)	\$	-	\$	5,000	\$ 8,000
Other	\$	-	\$	-	\$ -
Administrative Expenses (d)	\$		\$	1,444	\$ 2,000
Total	\$	-	\$	222,128	\$ 422,128
All Other Charges	\$		\$	-	\$
Total	\$	-	\$	222,128	\$ 422,128

- * Joint CL&P and UI Program for 2005
- (1) 2003 Actuals included in Energy Opportunities
- (2) Customer eligibility decreased to 200 kW to encourage mid-size market penetration
- (3) C&I program directed at projects > 200 kW with projected savings > 100,000 kWh or 100 kW
- (a) Consultant/Engineering Services
- (b) Customer incentives
- (c) Selected marketing/advertising
- (d) Employee training, mileage, etc.

Goals and Metrics Information:

Savings	<u>2005</u>
Demand Savings (kW)	551
Annual Energy Savings (kWh)	2,984,375
Lifetime Energy Savings (kWh)	56,703,125
Annual Cost Rate (\$/kWh)	\$ 0.141
Lifetime Cost Rate (\$/kWh)	\$ 0.007

<u>RFP</u>

Goal - Program Costs (000's)

Year	Budget	Actual	% of Goal Achieved
2000::	_= \$0	\$0	.0.0%
2001	\$700	\$22	3.2%
2002	\$763	\$88	11.5%
2003	\$410	\$185	45.1%
2004	\$222	\$0	0.0%
2005	\$422	\$0	0.0%

Goal - Installed kWh Savings (000's)

Goal - Installed kW Savings

Year	Goal	Actual	% of Goal Achieved	· Year	Goal	Actual	% of Goal Achieved
2000	-	-	0.0%	2000	-	-	0.0%
2001	2,040	228	11.2%	2001	-	-	0.0%
2002	2,434	544	22.4%	2002		-	0.0%
2003	2,611	2,414	92.5%	2003	635	521	82.0%
2004	2,000	-	0.0%	2004	314	•	0.0%
2005	2,984	-	0.0%	2005	551	-	0.0%

Goal - Lifetime kWh Savings (000's)

Budget	Actual	% of Goal Achieved
-	-	0.0%
30,600	3,420	11.2%
36,510	8,160	22.4%
39,165	36,210	92.5%
30,000	-	0.0%
56,703	-	0.0%
	30,600 36,510 39,165 30,000	30,600 3,420 36,510 8,160 39,165 36,210 30,000 -

	\$/kWh		\$/LT kWh		\$/kW	
Year	Target	Actual	Target	Actual	Target	Actual
2000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
2001	\$0.343	\$0.097	\$0.023	\$0.006	\$0.000	\$0.000
2002	\$0.313	\$0.162	\$0.021	\$0.011	\$0.000	\$0.000
2003	\$0.157	\$0.077	\$0.010	\$0.005	\$645.669	\$354.894
2004	\$0.111	\$0.000	\$0.007	\$0.000	\$707.006	\$0.000
2005	\$0.141	\$0.000	\$0.007	\$0.000	\$765.691	\$0.000

Notes

- 1. 2000-2002 data from filed in 03-01-01
- 2. 2003 data reflects budgets approved in 03-01-01
- 3. 2004 data represents the revised budget allocations
- 4. Program jointly operated with CL&P
- 5. Cost rates are based on '05 EO cost rates due to the lack of reliable information.

C&I RFP

UI Program Notes

Budget/FTE

- 2005 final budget is 90% greater than 2004, representing the securitization process and carryover.
- Budget includes .2 FTEs for staffing.

Goal

- Target of eight projects installed.
- Proactive marketing focus in 2005 throughout UI service area.
- Two rounds to be planned with approximately \$191,000 per round approx. 90% of the budget.
- Program to opened to customers whose demand is >200 kW.
- There were no submittals for 3rd round in '04, attempting to attract some in round four (deadline 10/30).
- Only two projects in first round; '04 YTD projected kWh 56% below the goal.
- Program directly competes with more flexible EO program.
- Ratios between the budget and kWh saved.
 - o '05 final budget is greater than both the 2004 and 2003 budgets, 90% & 3% respectively
 - o '05 kWh target is 49% greater than '04 target
 - '05 target is 14% greater than the '03 target & 24% greater than the '03 actual kWh savings
 - o Program directly competes with Energy Opportunities
- Program has only attracted 16 customers in four years.

Cost/Unit

- All kWh savings are attributed to lighting for BCR purposes.
- 2005 projected total cost rates: annual = \$.1414/kWh, lifetime = \$.0074/kWh.
- 2005 projected incentive only cost rates: annual = \$.128/kWh, lifetime = \$.007/kWh are in line with EO lighting projects.
- 2003 actual cost rates: annual = \$.1570/kWh, lifetime = \$.0105/kWh.
- 2002 actual cost rates: annual = \$.1618/kWh, lifetime = \$.0108/kWh.
- Adopting CL&P measure life values for end uses; for example lighting increases to 19 years.
- Only lighting has been used for planning due to the lack of data.
- Number of RFP projects (historically = 16) is too small for valid estimating; therefore, '05 cost rates are the same as the '05 Energy Opportunities.

Metric Changes

kWh saved is the basic metric for all C&I programs

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C&I Custom Services (CL&P)

Objective:

The objective of CL&P's Custom Services Program is to encourage energy efficiency by being involved in the initial purchase decisions of energy using equipment. Under the Program, the Company identifies and supports the implementation of available cost-effective measures for every conceivable end-use by offering services tailored to customers' individualized, specific needs.

Target Market:

The Custom Services Program targets existing C&I customers of all sizes with the desire to identify specific electric energy-efficiency opportunities. To help facilitate impact in SWCT, the Company plan on supporting and coordinate with EPA's ENERGY STAR Building Program, focusing efforts on Southwestern Area Commerce & Industry Association of Connecticut Inc. (SACIA) member facilities.

Process Reengineering for Increased Manufacturing Efficiency (PRIME) audits are available to industrial customers in the Standard Industrial Classification (SIC) classification range of 2000 to 3999. PRIME provides a productivity evaluation to achieve greater manufacturing efficiencies through more efficient, streamlined processes, waste minimization, inventory reduction and reduced floor space requirements.

Program Description:

Under the Custom Services Program, CL&P provides studies for customers who are not certain as to which measures they should. CL&P also provides focused studies for customers who have a specific project in mind. Incentives are paid for those measures that are cost-effective. Implementation of these measures is by the customer.

CL&P offers the Tailored HVAC component of Custom Services to customers that are considering either replacement or installation of new large-scale heating, ventilation, and/or air conditioning equipment. Technical expertise and incremental cost-based incentives are available for Tailored HVAC. The primary target of the service is projects with packaged HVAC equipment totaling generally over 30 tons, or chilled-water systems over 100 tons. Smaller packaged equipment projects are typically addressed using the Express HVAC Services, the Prescriptive Area of Custom, or the Energy Conscious Construction Program. HVAC systems in large new construction and major renovation projects are addressed in the Comprehensive Area of Energy Conscious Construction Program with approaches similar to Tailored HVAC.

CL&P continues to expand the scope and role of the traditional energy evaluation within the manufacturing sector to include environmental, production, and process issues through PRIME. Through this program CL&P continues to work directly with industrial customers to improve the

energy and manufacturing efficiency of various processes, both existing and planned, through lean manufacturing techniques. Financial assistance is available.

Marketing Strategy:

The Custom Services Program should be marketed to customers, trade allies, industry professionals, and ESCOs.

For trade allies, CL&P will likely increase personal contacts and presentations at meetings. The Company will also utilize additional print advertisements in trade ally publications. For customers, the Company intends to tie this marketing effort to cooperative advertising with trade allies and link it to general advertising.

Chamber of Commerce events and trade shows may be utilized and the programs can also be marketed at the technical seminars that the Company sponsors.

The Company utilizes direct contact with customers by Account Executives to increase awareness of the programs.

Incentive Strategy:

Prescriptive and non-prescriptive incentives are offered under the Custom Services Program. Prescriptive incentives are intended to pay for 100% of the incremental cost. Non-prescriptive incentives fall into one of two categories; "Add-On" or "Up-Grade".

An "Add-On" measure is defined as adding an optional piece of equipment to a system which improves electrical efficiency. Such equipment is not essential to the current operation of that system. Examples are energy management systems or variable frequency drives on existing injection molding machines. The incentive for an "Add-On" measure is intended to pay 50% of the installed cost subject to cost-effectiveness constraints. An "Upgrade" measure is defined as purchasing/replacing a piece of equipment that is essential to the current operation with an energy efficient piece of equipment instead of that of standard efficiency. The incentive for an "Upgrade" is intended to pay up to 100% of the incremental cost subject to cost-effectiveness constraints.

An example of a typical 2004 Custom Services "Add-On" project is as follows:

SWCT Commercial Customer (Car Wash)

Project Cost:

\$22,162

Measure:

Dryer Control Center with VFD's

Incentive:

\$11,081

kW Savings

17.4 summer & 11.7 winter

Lifetime kWh Savings:

517,155

Goals:

The goal of the Custom Services program in 2005 is to improve the energy efficiency of customer facilities and processes through upgrades to premium efficiency equipment and system improvements, bringing about energy savings, environmental improvements and increased production efficiency with an emphasis on SWCT to help curtail congestion problems. CL&P's 2005 goal for the Custom Services program is to reduce energy consumption by 28,245,180 kWh annually and 422,277,863 kWh lifetime with a target budget of approximately \$8,056,096.

New Program Issues:

CL&P continues to evaluate emerging technologies for possible inclusion in the Custom Services Program.

CL&P intends to provide additional funding in 2005 for the Connecticut Hospitals Association (CHA) Loan Program. The objective of CL&P's CHA Loan Program is to provide financing to hospitals which would otherwise find it difficult to fund C&LM measures. The program offers interest-free loans for energy efficiency projects. Financial assistance has been provided in the past through a \$4 million fund previously contributed by the C&LM fund. CL&P provides the evaluation of energy efficiency opportunities, options and recommendations; all projects are implemented and controlled by each hospital. Independent contractors provide quality assurance.

The State Building Code change may affect how the program is delivered and incentive qualified/calculated. The following summarizes the appropriate changes.

- The Good News: The code change is a substantial improvement in the minimum efficiency baseline for all future commercial/industrial buildings and represents an important step forward in market transformation by Connecticut's energy efficiency programs.
- The Challenge: Improvement in efficiency construction standards inevitably results in the need to re-set the baselines against which incentive levels and C&LM program savings are established. This means at least a near-term depressing effect on net new construction program savings and program cost-effectiveness, although the programs may remain very cost-effective.
- The Opportunity: The natural ratcheting effect of periodic upgrades in building/equipment standards now provides the opportunity to take building design and construction practices to the next level of performance. The utilities, in consultation with the ECMB, are exploring a variety of program strategies for raising the bar on energy efficient commercial buildings.

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Custom Services

All dollar values are in \$000	All C&	Customers							
Budget Projections	2002 A	<u>\ctual</u>	200	3 Actuals	2004 E	Budget*	2005 E	Budget	
Labor									
NU Labor	\$	876	\$	537	. \$	450	· \$	551	
Contractor Staff	\$	403	\$	88	\$	325	\$	377	
Total Labor	\$	1,280	\$	625	\$	775	\$	928	 a)
Outside Services	\$	772	\$	355	\$	1,289	\$	1,616	b)
Materials & Supplies	\$	-	\$	-	\$	10	\$	10	•
Incentives	\$	5,644	\$	3,861	\$	5,453	\$	5,317	c)
Marketing	\$	-	\$	21	\$	30	\$	45	d)
Administrative Expenses	\$	21	\$	99	\$	28	\$	25	e)
CHA	\$	-	\$	-	\$	-	\$	100	f)
Other	\$	•	\$	19	_\$	15	\$.	15	
Total	\$	7,716	\$	4,980	\$	7,600	\$	8,056	- g)

^{*} Revised Budget as filed on 8/18/04

- a) Labor budget increased from 2004 because a larger number of projects are anticipated to be completed and inspected in 2005. The program shut down in 2003 created a decrease in the number of total projects in 2004.
- b) Includes outside consultant fees for focused studies, system modeling and QA/QC and the implementation of PRIME
- c) Direct customer incentives with continued emphasis on SW Connecticut. Also includes incentives for 80+
 computer power supply measures.
- d) Includes marketing to customers, trade allies and professional organizations through print advertisements, leave-behind brochures, mailings, Chamber of Commerce events and trade shows. Also reflects marketing costs associated with promoting the 80+ computer power supply initiative
- e) Employee expenses including mileage, training, conference attendance and misc.
- f) Additional funding provided to CHA Loan Program
- g) Includes \$7.306m Custom Services and \$750k PRIME budgets

Demand Savings (kW reduction Goal)		5,405.8
Annual Energy Savings (KWh Reduction Goal)		28,245,180
Lifetime Energy Savings (kWh Reduction Goal)	4	422,277,863
Annual Cost Rate (\$/kWh)	\$	0.285
Lifetime Cost Rate (\$/kWh)	\$.	0.019
Electric b/c ratio		3.17
Total Resource b/c ratio		4.94

Custom Services

2004 ³

2005

412,974

422,278

		Program Costs					
Year	Budget	Actual	% of Budget	\$/LT-kWh 1		-	
2000	\$7,413,000	\$10,575,000	143%	0.017			
2001	\$7,720,000 -	\$8,915,000	115%	0.014			
2002	\$6,884,000	\$7,716,000	116%	0.015			
2003	\$6,000,000	\$4,979,000	83%	0.013			
2004 ³	\$7,600,000	n/a	n/a	n/a			
2005	\$8,056,096	n/a	n/a	n/a			
		Goal - Participation					
Year	Goal 2	Actual	% of Goal				
2000	5,223	7,834	150%	ű.			
2001	5,643	6,344	112%		v		
2002	4,873	5,592	115%				•
2003	360	174	48%				
2004 ³	273	n/a	n/a				
2005	333	n/a	n/a				
	Goal - Lifetime MV	Vh Savings			Goal ·	- Installed I	W Savings
Year	Goal (MWh)	Actual (MWh)	% of Goal	Year	Goal	Actual	%of Goal
2000	426,365	610,917	143%	2000	n/a	n/a	n/a
2001	576,707	627,246	109%	2001	n/a	n/a	n/a
2002	486,366	507,077	104%	2002	n/a	n/a	n/a
2003	401,205	386,534	96%	2003 4	5,596	6,724	120.2%

n/a

n/a

2004³

2005

6,108

5,406

n/a

n/a

n/a

n/a

		Program Ratios		
	\$/Lifeti	me kWh	\$/Annua	lized kW
Year	Plan	Actual	Plan	Actual
2000	0.017	0.017	n/a	1,199
2001	0.013	0.014	n/a	989
2002	0.014	0.015	n/a	1,117
2003	0.022	0.013	1,604	740
2004 ³	0.018	n/a	1,244	n/a
2005	0.019	n/a	1,490	n/a

n/a

n/a

Actual Dollars spent divided by actual life time kWh savings achieved for 2000 to 2002. inclusive. Budget dollars spent divided by life time kWh savings goals for 2003.

Goal for 2000-2002 is incentive dollars. Goal for 2003-2005 is number of projects.

Based on revised budgets and goals filed on 8/18/04.

Demand saving goals reflect 1/13/03 goals.

Custom Services

CL&P Program Notes

Budget / (FTE)

- 5.2 FTEs 100% dedicated to Custom Services and PRIME, additional employees as needed.
- 2005 budget includes \$750K PRIME program.
- 2005 planning model is based on 2002 actual results.

Goal

- Demand Savings (kW Reduction Goal) = 5,406 kW.
- Lifetime Energy Savings (kWh Reduction Goal) = 422,277,863 kWh.

Cost/kWh (Cost/Unit)

- $\frac{\text{Nnualized kW} = 1,490/\text{kW}}{\text{Nnualized kW}}$
- $\frac{\text{$}/\text{Lifetime kWh} = \text{$}0.019/\text{kWh}.}{\text{$}}$

Goal Setting Methodology

- 2005 planning model is based on 2002 actual results.
- Changes were made to incorporate differences in evaluation results (realization rates), program rule changes, baseline changes (codes), change in PRIME Program, and coincidence factors.

Metric Changes

• Not applicable.

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C&I Operation & Maintenance Services (CL&P)

The objective of CL&P's C&I Operation and Maintenance (O&M) Objective:

Program is to improve the operating efficiency of C&I customer

equipment to bring about energy savings.

Target Market: All C&I customers

The C&I O&M Program provides incentives for energy saving operation Program Description:

and maintenance (O&M) practices. Examples of some of the technologies covered by O&M services include compressed air system leak repairs, addition or correction of control components for efficient operation, and the cleaning of HVAC condenser/evaporator coils. CL&P

provides O&M evaluation and recommendations, but the customer

implements the O&M improvements.

A Retro-Commissioning pilot will be offered by CL&P within the existing O&M program (and by UI within its O&M RFP program) for 2005. The pilot will identify electric and non-electric energy savings opportunities through retro-commissioning studies of large customer facilities in the Class A commercial office market segment, preferably in the cost effectiveness of the pilot.

In addition, it is anticipated that the Companies will partner with regional initiatives such as Northeast Energy Efficiency Partnership ("NEEP") again this year to offer the Building Operator's Certification (BOC) course. The BOC provides training in the energy and resource efficient operation of building systems to qualify facility operators and maintenance staff for certification. The BOC program offers Level 1 and Level 2 training courses. These comprehensive courses span a seven month period covering the following topics: Electrical, HVAC Systems. Energy, HVAC Controls, Lighting, Codes, and Indoor Air Quality.

Marketing Strategy:

The O&M Services Program will be marketed to customers, trade allies, industry professionals, and ESCOs.

For trade allies, CL&P would like to increase personal contacts and presentations at meetings. The Company may also utilize additional print advertisements in trade ally publications. For customers, the Company can tie this marketing effort to cooperative advertising with trade allies and link it to general advertising.

Chamber of Commerce events and trade shows can be utilized and the programs will also be marketed at the technical seminars that the . Company sponsors.

The Company may also utilize direct contact with customers by Account Executives to increase awareness of the programs.

Incentive Strategy:

Incentive design provides for payment of 50% of the customer's cost in installing conservation measures that meet specific program objectives, 100% in SWCT towns.

Goals:

The goal of the O&M Program is to improve the operating efficiency of C&I customer equipment to bring about energy savings while reducing demand in the state. The increased emphasis on SWCT will help curtail congestion problems. The goals for 2005 are to reduce or avoid energy consumption by 10,638,308 kWh annually and 99,150,461 kWh lifetime with a target budget of \$2,856,096.

New Program Issues:

CL&P and UI are partnering together to offer a Retro-Commissioning pilot within the existing C&LM O&M program structures. The pilot will likely identify electric and non-electric energy savings opportunities through retro-commissioning studies of five large customer facilities in the Class A commercial office market segment, preferably in SWCT. This pilot aims to make owners aware of operating inefficiencies in their facilities and to systematically address them to generate energy savings.

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O&M Services (Roll-Up)

(includes O&M Services, O&M RFP and O&M Retro Pilot)

All o	dollar	values	are	in	\$000
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Budget Projections	2002 A	tual	2003	<u>Actuals</u>	2004	Budget*	2005	<u>Budget</u>	
Labor				tern .					
NU Labor	\$	76	\$	108	\$	-	\$	219	
Contractor Staff	\$	97	\$	4	\$		\$	195	
Total Labor	\$	173	\$	112	\$	•	\$	414	
Materials & Supplies	\$	0	\$	1	\$	-	\$	30	
Outside Services	\$	110	\$	289	\$	100	\$	1,244	a)
Incentives	\$	312	\$	28	\$	570	\$	1,622	ŧ
Marketing	\$	-	\$	2	\$	18	\$	20	۲,
Administrative Expenses	\$	3	\$	17	\$	5	\$	38	d)
Other	\$	-	\$	2	\$	20	\$	25	
Total	\$	598	\$	451	\$	713	\$	3,393	4

^{*} Revised Budget as filed on 8/18/04

- a) Consultants for energy audits, quality assurance/quality control (QA/QC) and inspections as necessary and implementation of O&M Retro Pilot and O&M RFP by 3rd party providers.
- b) Incentives paid directly to customers for the installation of cost effective energy conservation measures.
- c) Market program to customers, trade allies and professional organizations
- d) Employee expenses including mileage, training, conference attendance and misc.
- f) Includes \$2.056M O&M Services, \$537K O&M RFP, and \$800K Retro commissioning budgets

2005 Goals and Metrics Information

Demand Savings (kW reduction Goal) Annual Energy Savings (KWh Reduction Goal)		1,714.4.0 11,358,308
Lifetime Energy Savings (kWh Reduction Goal)	10	06,350,461
Annual Cost Rate (\$/kWh) Lifetime Cost Rate (\$/kWh)	\$ \$	0.299 0.032
Electric b/c ratio Total Resource b/c ratio		1.91 1.93

O&M Services

All dollar values are in \$000

Budget Projections Labor	2002 A	ctual	2003	<u>Actuals</u>	2004	Budget*	<u>200</u>	5 Budget	
NU Labor	\$	76	\$	103	\$	90	\$	149	- 11
Contractor Staff	\$	97	\$	4	\$	15	\$	137	
Total Labor	\$	173	\$	107	\$	105	\$	286	a)
Materials & Supplies	\$	0	\$	-	\$	25	\$	25	,
Outside Services	\$	110	\$	52	\$	200	\$	350	b)
Incentives	\$	312	\$	28	\$	590	\$	1,335	c)
Marketing	\$	-	\$	2	\$	18	\$	20	ď)
Administrative Expenses	\$	3	\$	15	\$	5	\$	20	e)
Other	\$		\$	2	\$	20	\$	20	ŕ
Total .	\$	598	\$	206	\$	963	\$.	2,056	

^{*} Revised Budget as filed on 8/18/04

- a) Increase in Labor costs due primarily to the increased budget, as well as the complexity and emphasis on O&M projects.
- b) Consultants for energy audits, quality assurance/quality control (QA/QC) and inspections as necessary.
- c) Incentives paid directly to customers for the installation of cost effective energy conservation measures.
- d) Market program to customers, trade allies and professional organizations
- e) Employee expenses including mileage, training, conference attendance and misc.

2005 Goals and Metrics Information

Demand Savings (kW reduction Goal)		1,594.4.0
Annual Energy Savings (KWh Reduction Goal)		10,638,308
Lifetime Energy Savings (kWh Reduction Goal)	!	99,150,461
Annual Cost Rate (\$/kWh)	\$	0.193
Lifetime Cost Rate (\$/kWh)	\$	0.021
Electric b/c ratio		2.92
Total Resource b/c ratio		2.83

O&M Services

		Program Costs					
Year	Budget	Actual	% of Budget	\$/LT-kWh1			
2000	\$3,747,000	\$3,663,000	98%	0.016			
2001	\$2,421,000	\$2,796,000	115%	0.017			
2002	\$1,204,000	\$617,000	51%	0.018			•
2003	\$1,300,000	\$451,000	35%	0.044			
2004 ³	\$963,000	n/a	n/a	n/a			
2005	\$2,056,000	n/a	n/a	n/a			
		Goal - Participation					
Year	Goal 2	Actual	% of Goal	,			
2000	3,305	3,093	94%	•			
2001	2,100	2,236	106%				
2002	519	306	59%				
2003	88	14	16%				
2004 ³	124	n/a	n/a				
2005	236	n/a	n/a				
	Go	al - Lifetime MWh savi	ngs		Goal - Ir	stalled kW	<u>Savings</u>
Year	Goal (MWh)	Actual (MWh)	% of Goal	Year	Goal	Actual	%of Goal
2000	283,896	252,573	89%	2000	n/a	n/a	n/a
2001	185,348	164,295	89%	2001	n/a	n/a	n/a
2002	33,636	33,643	100%	2002	n/a	n/a	n/a
2003	18,182	10,201	56%	2003 4	185	142	76.8%
2004 ³	49,764	n/a	n/a	2004 ³	921	n/a	n/a
2005	99,150	n/a	n/a	2005	1,594	n/a	n/a
		Program Ratios					
	\$/Lifeti	me kWh	\$/Annuali	zed kW			
Year	Plan	Actual	Plan	Actual			
2000	0.013	0.015	n/a	827			

	\$/Lifeti	me kvvn	⊅/Annualized κvv		
Year	Plan	Actual	Plan	Actual	
2000	0.013	0.015	n/a	827	
2001	0.013	0.017	n/a	1,099	
2002	0.036	0.018	n/a	1,125	
2003	0.046	0.044	2,781	3,176	
2004 ³	0.019	n/a	0	n/a	
2005	0.021	n/a	1,290	n/a	

Actual Dollars spent divided by actual life time kWh savings achieved for 2000 through 2002 inclusive.

Goal for 2000-2002 is incentive dollars. Goal for 2003-2005 is number of projects.

Based on revised budgets and goals filed on 8/18/04.

Demand saving goals reflect 1/13/03 goals.

O&M Services

CL&P Program Notes

Budget /FTE:

- 1.7 FTEs 100% dedicated to O&M Services, additional employees as needed.
- Increased labor cost attributed to technical complexity of O&M projects

Goal

- Demand Savings (kW Reduction Goal) = 1,594 kW.
- Lifetime Energy Savings (kWh Reduction Goal) = 99,150,461 kWh.

Cost/kWh (Cost/Unit)

- \$/Annualized kW = \$1,290/kW.
- \$/Lifetime kWh = \$0.021/kWh.

Goal Setting Methodology

- The 2005 planning model is based on 2002 actual results
- The O&M savings were adjusted down to 67%, based on the plan to offer 100% incentives and 67% of the budget in SWCT. The incentive for the rest of the state will remain at 50%. Changes were made to incorporate differences in coincidence factors.

Metric Changes

• The O & M savings were adjusted down by 67%, based on the plan to offer 100% incentives and 67% of the budget in SWCT. The incentive for the rest of the state will remain at 50%.

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Operations and Maintenance RFP (CL&P & UI)

Objective: The objective of the Companies' Operations and Maintenance (O&M)

RFP Program is to improve O&M practices through one or more third-party initiatives leading to sustained energy savings in facility O&M.

Target Market: Large C&I customers are the target market for the implementation phase

of the program.

Program Description: This program was initiated in late 2001 with a request for proposals. The

Companies began the implementation phase for the selected projects in

2004.

The selected vendors are assisting customers in establishing management systems for energy that may improve the information available to management and assist in evaluating and understanding the value of energy efficiency and load management during financial decision making. In 2005 these programs will continue to be focused on SWCT; however they will not be limited to only that region of the State.

UI anticipates that it will continue to participate in the O&M RFP program utilizing only one of the selected vendors. EnVinta has begun working with five customers who are expected to continue through implementation. The limiting factor is the budget and overall amount of dollars available for a cost effective program.

In addition, it is anticipated that the Companies can partner with regional initiatives such as NEEP again this year to offer the BOC course. The BOC provides training in the energy and resource efficient operation of building systems to qualify facility operations and maintenance staff for certification. The BOC program offers Level 1 and Level 2 training courses. These comprehensive courses span a seven month period covering the following topics: Electrical, HVAC Systems, Energy, HVAC Controls, Lighting, Codes, and Indoor Air Quality.

Marketing Strategy: The O&M RFP Program is now in the implementation phase in which the

third party vendors, with the assistance of the Companies, plan to target appropriate market participants in each of the program areas. The implementers are responsible for marketing the program to customers. Their marketing strategy calls for direct customer contact and partnering

with major organizations like the Manufacturer's Alliance.

Incentive Strategy: Under the O&M RFP Program, incentives or other reimbursements can be

tailored based upon the specific nature of each proposal. During proposal evaluation, projects demonstrating significant cost sharing with other parties and those with lower overall costs will be given priority. In some

cases, portions of the selected vendor's proposal will qualify for

incentives from existing programs, such as CL&P's Custom Services and UI's Energy Opportunities.

Goals:

CL&P Goals: The 2005 goal for the O&M RFP Program is to reduce large C&I energy consumption in CL&P territory by 720,000 kWh annually and 7,200,000 kWh lifetime with a target budget of approximately \$537,000 dollars.

UI Goals: The 2005 goal for the O&M RFP Program is to reduce large C&I energy consumption in the UI territory by 200,000 kWh annually and 2,000,000 kWh lifetime with a target budget of approximately \$181,706 dollars.

New Program Issues:

CL&P and UI are partnering together to offer a Retro-Commissioning pilot within the existing C&LM O&M program structures. The pilot will likely identify electric and non-electric energy savings opportunities through retro-commissioning studies of five large customer facilities in the Class A commercial office market segment, preferably in SWCT. This pilot aims to make owners aware of operating inefficiencies in their facilities and to systematically address them to generate energy savings.

O&M RFP

All dollar values are in \$000

Budget Projections	2002 A	ctual	2003	<u>Actuals</u>	2004	Budget*	2005	Budget	
Labor			•				**		
NU Labor	\$	17	\$	5	\$	32	\$	35	
Contractor Staff	\$	_	\$	_	\$		\$		
Total Labor	\$	17	\$	5	\$	32	\$	35	
Materials & Supplies	\$	0	\$	1	\$	-	\$	-	
Outside Services	\$	0	\$	236	\$	500	\$	499	a)
Incentives	\$	-	\$		\$	-	\$	-	
Marketing	\$	•	\$	1	\$	-	\$	-	b)
Administrative Expenses	\$	-	\$	2	\$	5	\$	3	c)
Other	\$	-	\$		\$		\$		
Total	\$	17	\$	245	\$	537	\$	537	

^{*} Revised Budget as filed on 8/18/04

- a) Fees to 3rd party providers for implementation. Also includes \$25k for BOC training associated costs
- b) Marketing will conducted by the Envinta and Predicate Inc. Some additional marketing and support will be provided through the Account Executives.
- c) Employee expenses including mileage, training, conference attendance and misc.

2005 Goals and Metrics Information

Demand Savings (kW reduction Goal) Annual Energy Savings (kWh Reduction Goal) Lifetime Energy Savings (kWh Reduction Goal)	120.0 720,000 7,200,000
Annual Cost Rate (\$/kWh)	\$ 0.746
Lifetime Cost Rate (\$/kWh)	\$ 0.075
Electric b/c ratio	0.85
Total Resource b/c ratio	0.93

O&M RFP

			Pro	gram Costs						
Year	ļ	Budget		Actual	% of Budget					
2000	\$	-	\$	-	0.0%					
2001:	\$	200,000	\$	26,000	13.0%					
2002	\$	-	\$	-	0.0%					
2003	\$	-	\$	-	0					
2004 ²	\$	537,000		n/a	n/a					
2005	\$	537,000		n/a	n/a					
			Goal -	Participation	<u>. 1</u>					
Year		Goal		Actual	% of Goal					
2000		n/a		n/a	n/a					
2001		n/a		n/a	n/a					
2002		n/a		n/a	n/a		•			
2003		n/a		n/a	n/a					
2004 ²		50		n/a	n/a					
2005		50		n/a	n/a					
			Goal - Life	time MWh sa	vings			Goal	- Installed	kW Savings
Year	E	Budget		time MWh sa ctual	<u>avings</u> % of Budget		Year	Goal Goal	- Installed Actual	kW Savings %of Goal
Year 2000	í						Year 2000			
	E	Budget		ctual	% of Budget			Goal	Actual	%of Goal
2000	Ē	Budget 0		octual	% of Budget 0.0%		2000	Goal n/a	Actual n/a	%of Goal n/a
2000 2001 2002 2003	E	Budget 0 0		otual 0 0	% of Budget 0.0% 0.0%	;	2000 2001	Goal n/a n/a	Actual n/a n/a	%of Goal n/a n/a
2000 2001 2002		Budget 0 0 0	Α	octual 0 0 0	% of Budget 0.0% 0.0% 0.0%		2000 2001 2002	Goal n/a n/a n/a	Actual n/a n/a n/a	%of Goal n/a n/a n/a
2000 2001 2002 2003		Budget 0 0 0 0	Α	Actual 0 0 0 0	% of Budget 0.0% 0.0% 0.0% 0.0%		2000 2001 2002 2003 ³	Goal n/a n/a n/a n/a	Actual n/a n/a n/a n/a	%of Goal n/a n/a n/a n/a
2000 2001 2002 2003 2004 ²		Budget 0 0 0 0 0 7,200	А	octual 0 0 0 0 0 n/a	% of Budget 0.0% 0.0% 0.0% 0.0% n/a		2000 2001 2002 2003 ³ 2004 ²	Goal n/a n/a n/a n/a n/a	Actual n/a n/a n/a n/a n/a n/a	%of Goal n/a n/a n/a n/a n/a
2000 2001 2002 2003 2004 ²		3udget 0 0 0 0 0 7,200 7,200	А	nctual 0 0 0 0 0 n/a n/a	% of Budget 0.0% 0.0% 0.0% 0.0% n/a		2000 2001 2002 2003 ³ 2004 ²	Goal n/a n/a n/a n/a n/a	Actual n/a n/a n/a n/a n/a n/a	%of Goal n/a n/a n/a n/a n/a
2000 2001 2002 2003 2004 ² 2005		3udget 0 0 0 0 0 7,200 7,200	<u>Proc</u> ime kWh	nctual 0 0 0 0 0 n/a n/a	% of Budget 0.0% 0.0% 0.0% 0.0% n/a n/a		2000 2001 2002 2003 ³ 2004 ² 2005	Goal n/a n/a n/a n/a n/a	Actual n/a n/a n/a n/a n/a n/a	%of Goal n/a n/a n/a n/a n/a
2000 2001 2002 2003 2004 ² 2005		Budget 0 0 0 0 7,200 7,200 \$/Lifet	<u>Proc</u> ime kWh A	octual 0 0 0 0 n/a n/a ram Ratios	% of Budget 0.0% 0.0% 0.0% n/a n/a \$/Annualized k		2000 2001 2002 2003 ³ 2004 ² 2005	Goal n/a n/a n/a n/a n/a	Actual n/a n/a n/a n/a n/a n/a	%of Goal n/a n/a n/a n/a n/a
2000 2001 2002 2003 2004 ² 2005		O 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	<u>Proc</u> ime kWh A	octual 0 0 0 0 n/a n/a n/a cram Ratios	% of Budget 0.0% 0.0% 0.0% n/a n/a \$/Annualized k		2000 2001 2002 2003 ³ 2004 ² 2005 Actual n/a	Goal n/a n/a n/a n/a n/a	Actual n/a n/a n/a n/a n/a n/a	%of Goal n/a n/a n/a n/a n/a
2000 2001 2002 2003 2004 ² 2005 Year 2000 2001 2002		3udget 0 0 0 0 7,200 7,200 7,200 \$/Lifet Plan n/a	<u>Proc</u> ime kWh A	octual 0 0 0 n/a n/a n/a ctual n/a n/a n/a n/a	% of Budget 0.0% 0.0% 0.0% n/a n/a \$/Annualized k' Plan n/a		2000 2001 2002 2003 ³ 2004 ² 2005 Actual n/a n/a	Goal n/a n/a n/a n/a n/a	Actual n/a n/a n/a n/a n/a n/a	%of Goal n/a n/a n/a n/a n/a
2000 2001 2002 2003 2004 ² 2005 Year 2000 2001 2002 2003		Budget 0 0 0 0 7,200 7,200 \$/Lifet Plan n/a n/a	<u>Proc</u> ime kWh A	octual 0 0 0 0 n/a n/a n/a ctual n/a n/a	% of Budget 0.0% 0.0% 0.0% n/a n/a \$/Annualized k' Plan n/a n/a		2000 2001 2002 2003 ³ 2004 ² 2005 Actual n/a n/a	Goal n/a n/a n/a n/a n/a	Actual n/a n/a n/a n/a n/a n/a	%of Goal n/a n/a n/a n/a n/a
2000 2001 2002 2003 2004 ² 2005 Year 2000 2001 2002		Budget 0 0 0 0 7,200 7,200 \$/Lifet Plan n/a n/a n/a	<u>Proc</u> ime kWh A	octual 0 0 0 n/a n/a n/a ctual n/a n/a n/a n/a	% of Budget 0.0% 0.0% 0.0% n/a n/a \$/Annualized k' Plan n/a n/a		2000 2001 2002 2003 ³ 2004 ² 2005 Actual n/a n/a n/a	Goal n/a n/a n/a n/a n/a	Actual n/a n/a n/a n/a n/a n/a	%of Goal n/a n/a n/a n/a n/a

Goal represents number of projects.

Based on revised budgets and goals filed on 8/18/04.

Demand saving goals reflect 1/13/03 goals.

O&M RFP

CL&P Program Notes

Budget / (FTE)

• 0.3 FTE 100% dedicated to O&M RFP and BOC training, additional employees as needed.

Goal

- Demand Savings (kW Reduction Goal) = 120 kW.
- Lifetime Energy Savings (kWh Reduction Goal) = 7,200,000 kWh.

Cost/kWh (Cost/Unit)

- \$/Annualized kW = \$4,475/kW.
- $\frac{1}{2}$ Lifetime kWh = $\frac{1}{2}$ 0.075/kWh.

Goal Setting Methodology

• Goals are set by the contractor's proposal of energy savings achievable through these 3rd party programs.

Metric Changes

• There are no metrics for this program.

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O&M Retrocommissioning Pilot

All dollar values are in \$000

Budget Projections	2005 B	2005 Budget			
Labor:					
NU Labor	\$	35			
Contractor Staff	\$	58			
Total Labor	\$	93			
Materials & Supplies	\$	5			
Outside Services	\$	395	a)		
Incentives	\$	287	b)		
Marketing	\$	٠ -			
Administrative Expenses	\$	15	c)		
Other	. \$	5			
Total	\$	800			

- a) Fees to 3rd party contractors who will perform retrocommissioning services
- b) Incentives paid to customers for facility control modifications that will help enable long term energy savings
- c) Employee expenses including mileage, training, conference attendance and misc

2005 Goals and Metrics Information

Demand Savings (kW reduction Goal)	N/A
Annual Energy Savings (KWh Reduction Goal)	N/A
Lifetime Energy Savings (kWh Reduction Goal)	N/A
Annual Cost Rate (\$/kWh)	N/A
Lifetime Cost Rate (\$/kWh)	N/A
Electric b/c ratio	N/A
Total Resource b/c ratio	N/A

O&M Retrocommissioning

Not a goals based program.

O&M Retro Commissioning (Pilot)

CL&P Program Notes

Budget /FTE:

• 0.3 FTE 100% dedicated to O&M Retro Commissioning Pilot, additional employees as needed.

Goal

• Not Applicable

Cost/kWh (Cost/Unit)

• Not Applicable

Goal Setting Methodology

• Not Applicable

Metric Changes

• Not Applicable

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O&M RFP * (1)

(Includes Building Operator Certification "BOC" Training)

Baseline Assumptions:

Market - Large C&I customers (2)

Budget Projections	200	3 Act (3)	i	2004 Bud	2	005 Bud	
UI Labor (a)	\$	-	\$	19,246	\$	19,809	
Materials & Supplies	\$	-	\$	1,320	\$	200	O&M RFP
Outside Services (b)	\$	-	\$	127,194	\$	113,264	O&M RFP
Outside Services (c)	\$	-	\$	-	\$	30,000	RetroCx
Outside Services (d)	\$	-	\$	-	\$.	14,400	BOC
Other Labor	\$	-	\$	-	\$	-	
Incentives	\$	-	\$	28,000	\$	•	
Marketing	\$	-	\$	4,500	\$	2,000	O&M RFP
Marketing	\$	-	\$	_	\$	500	BOC
Other	\$	-	\$	-	\$	-	
Administrative Expenses	\$	-	\$	1,446	\$	1,333	O&M RFP
Administrative Expenses	\$	-	\$	-	\$	100	RetroCx
Administrative Expenses	\$	-	\$	-	\$	100	BOC
Total	\$	-	\$	181,706	\$	181,706	
All Other Charges	\$		\$	-	\$	-	
Total	\$		\$	181,706	\$	181,706	

^{*} Joint CL&P and UI Program for 2005

- (1) O&M RFP includes the O&M RFP, BOC⁽⁴⁾, Retro-Commissioning pilots
- (2) Large C&I customers offer the most opportunities for EnVinta and RetroCx
- (3) 2003 Actual included in Energy Opportunities
- (4) Building Operator's Certification Program by NEEP
- (a) Administration for all 3 pilots
- (b) Envinta services
- (c) PECI services
- (d) NEEP services

Goals and Metrics Information:

Savings	2005
Demand Savings (kW)	23
Annual Energy Savings (kWh)	200,000
Lifetime Energy Savings (kWh)	2,00,000
Annual Cost Rate (\$/kWh)	\$ 0.909
Lifetime Cost Rate (\$/kWh)	\$ 0.091

O&M RFP

Goal - Program Costs (000's)

Para Granda de Cara de		Language program of the	- % of Goal
Year	Budget	Actual	Achieved
2000	\$0	\$0	0.0%
2001	\$100	\$0	0.0%
2002	\$235	\$0	0.0%
2003	\$167	\$70	42.2%
2004	\$182	\$0	0.0%
2005	\$182	\$0	0.0%

Goal - Installed kWh Savings (000's)

Goal - Installed kW Savings	Goal -	Installed	kW	Savings
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						caving	<u> </u>
Year	Goal	Actual	% of Goal Achieved	Year	Goal	Actual	% of Goal Achieved
2000	-		0.0%	2000	•	-	0.0%
2001	-	-	0.0%	2001	-	-	0.0%
2002	-	-	0.0%	2002) -	-	0.0%
2003	200	-	0.0%	2003	34	-	0.0%
2004	200	-	0.0%	2004	23	-	0.0%
2005	200	•	0.0%	2005	23	-	0.0%

Goal - Lifetime kWh Savings (000's)

% of Goal Achieved	Actual	Budget	Year
0.0%	-	-	2000
0.0%	wa	•	2001
0.0%	-	-	2002
0.0%	-	3,000	2003
0.0%	-	3,000	2004
0.0%	•	2,000	2005

O&M RFP

Program Ratios

	\$/kWh		\$/LT kWh		\$/kW	
Year	Target	Actual	Target	Actual	Target	Actual
2000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
2001	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
2002	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
2003	\$0.835	\$0.000	\$0.056	\$0.000	\$4,911.765	\$0.000
2004	\$0.910	\$0.000	\$0.055	\$0.000	\$7,913.043	\$0.000
2005	\$0.909	\$0.000	\$0.091	\$0.000	\$7,900.261	\$0.000

Notes

- 1. 2000-2002 data from filed in 03-01-01
- 2. 2003 data reflects budgets approved in 03-01-01
- 3. 2004 data represents the revised budget allocations
- 4. Program jointly operated with CL&P
- 5. O&M RFP contains Administrative costs for RetroCX, BOC, and Envinta

O&M RFP

UI Program Notes

Budget/FTE

- 2005 budget remains unchanged from the revised '04 budget.
- 2005 budget houses administrative costs for RFP, BOC, and RetroCx.
- Budget for EnVinta includes marketing and the implementation phase of 3 projects.
- Any incentives for implemented measures will be accounted for in EO or EB.
- Funding for the RetroCx pilot with CL&P (80/20 split) will be accrued in 2004.
- RetroCx funding is allocated for one major assessment, approximately \$30,000.
- Any incentives for implemented measures will be accounted for in EO.
- Budget includes funding for BOC training with CL&P (50% split).
- BOC training cost s are offset by customer co-pay (60%).
- Budget includes .2 FTEs for staffing.
- Incentives may be offered to motivate customers on a case by case basis.

Goal

- Marketing focus continues to be on SWCT.
- Diverse cross section of facility types with large energy consumption.
- Five diagnostic reviews (audits) with critical six customers.
- Focus on kWh savings and peak kW reduction.
- Reduced lifetime from 15 to 10 years for benefit cost analysis which reduces lifetime kWh savings.
- RetroCx goal is an assessment for one major customer in SWCT, with implementation in '05.
- Building Operator's Certification courses offered jointly with CL&P in '03 and '04.
- NEEP evaluation supports .5 kWh/sq.ft savings as being appropriate claim.
- Any kWh savings from the RetroCx implementation are represented in EO.
- There are no definite savings numbers to use for forecasting at this time.

Cost/Unit

- 2003 was the first year for the program.
- 2004 projected revised cost rate: annual = \$.91/kWh, lifetime = \$0.0910/kWh
- 2005 projected cost rate: annual = \$.91/kWh, lifetime = \$0.0910/kWh.

Metric Changes

• kWh saved is the basic metric for all C&I programs.

Energy Opportunities (UI)

Objective:

The objective of UI's Energy Opportunities (EO) program is to improve the energy efficiency of a customer's existing facility. These opportunities are captured by: 1) exchanging functioning, yet inefficient equipment within the commercial or industrial environment with higher efficiency equipment; 2) improving a facility's building shell or facility's performance; 3) improving energy use or management practices; and 4) inducing efficiency where it was not previously present.

Target Market:

Energy Opportunities targets all commercial, industrial, and institutional customers with peak demand greater than 150 kW that are planning retrofit projects in their facilities with UI approved energy efficiency measures. This program also targets customer segments with unique characteristics and needs (not covered by other program offerings), such as municipalities, federal buildings, small businesses, and economic development prospects.

Program Description:

The program offers a comprehensive and highly flexible menu of energy consulting services to existing commercial and industrial customers in order to assist them in retrofitting their facilities with cost effective C&LM measures and technologies. The services provided by Energy Opportunities are varied and specifically designed to meet the needs of the individual customer. They include energy audits, single measure analyses, walk-through audits, energy and end-use analyses, product reviews, review of proposals submitted by contractors or vendors, cash incentives, and co-funded energy studies for advanced technologies.

Marketing Strategy:

UI's Energy Engineers, Marketing Representatives, and Account Managers market Energy Opportunities directly to customers through face-to-face meetings. UI personnel use tools such as UI's website, comprehensive information packets, case studies, direct mail, seminars, and trade shows. When applicable, UI integrates its marketing programs with Federal, State and Regional initiatives. Active participation and involvement with the vendor community influences building trade organizations, vendors, contractors, and energy services companies to become an extension of UI staff by delivering qualified leads for this program.

Marketing for Energy Opportunities occurs over the twelve month calendar year at specific intervals. The marketing plan is designed to be flexible in order to maximize results. The following represents the anticipated strategies and timing. The overall estimated budget Energy Opportunities is \$93,000.

Strategy/Items	Timing
Brochure revision	TBD
Guidebook revision	TBD
Direct Mail	TBD
Newsletter	Quarterly
Selected Advertising	Intermittently
Trade Shows (1)	TBD
Association/Promotions	Intermittently
Promotional Items	On-going
Mini-Case Studies	On-going

Energy Opportunities does utilize low value giveaway items such as pocket screwdrivers, or pens. The intent of these giveaways is to continually create presence and awareness for the program's name.

Incentive Strategy:

UI employs an incentive strategy that is designed to successfully meet the needs of our customer base. Over the years its flexibility has proven to be vital for implementing cost effective, energy- efficient projects. Qualifying projects or Energy Conservation Measures (ECMs) earn incentives that represent a percentage of the project costs up to a maximum dollar value per kWh saved. The percentage and value per kWh saved are set on an as needed basis to influence implementation and may vary from year to year. The incentive calculations are based on a) annual energy savings (kWh) b) project or ECM cost and c) the simple payback for the project or ECM. Energy Opportunities will also employ a maximum incentive cap per customer Federal Tax ID, or per project per contract account.

The percentage and dollar value per kWh saved to be used in the incentive structure for 2005 is still under review. As in the past, however, customers will earn the lesser amount of a) a buy-down to one year; b) a percentage of the project cost; or c) a value per kWh saved.

This incentive structure will continue to be supplemented by integrating incentives, up to \$500 per kW, for peak demand reduction.

The following example illustrates how the incentive is calculated for a typical lighting project. A customer decides to retrofit an office with T8 fluorescent technology and occupancy sensors. The retrofit project consists of 100 fixtures being retrofitted from 4L-F40 T12 lamps with two standard ballasts, to 4L-F32T8 lamps with one electronic ballast. In addition, occupancy sensors are installed to provide more control to the lighting. Project specifics include:

Annual Consumption

\$11,731

117,312 kWh

Annual Savings	\$ 3,577	35,776 kWh
Project Cost	\$11,000	
Payback (before incentive)	3.08	
UI Incentive (@ 30%)	\$ 3,300	
Net Payback (after incentive)	2.15	

Goals:

The goal for Energy Opportunities in 2005 is to reduce the commercial and industrial energy consumption by 21,784,692 kWh and 368,721,496 kWh lifetime with a budget target of \$2,800,000 dollars.

New Program Issues:

Energy Opportunities will continue to focus on reducing demand where possible throughout UI's territory and especially SWCT. Special considerations for peak demand reduction may be developed for the six critical towns.

New for 2005 will be the integration of Retro-Commissioning (RetroCx) incentives for eligible measures or projects. RetroCx is being piloted in 2004 and it is anticipated that the pilot will be expanded in late 2005. Therefore any applicable incentives for qualifying measures will be paid from the Energy Opportunities budget.

The Program will also make an effort to promote and quantify nonelectric benefits for the customer such as maintenance savings or fossil fuel savings from Energy Management systems. This may be facilitated by offering a bonus incentive for non-electric measures. Currently, the feasibility of a bonus incentive is being reviewed. This page intentionally left blank.

Energy Opportunities

Baseline Assumptions:

Market - Retrofit program for C&I customers > 150 kW (1)

Budget Projections		2003 Act (2)		2004 Bud		2005 Bud
UI Labor	\$	350,331	\$	340,369	\$	355,608
Materials & Supplies	\$	7,564	\$	2,864	\$	2,103
Outside Services (a)	\$	110,567	\$	22,000	\$	31,000
Other Labor (b)	\$	-	\$	-	\$	40,000
Incentives (c)	\$	939,654	\$	1,795,893	\$	2,257,789
Marketing (d)	\$	7,433	\$	28,000	\$	93,000
Other	\$	6	\$	-	\$	-
Administrative Expenses (e)	\$	8,543	<u>\$</u>	18,000	\$	20,500
Total	\$	1,424,098	\$	2,207,126	\$	2,800,000
All Other Charges	<u>\$</u>	7	<u>\$</u>		<u>\$</u>	
Total	\$	1,424,105	\$	2,207,126	\$	2,800,000

- (1) Customer eligibility is restricted to 150 kW or greater
- (2) 2003 Actual includes RFP and O&M RFP
- (a) Consultant services
- (b) Engineering/audit services
- (c) Customer incentives
- (d) Brochure revision, selected advertising, public relations
- (e) Employee training, mileage, etc.

Goals and Metrics Information:

Savings	<u>2005</u>
Demand Savings (kW)	4,966
Annual Energy Savings (kWh)	21,784,692
Lifetime Energy Savings (kWh)	368,721,496
Annual Cost Rate (\$/kWh)	\$ 0.129
Lifetime Cost Rate (\$/kWh)	\$ 0.008

Energy Opportunities

Goal - Program Costs (000's)

Year	Budget	Actual	% of Goal Achieved
2000	\$2,559	\$3,006	117.5%
2001	\$5,165	\$3,423	66.3%
2002	\$2,350	\$1,271	54.1%
2003	\$2,315	\$1,424	61.5%
2004	\$2,207	\$0	0.0%
2005	\$2,800	\$0	0.0%

Goal - Installed kWh Savings (000's)

Goal - Installed kW Savings

			% of Goal				% of Goal
Year	Goal	Actual	Achieved	Year	Goal	Actual	Achieved
2000	9,854	19,863	201.6%	2000	-	-	0.0%
2001	29,321	25,592	87.3%	2001	-	. =.	0.0%
2002	9,897	13,156	132.9%	2002	-	-	0.0%
2003	18,727	11,929	63.7%	2003	3,960	2,191	55.3%
2004	17,699	-	0.0%	2004	4,443		0.0%
2005	21,785		0.0%	2005	4,966		0.0%

Goal - Lifetime kWh Savings (000's)

Year	Budget	Actual	% of Goal Achieved
2000	147,813	280,874	190.0%
2001	433,695	383,196	88.4%
2002	146,823	190,038	129.4%
2003	280,905	178,935	63.7%
2004	265,485	-	0.0%
2005	368,721	-	0.0%

	<u>Progra</u>	am Ratios				
	\$/kWh		\$/LT kWh		\$/kW	****
Year	Target	Actual	Target	Actual	Target	Actual
2000	\$0.260	\$0.151	\$0.017	\$0.011	\$0.000	\$0.000
2001	\$0.176	\$0.134	\$0.012	\$0.009	\$0.000	\$0.000
2002	\$0.237	\$0.103	\$0.016	\$0.007	\$0.000	\$0.000
2003	\$0.124	\$0.119	\$0.008	\$0.008	\$584.596	\$649.932
2004	\$0.125	\$0.000	\$0.008	\$0.000	\$496.736	\$0.000
2005	\$0.129	\$0.000	\$0.008	\$0.000	\$563.889	\$0.000

Notes

- 1. 2000-2002 data from filed in 03-01-01
- 2. 2003 data reflects budgets approved in 03-01-01
- 3. 2004 data represents the revised budget allocations
- 4. 2002-2003 Energy Opportunities included RFP and O&M RFP numbers
- 5. 2005 EO budget & goal includes potential measures from Retro-Commissioning & other O&M RFP sub-programs

Energy Opportunities

UI Program Notes

Budget/FTE

- '02 decline few RFP projects only 3% of \$700K budget spent; funds diverted to demand initiatives.
- '03 decline RFP funds eliminated approximately \$180,000 and minimal O&M RFP expenditures.
- Implementation was severely impacted in '04 due the spending cap for the first four months of 2004.
- 2005 final budget is 27% greater than the '04 revised budget, representing impacts from carry-over and securitization.
- 2005 final budget is 21% greater than the '03 budget.
- Budget includes 3.2 FTEs for staffing.

Goal

- Target = 150 installed projects in 2005.
- Program incentive eligibility requirement was raised.
- EO customer eligibility is now >150 kW; in the past it used to be >100 kW.
- A realization rate of 98.5% has been calculated, staying consistent with Municipal and SMB.
- Market needed to be stimulated in '04 to produce projects.
- It is anticipated that the market will continue to need stimulation, therefore:
 - o The program design will have to maximize the incentive structure to its fullest availability.
 - The program will experience increased marketing efforts with greater associated costs.
- The kWh goal includes savings from Retro-Commissioning & other O&M RFP sub programs.
- Ratios between the budget and actuals in 2002 show a significant increase in kWh targets.
 - o '05 final budget is 19% greater than the '02 budget
 - o '05 final kWh target is more than 120% higher than '02 target
 - o '05 final kWh target is approximately 83% greater than the '03 kWh actuals
 - o '05 final kWh target is 16% greater than the '03 kWh target
 - o '05 final kWh target is approximately 23% greater than the '04 kWh target
 - o '05 final kW target is approx. 12% greater than the '04 kW target
- Adopting CL&P measure life values for end uses; for example lighting increases to 19 years.

Cost/Unit

- 2002 actual cost rates: annual = \$.1034/kWh, lifetime = \$.0072/kWh.
- 2004 revised projected cost rates: annual = \$0.1247/kWh, lifetime = \$.0083/kWh.
- 2005 revised projected cost rates: annual = \$0.1285/kWh, lifetime = \$.0076/kWh.
- 2005 projected \$%W = \$563.89 is 14% less than '03 actuals of \$649.93.
- Higher costs due to less kWh per incentive dollar; YTD = 10.9 kWh/\$.
- Higher cost rates do to more dollars being used to stimulate the market.

Metric Changes

• kWh saved is the basic metric for all C&I programs.

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Small Business Energy Advantage (CL&P & UI)

Objective:

The objective of the joint CL&P and UI Small Business Energy

Advantage Program (SBEA) is to provide cost-effective, turnkey C&LM

services for small business customers.

Target Market:

All C&I customers, excluding municipal and government accounts with an average 12-month peak demand up to 200 kW (with the exception of municipal and government accounts) are eligible for this program. UI will have a maximum of 150 kW. SWCT will be a major emphasis in the 2005 program year.

Program Description:

The Companies provide (through a network of approved contractors) direct or turnkey services to maximize energy efficiency operations for the customers. These direct services include energy assessments and installation of measures.

As financial constraints are one of the primary barriers for this market, usually there are no up-front customer costs. The Companies pay incentives for relevant energy efficiency measures within cost-effectiveness constraints. To cover the customer's share of the costs, SBEA has offered an interest-free financing option to credit-qualifying customers in a "on the bill financing" approach to financing. The loan repayment term, which is determined by the simple payback of the project, is set at a level which attempts to provide the customer with a positive annual cash flow based upon the estimated energy savings resulting from the installed measures.

Further, this program includes an educational component to inform the customers of the benefits that can be achieved through energy efficiency efforts.

In 2004, CL&P's SBEA received a silver Connecticut Innovations Prize from the Connecticut Quality Improvement Award Partnership, Inc.

Marketing Strategy:

This program will primarily be marketed through the contractor network and targeted direct mail. Where appropriate, the Companies will explore joint marketing opportunities. Initially, this will be in the form of joint brochures.

CL&P Specific Marketing Strategy: In 2005, marketing for the SBEA will be increased. CL&P will explore a variety of additional marketing strategies such as: targeting specific industries and neighborhoods, and working with trade groups, chambers of commerce, the Connecticut Department of Economic and Community Development and town

officials. Based upon the results of exploring these additional avenues, promising markets will be pursued and programs will be implemented.

Marketing for CL&P's SBEA occurs over the twelve-month calendar year at specific intervals. The marketing plan is designed to be flexible in order to maximize results. The following represents the anticipated strategies, and timing with an overall estimated budget of \$40,000.

Strategy/Items	Timing
Direct Mail*	2 nd Qtr
Selected Advertising**	As needed
Trade Shows	Intermittent
Direct Mail*	3 rd Qtr
Case Studies	As needed
Brochure revision	As needed
Chamber of Commerce Ad	Bi-annually
Newsletter ·	Quarterly
Promotional items	On a continual basis

*Direct Mail – CL&P will prepare a focused direct mail to identify and provide warm customer leads to pre-qualified SBEA contractors.

**Selected advertising includes newsletters and other advertising with business association.

CL&P's website, <u>www.cl-p.com/Energy</u> at Work/sbea, will continue to be utilized to showcase successful projects along with other relevant program information.

UI Specific Marketing Strategy: UI will explore a variety of additional marketing activities such as: targeting specific industries or neighborhoods, and working with trade groups, Chambers of Commerce, the Connecticut Department of Economic and Community Development and Town Officials. Based upon the exploration of these additional avenues, those which offer promise will be implemented. The program will continue to be marketed through a coordinated effort with UI's Community Based Energy Initiative (CBEI) Program.

UI's website, <u>www.uinet.com/your_business/sbea.asp</u>, will continue to be utilized to showcase successful projects along with other relevant program information.

Marketing for UI's SBEA occurs over the twelve-month calendar year at specific intervals. The marketing plan is designed to be flexible in order to maximize results. The following represents the anticipated strategies, and timing with an overall estimated budget of \$32,000.

Strategy/Items

Timing

Brochure revision	TBD
Chamber of Commerce Ad	Quarterly
Direct Mail	TBD
Newsletter	Quarterly
Selected Advertising	Intermittently
Trade Shows (1)	TBD
Direct Mail	TBD
Association /promotions	. TBD
Promotional Items	On-going
Mini-Case Studies	On-going

UI's Small Business Program does utilize low value giveaway items such as pocket screwdrivers, rulers or pens, etc. The intent of these giveaways is to continually create presence and awareness for the program's name.

Incentive Strategy:

Incentives for lighting and other energy efficiency measures are prescriptive and capped within cost-effectiveness constraints. In some instances, incentives for non-lighting measures are custom-designed within cost-effectiveness constraints. The Companies will continue to evaluate market trends and responsiveness and make adjustments to participation requirements and incentive levels accordingly.

Financing will be offered with this program as described in the C&LM Financing section.

CL&P Specific Incentive Strategy: The following example illustrates the incentive breakdown for an SBEA project. The example project is from an actual installed 2004 commercial customer with an average monthly demand of 22 kW. The installed measures included new compact fluorescent lamps, T8 fixture retrofits, new T8 fixtures, and refrigerator door heaters.

Total Project Cost Lighting Incentive Refrigeration Incentive	\$6,377 \$ 1,252 \$ 600
Net Cost to Customer	\$4,525
Estimated Annual Energy Savings Estimated Monthly Energy Savings	\$1,904 \$ 158
Monthly Payment (0% @ 29mths)	\$ 156

Once the loan is repaid the customer reaps the benefits of future energy savings through lower electric bills. The Companies provide oversight at each step of the process to ensure the customer is well-informed and satisfied with the final installation.

UI Specific Incentive Strategy: The following example illustrates how the incentive is calculated for a lighting and refrigeration project:

A customer decides to retrofit his or her facility with T8 fluorescent, Light Emitting Diode (LED) Exit signs and has refrigeration controls installed. The project consists of 26 fixtures being retrofitted from 4L-F40 T12 lamps with two standard ballasts, to 2L-F32 T8 lamps with one electronic ballast. In addition, one Exit sign with two 15-watt incandescent lamps was replaced with a standard LED Exit sign. Fan, Door Heater, Freezer Heater and Vendor Cooler controls were installed. Project specifics include:

Annual Consumption	\$ 26,000	178,000 kWh
Annual Savings	\$ 3,360	46,000 kWh
Project Cost	\$ 10,000	
Incentive	\$ 4,540	•
Payback	1.6 years	
Customer Monthly Savings	\$ 280.00	
Customer Monthly Charge	\$ 274.37	

Goals:

CL&P Goals: The goals for 2005 within the CL&P territory are 1) service 1,500 customers with audits, and 2) reduce or avoid the Small Business energy consumption by 12,231,523 kWh annually and 199,629,336 kWh lifetime with a target budget of \$3,403,000.

UI Goals: The goals for 2005 within UI's service territory are 1) service 1,106 customers with audits, 307 installed projects and 2) reduce or avoid the Small Business energy consumption by 6,895,000 kWh and 108,927,989 kWh lifetime with a target budget of \$1,200,000.

New Program Issues:

The Companies have expanded the eligibility criteria in an effort to service the small to mid-size customer base more completely. In addition, the small business customer is an attractive target for programs external to the C&LM fund. These external competitive events, such as the ISO GAP RFP, may have an impact on the program. The Companies will be monitoring these events for any potential negative impacts.

The Companies anticipate expanding the list of eligible energy efficient measures to include more refrigeration measures such as evaporator motor replacements and hydraulic door closures, more HVAC measures such as automated computer controls for Rooftop Units, more process oriented measures such as air compressor controls, and the Super T8 fluorescent technology. In addition, the inclusion of an air conditioner tune-up rebate is being examined. SWCT will continue to be a focal point for the program.

The Companies are exploring ways to promote and quantify non electric benefits to its customers. This may be facilitated by offering a bonus incentive for non-electric measures. Currently, the feasibility of a bonus incentive is being reviewed.

CL&P Specific Issues: The maximum size customer allowed in the program was returned in 2004 to 200 kW. This change allows CL&P to increase market penetration for this customer segment.

UI Specific Issues: UI will increase eligibility to 150 kW in an effort to service the small to mid-size market more completely. By increasing the eligible customer size, the potential size of an energy saving project is increased, which necessitates modifying the financing parameters of the program. Therefore, UI will be increasing the maximum incentive to \$22,500 and the maximum amount to be financed to \$37,500 per project.

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Small Business Energy Advantage

All dollar values are in \$000

05 Budget	
429	
152	
581	
5	
240	a)
2,511	b)
40	c)
16	d)
10	
3,403	-
	5 240 2,511 40 16 10

^{*} Revised Budget as filed on 8/18/04

- a) Software support, technical analysis and 3rd Party pre/post inspection service
- b) Incentives paid for the installation of cost effective energy conservation measures plus interest paid by CL&P for 0% customer loans. Interest payments are estimated to be approximately \$450K in 2005.
- c) Market program to customers, trade allies and professional organizations. Includes a direct mail questionnaire directed towards SWCT only to develop a list of pre-qualified SBEA customer leads.
- d) Employee expenses including mileage, training, conference attendance and misc.

2005 Goals and Metrics Information

Demand Savings (kW reduction Goal) Annual Energy Savings (kWh Reduction Goal)	•	2,339.7 12,231,523
Lifetime Energy Savings (kWh Reduction Goal)	19	9,629,336
Annual Cost Rate (\$/kWh)	\$	0.278
Lifetime Cost Rate (\$/kWh)	\$	0.017
Electric b/c ratio		3.48
Total Resource b/c ratio		1.61

Small Business Energy Advantage

Program	Costs
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Year	Budget	Actual	% of Budget	\$/LT-kWh1
2000	\$1,525,000	\$852,000	56%	0.011
2001	\$2,720,000	\$2,437,000	90%	0.013
2002	\$3,449,000	\$2,812,000	82%	0.015
2003	\$3,800,000	\$2,167,000	57%	0.010
2004 ³	\$3,000,000	n/a	n/a	n/a
2005	\$3,403,000	n/a	n/a	n/a
		Goal - Participation		
Year	Goal 2	Actual	% of Goal	
2000	924	587	64%	
2001	1,860	2,023	109%	
2002	2,114	1,961	93%	
2003	769	505	66%	
2004 ³	561	n/a	n/a	
2005	522	n/a	n/a	

Goal - Lifetime MWh Savings

Goal - Installed kW Savings

Year	Goal (MWh)	Actual (MWh)	% of Goal	Year	Goal	Actual	%of Goal
2000	107,466	75,624	70%	2000	n/a	n/a	n/a
2001	197,383	189,039	96%	2001	n/a	n/a	n/a
2002	181,333	192,412	106%	2002	n/a	n/a	n/a
2003	261,691	221,042	84%	2003 4	3,224	2,430	75.4%
2004 ³	217,790	n/a	n/a	2004 ³	2,552	n/a	n/a
2005	199,629	n/a	n/a	2005	2,340	n/a	n/a

Program Ratios

	\$/Lifeti	me kWh	\$/Annualized kW		
Year	Plan	Actual	Plan	Actual	
2000	0.014	0.011	n/a	1004	
2001	0.014	0.013	n/a	1066	
2002	0.019	0.015	n/a	1196	
2003	0.017	0.010	1,270	892	
2004 ³	0.014	n/a	1,175	n/a	
2005	0.017	n/a	1,454	n/a	

Actual Dollars spent divided by actual life time kWh savings achieved for 2000 to 2003. inclusive. Budget dollars spent divided by life time kWh savings goals for 2004

Goal for 2000-2002 is incentive dollars. Goal for 2003-2005 is number of projects.

Based on revised budgets and goals filed on 8/18/04.

Demand saving goals reflect 1/13/03 goals.

Small Business Energy Advantage

CL&P Program Notes

Budget / (FTE)

- 4 FTEs.
- 38% budget reduction from 1/13/03 files budget.
- Increased marketing focus in SWCT.

Goal

- 522 customers installed projects.
- 1,500 customers audits completed.
- Demand Savings (kW Reduction Goal) = 2,340 kW.
- Lifetime Energy Savings (kWh Reduction Goal) = 199,629,336 kWh.

Cost/kWh (Cost/Unit)

- $\frac{1}{454}$ \$\text{ Annualized kW = \$1,454/kW.}
- $\frac{\text{$}/\text{Lifetime kWh} = \$0.017/\text{kWh}.}{\text{$}}$

Goal Setting Methodology

- The 2005 planning model is based on 2002 actual results.
- Changes were made to incorporate differences in evaluation results (realization rates), coincidence factors, and updated loan interest payments.

Metric Changes:

• Not applicable.

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Small Business Energy Advantage *

Baseline Assumptions:

Market - Retrofit program for small C&I customers < 150 kW (1)

Budget Projections		2003 Act	2	004 Bud		2005 Bud
UI Labor	\$	164,196	\$	193,169	\$	198,158
Materials & Supplies	\$	716,406	\$	2,500	\$	5,000
Outside Services (a)	\$	-	\$	75,775	\$	88,000
Other Labor (b)	\$	-	\$	-	\$	20,000
Incentives (c)	\$	573,067	\$	624,407	\$	841,842
Marketing (d)	\$	5,120	\$	21,000	\$	32,000
Other	\$	(615,432)	\$	-	\$	-
Administrative Expenses (e)	\$	3,054	\$	5,753	<u>\$</u>	15,000
Total	\$	846,411	\$	922,604	\$	1,200,000
All Other Charges	<u>\$</u>		\$	-	\$	-
Total	\$	846,411	\$	922,604	\$	1,200,000

- * Joint CL&P and UI Program for 2005
- (1) Customer eligibility increased to 150 kW to capture more mid-size market share
- (a) Project financing
- (b) Consultant services
- (c) Customer incentives
- (d) Brochures, selected advertising, etc.
- (e) Employee training, mileage, etc.

Goals and Metrics Information:

Savings	<u>2005</u>
Demand Savings (kW)	1,132
Annual Energy Savings (kWh)	6,895,000
Lifetime Energy Savings (kWh)	108,927,989
Annual Cost Rate (\$/kWh)	\$ 0.174
Lifetime Cost Rate (\$/kWh)	\$ 0.011

Small Business Energy Advantage

Goal - Program Costs (000's)

Year	Budget	Actual	% of Goal Achieved
2000	\$1,514	\$1,203	79.5%
2001	\$1,327	\$1,595	120.2%
2002	\$1,065	\$997	93.6%
2003	\$1,301	\$846	65.0%
2004	\$922	\$0	0.0%
2005	\$1,200	\$0	0.0%

Goal - Number Of Audits

\$/Project

Year	Audit Goal	Actual Audits	Project Target	Project Actual	Project/ Audits	Year	Target	Actual	% of Goal Achieved
2000	642	982	225	317	32.3%	2000	\$6,729	\$3,795	56.4%
2001	1,224	1,294	294	258	19.9%	2001	\$4,514	\$6,182	137.0%
2002	1,035	1,406	253	276	19.6%	2002	\$4,209	\$3,612	85.8%
2003	1,102	540	298	148	27.4%	2003	\$4,366	\$5,716	130.9%
2004	851	-	237	-	0.0%	2004	\$3,936	\$0	0.0%
2005	1,106	-	307	-	0.0%	2005	\$3,909	\$0	0.0%

Goal - Installed kWh Savings (000's)

Goal - Installed kW Savings

1,650

1,031

% of Goal

0.0% 0.0%

115.5%

72.4% 0.0% 0.0%

Actual Achieved

Year	Budget	Actual	% of Goal Achieved	Year	Goal
2000	6,417	5,274	82.2%	2000	-
2001	5,761	6,506	112.9%	2001	-
2002	4,765	6,279	131.8%	2002	1,429
2003	6,250	3,578	57.2%	2003	1,424
2004	4,930		0.0%	2004	802
2005	6,895	-	0.0%	2005	1,132

Goal - Lifetime kWh Savings (000's)

Year	Budget	Actual	% of Goal Achieved
2000	96,300	79,100	82.1%
2001	86,400	97,600	113.0%
2002	71,500	94,200	131.7%
2003	93,750	53,670	57.2%
2004	73,950	-	0.0%
2005	108,928	-	0.0%

Small Business Energy Advantage

Program Ratios

rangetariet (\$/kWh		\$/LT kWh	-	\$/kW	
Year	Target	Actual	Target	Actual	Target	Actual
2000	\$0.236	\$0.228	\$0.016	\$0.015	\$0.000	\$0.000
2001	\$0.230	\$0.245	\$0.015	\$0.016	\$0.000	\$0.000
2002	\$0.224	\$0.159	\$0.015	\$0.011	\$745.276	\$604.242
2003	\$0.208	\$0.236	\$0.014	\$0.000	\$913.624	\$820.563
2004	\$0.187	\$0.000	\$0.012	\$0.000	\$1,149.626	\$0.000
2005	\$0.174	\$0.000	\$0.011	\$0.000	\$1,060.468	\$0.000

Notes

- 1. 2000-2002 data from filed in 03-01-01
- 2. 2003 data reflects budgets approved in 03-01-01
- 3. 2004 data represents the revised budget allocations

Small Business Energy Advantage

UI Program Notes

Budget/FTE

- 2005 final budget is 130% greater than the '04 revised budget, an impact from carryover & securitization.
- 2005 final budgets decreased 8% when compared to 2003.
- Project financing costs reduce available incentive funds by one third.
- Budget includes 2 FTEs for staffing.

Goal

- SMB customer eligibility is now <150 kW; in the past it was < 100 kW.
- Utilized the 98.5% realization rate as determined by RLW Analytics impact evaluation study in 2004.
- The realization is consistent with Municipal, EO, and CL&P.
- Spending cap and financing decision inhibited the programs ability to attract customers.
- Market needed to be stimulated in '04 to produce projects.
- The market will continue to need stimulation; '05 will have increased marketing efforts; higher costs.
- Ratios between the final and actuals show a significant increase in the targets when compared to 2002.
 - o '05 final kWh target is 40% greater than the '04 kWh target
 - o '05 final kWh target is 10% greater than the '03 kWh target
 - o '05 final kWh target is 45% greater than the '02 kWh target
 - o '05 final kWh target is 10% greater than '02 kWh actuals
 - o '05 final audit goal is 7% greater than '02 goal
 - o '05 final goal for completed projects is 11% greater than '02 actuals
- Increasing the scope of SMB measures to achieve more kWh savings.

Cost/Unit

- 2002 projected cost rates: annual = \$.2235/kWh, lifetime = \$.0149/kWh.
- 2002 actual cost rates: annual = \$.1588/kWh, lifetime = \$.0106/kWh.
- 2004 projected cost rates: annual = \$.1740/kWh, lifetime = \$.0110/kWh.
- 2005 projected cost rates: annual = \$.1870/kWh, lifetime = \$.0125/kWh.
- 2005 cost rates are 22% and 26% less than the 2002 projected cost rates for kWh LT kWh.
- kWh from AC tune-ups are more expensive.
- Project financing costs have been budgeted and increase the \$\$/kWh.
- 2003 and 2004 program years have been abnormal years experiencing budget constraints and shutdowns.
- The three year average kWh goal is 26% greater than 2002.
- Adopted CL&P measure life values for end uses; for example lighting increases to 19 years.
- \$/kW is higher since adding refrigeration controls, these controls effect off-peak kW and kWh.

CHAPTER FOUR: OTHER

EDUCATION/OTHER

SmartLiving Center® (CL&P & UI)

Objective:

The objective of the UI SmartLiving® Center in Orange is to serve as the "hub" for residential and to a lesser extent C&I conservation programs. Services include up-to-date C&LM program and promotion information, information on new technologies, technical assistance, training, recommendations, guidance, information and education in energy efficient building techniques and products in order to transform the home building, lighting and appliance market over time. In addition, the Center offers an online ordering kiosk for the SmartLiving® Catalog. Services are offered to homeowners, home buyers, home builders, architects, home field specialists, designers, local organizations, and children. Specifically with respect to children, the UI SmartLiving® Center's objective has become an integral part of the strategy with respect to the *eeSmarts*TM Program by providing tours to school classes and existing as a resource for teachers who utilize the curriculum.

CL&P's objective is to build on the successful museum collaborations of 2004 and expand the "SmartLiving" ® Center concept to provide energy efficiency to a broader audience by partnering with key educational museums, science centers and other high traffic public venues throughout the State. CL&P plans on collaborating with these groups to integrate C&LM messages and information for workshops, children's activities and exhibits with emphasis on broad C&LM program offerings.

Target Market:

The main target market for the UI SmartLiving® Center is residential customers and their families as well as teachers and students. The target market also includes market actors such as homeowners, home buyers, architects, builders, designers, retailers, trade allies, building officials, realtors, appraisers, mortgage lenders, and children. For 2005, the Center will increasingly be promoted as a resource for customers who are in the market for central air conditioning, and will provide targeted services associated with installation practices and system options.

For the CL&P museum "partnership", the target market is residential customers and their families, educators/students, homeowners, home buyers, architects, builders, designers, trade allies and businesses.

Program Description:

The UI SmartLiving® Center is an interactive, professionally staffed facility which serves as a high-profile resource for promoting energy-efficient products and ideas to educate customers about conservation. The

UI SmartLiving® Center is an educational facility featuring training sessions and seminars, special events and tours, all geared toward teaching customers that they can use energy wisely while keeping an eye on the environment and not sacrifice their comfort or style. Project seminars are planned which feature such topics as energy efficient technologies and target "do-it-yourself" homeowners, builders, designers, other industry specialists, teachers and children.

The UI SmartLiving® Center features hands-on, interactive displays and demonstrations of energy-efficient appliances, lighting technologies and new construction practices. The UI SmartLiving Center's® knowledgeable staff provides technical assistance and advice related to energy efficiency and conservation.

The UI SmartLiving® Center exists as a resource to cross-promote a variety of C&LM programs. It also complements the local retail marketplace and includes those retailers in promotions and displays at the centers.

CL&P's "museum partnership" will incorporate C&LM program materials and messages into the activities, interactive displays and permanent exhibits at existing facilities.

Marketing Strategy:

CL&P: CL&P plans to market to consumers and businesses through area museums, science centers and other public venues to educate them on the value and importance of energy efficiency. The C&LM Fund will promote energy efficiency through displays, workshops and permanent exhibits that museum personnel will provide to visitors, school groups, teachers and parents. There are also special events that may be developed to spotlight certain programs, energy efficiency trends and community collaborations. Marketing is also planned via CL&P's website and bill inserts as well as the museums newsletters and websites.

UI: Ongoing/Periodic Activities

- o Quarterly "Source" Articles
- o Home Show participation
- o Promotional mailings for special events

First Ouarter 2005

- Direct mail announcing SLC/eesmarts bus reimbursement program and educational tours
- o Home Show participation
- Book Readings at SLC

Second Quarter 2005

- o Earth Day celebration
- o Book Readings at SLC

Third Quarter 2005

o Joint participation in C&LM community events and fairs

Fourth Quarter 2005

o Family Science Day

Goals:

CL&P: A long-term presence at 2 museums with an estimated budget of

\$250,000.

UI: 10,000 visitors, which would include tour/seminar participants, with an estimated budget of \$428,085.

New Program Issues: CL&P's museum partnership is a new development piloted in 2004 and

expanded to full program level for 2005. The goal is to continue to market the SmartLiving concept and spread the message of energy efficiency to the large population of visitors to museums, science centers and other public venues across the state. We would like to place a special

emphasis on SWCT locations.

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Smart Living Center - Museum Partnerships

All dollar values are in \$000

Budget Projections	2002	Actuals	2003	Actuals	2004 Bu	idget*	2005 B	udget	_
Labor:									
NU Labor	\$	80	\$	20	\$	5	\$	63	
Contractor Staff	\$	121	\$	58	\$	-	\$	-	_
Total Labor	\$	201	\$	78	\$	5	\$	63	
Outside Services	\$	96	\$	131	\$	48	\$	80	a)
Materials & Supplies	\$	-	\$	46	\$	-	\$	50	b)
Fees & Incentives	\$	6	\$	-	\$	-	\$	32	c)
Marketing	\$	105	\$	-	\$		\$	-	
Joint CL&P / UI Market	\$	-	\$	-	\$	-	\$	-	
CL&P Market	\$	-	\$	-	\$	-	\$	25	d)
Misc Marketing	\$	-	\$. 14	\$	-	\$	-	_
Sub-total Marketing	\$	105	\$	14	\$	•	\$	25	
Administrative Expense	\$	-	\$	23	\$	-	\$	-	
Other	\$	102			\$		\$	-	_
Total	\$	510	\$	292	\$	53	\$	250	-

^{*} Revised Budget as filed on 8/18/04

- a) Creative support for museum projects
- b) Includes printing/design costs for educational materials
- c) Includes sponsorships for museum/public facilities exhibits and workshops.
- d) Includes Direct mail/collateral and grassroots/PR.

2005 Goals and Metrics Information

Demand Savings (kW reduction Goal)	N/A	
Annual Energy Savings (KWh Reduction Goal)	N/A	
Lifetime Energy Savings (kWh Reduction Goal)	N/A	
Annual Cost Rate (\$/kWh)	N/A	
Lifetime Cost Rate (\$/kWh)	N/A	
Electric b/c ratio	N/A	
Total Resource b/c ratio	N/A	

SmartLiving Center - Museum Partnerships

Not a goals based program.

SmartLiving Center® - Museum Partnerships

CL&P Program Notes

Budget/FTE

- 2005 budget reflects a decrease due to budget cuts.
- Staffing includes .6 FTE for program administration and oversight.

Goal

• Since the museum collaborations program was introduced in 2004, we do not have any historical data at this time to project a goal.

Cost/Unit

• Not applicable.

Goal Setting Methodology

• Since this program was introduced in 2004, we do not have any historical data at this time to project a goal.

Metric Changes

• Participate in at least one museum collaboration in 2005 in SWCT.

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SmartLiving Center

Baseline Assumptions:

Market - UI residential customers, appliance retailers, builders, developers, realtors

Budget Projections	2003 Act	2004 Bud	2005 Bud
Ul Labor (a)	\$ 58,030	\$ 163,706	\$ 153,990
Materials & Supplies	\$ 8,611	\$ 14,280	\$ 8,000
Outside Services	\$ 10,045	\$ 36,000	\$ -
Other Labor (b)	\$ 89,655	\$ 27,246	\$ 66,000
Incentives	\$ -	\$ -	\$ 8,000
Marketing (c)	\$ 63,544	\$ 95,000	\$ 55,000
Other (d)	\$ 103,687	\$ 128,000	\$ 134,000
Administrative Expenses	\$ 10,342	\$ 13,853	\$ 3,095
Total	\$ 343,914	\$ 478,085	\$ 428,085
All Other Charges	\$ 495	\$ -	\$ -
Total	\$ 344,409	\$ 478,085	\$ 428,085

- (a) 1.8 FTE UI staffing and oversight
- (b) 1.1 FTE staffing
- (c) Print, grassroots, direct mail
- (d) Utilities and operating expenses

Goals and Metrics Information:

of Visitors 2005 2005 10,000

SmartLiving Center

Goal - Program Costs (000's)

Year	Budget	Actual	% of Goal Achieved
2000	\$300	\$307	102.3%
2001	\$524	\$836	159.5%
2002	\$423	\$392	92.7%
2003	\$531	\$345	65.0%
2004	\$478	\$0	0.0%
2005	\$428	\$0	0.0%

Goal - Number of Customers Served

Year	Goal	Actual	% of Goal Achieved
2000	-	-	0.0%
2001	-	•	0.0%
2002	5,000	7,977	159.5%
2003	11,340	6,221	54.9%
2004	8,500	-	0.0%
2005	10,000	-	0.0%

SmartLiving Center®

UI Program Notes

Budget/FTE

- In mid-year 2003, due to the financial crisis, contract staff were replaced by UI staff.
- 2004 budget reflects continued use of UI staff, resulting in the bulk of the budget decrease.
- Staffing includes 1.8 FTE for oversight, program administration and floor staffing.

Goal

- SmartLiving Center goals for 2003 defined by the Department in its Decision in 03-01-01.
- 2004 goal is based on 2002 performance, assuming increased tours and seminars to attempt to address lack of catalog.
- Goal reflects Department's guidance to increase visits and decrease cost per visit, factoring in 2004 experience

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eeSmarts™ (CL&P & UI)

Objective:

The **eesmarts**TM program is a joint program of CL&P and UI. The vision of the energy education program is to develop an energy conservation ethic among students, encouraging both them and their parents to incorporate energy conservation practices in their schools and homes. This vision was accomplished through the creation of the **eesmarts**TM education program, an energy efficiency learning initiative.

During 2004, the Companies achieved their short-term objective of completing the Grade 6-8 curriculum so that in 2005 the objectives can be twofold: continued emphasis on placing curriculum in schools and strong emphasis on post-placement support and follow-up. The Companies are keenly aware that placing curriculum in schools is of little long-term value if it is taught only once, or not at all; therefore, deliberate involvement with the teachers who have the curriculum may be a prominent feature of the 2005 program.

Target Market:

The energy education program plans to target three groups; the city/town's Board of Education, school principals/teachers, and parents. By targeting these groups, the Companies are able to reach and educate Connecticut schoolchildren.

Program Description:

Introduction

eesmartsTM is an energy efficiency learning initiative. The vision of **eesmarts**TM is to develop an energy-efficient ethic among all school age students in Connecticut, encouraging them to incorporate energy efficient practices and behaviors into their lives at home and at school. This is accomplished through an array of products and services including curriculum materials, technical support through a Continuing Education Unit ("CEU") program for teachers, outreach and related resources. Schools and teachers benefit from the **eesmarts**TM program without a cost in dollars, but by having to invest precious class time.

The *eesmarts*TM program was developed by UI with a team of Connecticut-certified educators with a curriculum that teaches children about energy and conservation, and is supportive of the Connecticut Mastery Test, the Connecticut State Framework and the National Science Standards. By making the program supportive of these programs, we increase the likelihood of adoption of *eesmarts*TM by schools and teachers.

Curriculum Units (Grades K-8)

The *eeSmarts*TM elementary education program includes a grade K-3

dinosaur series. This series includes a big storybook with unique characters that teach children about energy and efficiency, a comprehensive teacher guidebook that gives teachers detailed lessons and background information, and a classroom poster that reminds the students of the energy efficiency lessons learned.

The grade 4-5 curriculum is an experiment and activity based box set. Teachers can use these lessons to teach their students about electricity, fossil fuels, renewable energy, reading electricity bills and understanding electricity usage.

Grades 6-8 curriculums consist of twelve lessons built around the subjects of Energy Systems, Energy Efficiency, Energy Transformation and Systems. Under these subjects, students learn about conservation, energy efficiency, Southwestern Connecticut transmission issues and congestion, and why it is important to save.

The *CESmarts***TM** curriculum units are provided to teachers to use in their class at their discretion. The units were created so teachers can use the curriculum materials every year, enabling the *CESmarts***TM** message to be given to a new class of students year after year.

Technical Support/Continuing Education Unit (CEU) Program
Through the partnerships developed with the Connecticut Regional
Education Services Centers, *eesmarts*TM plans on continuing to offer
schoolteachers continuing education units for learning how to use *eesmarts* TM curriculum in their classroom and how to use the resources
available to them on energy efficiency and conservation. In addition,
follow-up with teachers who have received the curriculum may be made
in person and by telephone or email to determine what additional needs or
questions the teacher may have and to pursue submission of pre and posttests, as well as teacher evaluations.

Outreach

Working in conjunction with the UI SmartLiving® Center, *@eSmarts*TM may continue to offer educational tours and Family Science Days (FSD) to promote our message to children and their families. Educational tours may be available to schools, classes, after school groups (i.e., Boy Scouts, Girl Scouts, etc). Themes for the tours include the origins of energy, energy efficiency, and conservation and alternate sources of energy. The tours make use of the UI SmartLiving® Center's many interactive displays. The FSD's are opportunities for children and their parents to learn and have fun.

Resources

A list of additional resources and lessons available to teachers on the topic

of energy, energy efficiency and conservation are included in the curriculum. In addition, on the *eesmarts* web-site, www.eesmarts.com, the Companies list resources for teachers on the same topics. Once teachers have used the *eesmarts* curriculum they are better equipped and more aware of energy and conservation issues and thus, more likely to seek out additional information, lessons and activities on energy. Personalized attention to these resources is offered via the post-placement follow-up effort.

Marketing Strategy:

Ongoing/Periodic Activities

- Outreach to new and participating schools via direct contact, email and conferences
- o Grassroots outreach via public relations, UI's "Source" bill insert, and news features on www.eesmarts.com

First Quarter 2005

- o Direct mail announcing SLC/ *eeSmarts*[™] bus reimbursement program and educational tours
- o Home Show participation
- o Conferences
- o Book Readings at SLC

Second Quarter 2005

- o Joint sponsorship of SLC Earth Day celebration
- o Conferences
- o Book Readings at SLC

Third Quarter 2005

- o Joint participation in C&LM community events and fairs
- o Back-to-school direct mailing to educators

Fourth Quarter 2005

- o Conferences
- Family Science Day at SLC

Goals:

CL&P and **UI** Goals:

CL&P: 800 curriculum units K-8 with an estimated budget of \$251,000. UI: 600 curriculum units K-8 with an estimated budget of \$319,466.

Minimum of (4) four CEU workshops

1000 pre/post tests and teacher evaluations statewide, corresponding to a utilization rate of 50% based on target number of curriculums placed.

New Program Issues:

For 2005 the new program issues include availability of grade 6-8 curriculums and emphasis on post-placement follow-up and assistance.

Grades 6-8 provides an opportunity to offer a more complete package to those schools that have not yet taken advantage of the curriculum. Perhaps more importantly, the new curriculum's availability may provide a platform from which to pursue active follow-up with schools and school systems already using all or part of the K-5 curriculum.

The initial plan for the eesmarts program was a curriculum that would span grades K through 12 and provide a solid educational background in energy related matters throughout the primary and secondary levels. The budgetary realities that have developed as a result of the funding reallocation that occurred during the 2003 legislative session have caused a shift in strategy. In light of the current funding situation and after consultation with the ECMB, additional curriculum development will not be funded. The companies plan to work with ISE to develop teacher workshops and educational tools for high school grades that would allow the Companies to reach this student population. This will be done in coordination with the existing *EESmarts*TM infrastructure and delivery channels.

eeSmarts™

All dollar values are in \$000									
Budget Projections	2002 Ac	tual	<u>2003</u>	<u>Actuals</u>	<u>2004</u>	Budget*	<u>2005</u>	Budget	
Labor:									
NU Labor	\$	28	\$	32	\$	21	\$	37	
Contractor Staff	\$	-	\$	B	\$	60	\$	-	
Total Labor	\$	28	\$	32	\$	81	\$	37	
Materials & Supplies	\$	-		(1)	\$	-	\$	-	
Outside Services	\$	-	\$	192	\$	-	\$	127	a)
Educational Consultants Education Conference	\$	173	\$, -	\$	-	\$	-	
Registrations	\$	•	\$	-	\$	-	\$	•	
Portable Displays Curriculum Materials &	\$	-	\$	-	\$	-	\$	-	
Shipment Presentation by Educ.	\$	-	\$	-	\$	60	\$	55	b)
Consultants for Teachers	\$	-	\$	-	\$	-	\$	-	
UI Project Management Fee	\$	-	\$	-	\$	17	\$	17	
Website Hosting Fee	\$	*	\$	-	\$	2	\$	<u> </u>	
Sub-total Outside Services	\$	173	\$	192	\$	79	\$	199	
Marketing									
Joint CL&P / UI Market	\$	-	\$	-	\$	-	\$	-	
PR / Video	\$	-	\$	_	\$	-	\$	-	
Misc Marketing	\$	-	\$	12	\$	40	\$	5	c)
Administrative Expense	\$	-	\$	14	\$	5	\$	5	
Other	\$	14		1	\$	5	\$	5	
Total * Revised Budget as filed on 8/18/04	\$	215	\$	250	\$	210	\$	251	

a) Vendor: Competitive Resources, Inc (CRI). Visit schools, teacher training seminars, educational symposiums, etc. to promote curriculum.

2005 Goals and Metrics Information

The eeSmarts Program does not have a kWh savings metric.

Demand Savings (kW Reduction Goal) Annual Energy Savings (kWh Reduction Goal) Lifetime Energy Savings (kWh Reduction Goal)	N/A N/A N/A	
Annual Cost Rate (\$/kWh)	N/A	
Lifetime Cost Rate (\$/kWh)	N/A	
Electric b/c ratio	N/A	
Total Resource b/c ratio		

b) Vendor: Atlantic Coast Fulfillment. Fulfillment of curriculum requests.

c) Includes bill inserts, mailings to curriculum directors and principal/pilot programs

eeSmartsTM

	Goal - # Curriculae Delivered					
Year	Goal	Actual	% Achieved			
2001	n/a	n/a	n/a			
2002	n/a	314	2			
2003	n/a	n/a	n/a			
2004 ³	1,400	n/a	n/a			
2005	800	n/a	n/a			
		Coal Participati	ion			
Year	Goal	Goal - Participati Actual	% of Goal			
2001	n/a	n/a	% of Goal			
2001	n/a	n/a	n/a (
2002	n/a	n/a	n/a			
		· -				
2004 ³	n/a	n/a	n/a			
2005	n/a	n/a	n/a			
		Goal - Budget				
Year	Budget	Actual	% of Goal			
2001	\$200,000	159,000	80%¹			
2002	\$270,000	215,000	80%			
2003	\$300,000	249,000	83%			
2004 ³	\$210,000	n/a	n/a			
2005	\$251,000	n/a	n/a			
		December Deffer	_			
	Φ#:E-4:	Program Ratios	-			
V	\$/Lifetim		\$/Annualized			
Year	Plan	Actual	Plan	Actual		
2001	n/a	n/a	n/a	n/a		
2002	n/a	n/a	n/a	n/a		
2003	n/a	n/a	n/a	n/a		
2004 ³	n/a	n/a	n/a	n/a		
2005	n/a	n/a	n/a	n/a		

Program began in 2001. 2002 is first year with any reportable data.

Based on revised budgets and goals filed on 8/18/04.

eeSmartsTM

CL&P Program Notes

Budget/FTE

- 2005 budget includes .3 FTE.
- 2005 budget reflects reduced scale grade 6-8 curriculum and steady state K-5 implementation.

Goal

• 2005 unit goal is number of curriculum packages K-6 expected to be delivered.

Cost/Unit

• This benchmark is not applicable due to significant proportion of spending for development.

Goal Setting Methodology

• 2005 goal was determined by prorating based on previous year's expenditures and curriculum delivered to date.

Metric Changes

• 2005 goal is based on delivered curriculum packages.

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eeSmarts™ (K-12 Education) *

Baseline Assumptions:

Market - Primary and secondary schools throughout UI service territory

Budget Projections	2003 Act	2004 Bud	2005 Bud
Ul Labor (a)	\$ 67,605	\$ 90,747	\$ 86,043
Materials & Supplies	\$ 4,257	\$ 7,069	\$ 6,000
Outside Services (b)	\$ 266,956	\$ 88,944	\$ 70,423
Other Labor (c)	\$ -	\$ 16,500	\$ 100,000
Incentives	\$ 272	\$ -	\$ -
Marketing (d)	\$ 137,251	\$ 109,400	\$ 50,000
Other	\$ (221,469)	\$ -	\$ -
Administrative Expenses	\$ 11,140	\$ 6,806	\$ 7,000
Total	\$ 266,012	\$ 319,466	\$ 319,466
All Other Charges	<u>\$</u> -	<u>\$</u>	\$ -
Total	\$ 266,012	\$ 319,466	\$ 319,466

^{*} Joint CL&P and UI Programs for 2005

- (a) 1.0 FTE UI oversight
- (b) Warehousing, fulfillment, curriculum costs
- (c) Field and sales support
- (d) Conferences, direct mail, collateral

Goals and Metrics Information:

	<u>2005</u>
Curriculum placed	600
Curriculum Usage Verified	300

eeSmarts™

Goal - Program Costs (000's)

Year	Budget	Actual	% of Goal Achieved
2000	\$363	\$392	108.0%
2001	\$427	\$298	69.8%
2002	\$377	\$855	226.8%
2003	\$427	\$266	62.3%
2004	\$319	\$0	0.0%
2005	\$319	\$0	0.0%

Goal - Number of Customers Served

Year	Goal	Actual	% of Goal Achieved
2000	-	-	0.0%
2001	-	-	0.0%
2002	38	619	1628.9%
2003	38	696	0.0%
2004	600	-	0.0%
2005	600		0.0%

eeSmartsTM

UI Program Notes

Budget/FTE

- 2002 actual expenditures reflect DPUC guidance regarding use of excess available funds.
- 2004 budget reflects reduced scale grade 6-8 curriculum and steady state K-5 implementation
- 2004 staffing includes 1.25 FTE for oversight and program administration.
- 2005 staffing drops to 1.0 FTE with curriculum development concluded and increased outsourcing.

Goal

• 2002-2003 goals were stated in terms of number of schools served.

Metric Changes

- Beginning in 2004 number of curriculum packages shipped becomes the metric.
- 2005 adds the Department's required utilization rate metric with goal of verifying usage of the curriculum in 300 schools.

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Residential Audits (CL&P & UI)

Objective: The objective of the CL&P's Residential Audit program is to provide

quality audit services to customers while educating them about energy

saving measures and practices.

Target Market: Non-low income Residential Customers using electric or fossil fuel heat.

Program Description: A direct descendant of the CONN SAVE program, which was disbanded

in 1990, this program provides on-site home energy audits, including low cost, unbiased information on ways to lower energy consumption, and installation of electric water heating measures including water heater tank wraps, pipe wraps, and low-flow shower heads. Weatherization, water heating conservation measures, and lighting measures which are

determined to be cost-effective are also installed at the time of the audit,

depending on the electricity usage at the unit.

A contractor visits the homes of customers requesting audits. The home is field measured and an audit software program is used to generate an estimated home energy usage which is compared to the actual usage. The audit also offers a list of energy saving measures that the homeowner can

either do themselves or hire out.

In addition to the field audit, for CL&P, an on-line audit is available at the

Company's website.

Marketing Strategy: The program is marketed to interested customers through the customer

service centers and the SmartLiving Center.

Program Note: UI embeds its Residential Audit within the UI Helps Program for ease of

administration, given the fact that this service to non-low income customers closely resembles the audit component of the low income

program.

Residential Audits

All dollar values are in \$000

Budget Projections	2002 Actual		2003 Actuals		2004 Budget*		2005 Budget		
Labor:		-							
NU Labor	\$	56	\$	16	\$	5	\$	5	
Contractor Staff	\$\$	289	\$	6	\$	-	_ \$		
Total Labor	\$	345	\$	22	\$	-	\$	5	
Outside Services	\$	169	\$	7	\$	30	\$	25	a)
Incentives	\$	575	\$	-	\$	-	\$	-	
Marketing	\$.	17	\$	-	\$	-	\$	_	
Administrative Expense	\$	_	\$	-	\$	-	\$	-	
Other	\$	-	\$	2	\$	**	\$	_	
Miscellaneous	\$.	18	\$	-	\$	• 1	\$	_	
Total	\$	1,124	\$	31	\$	35	\$	30	

^{*} Revised Budget as filed on 8/18/04

2005 Goals and Metrics Information .

The Residential Energy Audit Program does not have a kWh savings metric

Demand Savings (kW reduction Goal)	N/A
Annual Energy Savings (KWh Reduction Goal)	N/A
Lifetime Energy Savings (kWh Reduction Goal)	N/A
Annual Cost Rate (\$/kWh)	N/A
Lifetime Cost Rate (\$/kWh)	N/A
Electric b/c ratio	N/A
Total Resource b/c ratio	N/A

a) Program is implemented by outside contractor.

Residential Audits

Not a goals based program.

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Community Based Program (CL&P & UI)

Objective:

The objective of the joint CL&P and UI Community Based Program (CBP) is to advance the efficient use of energy, protect the environment and promote the economic development in the communities designed by ISO-NE as "preferred municipalities" in SWCT. CL&P intends to continue to partner with Norwalk to implement the Community Based Program in 2005. CL&P intends to identify a possible second SWCT community with which to partner during 2005. UI will continue to target the "preferred municipality" of Shelton along with its sister communities of Ansonia and Derby. By focusing on the community's specific energy needs and teaching residents about energy conservation, the community residents can learn how to save scarce resources and decrease property losses, as well as to respect the environment.

The CBP builds enthusiasm and establishes an energy efficiency ethic and creates an "umbrella" identity under which all conservation programs can be implemented within the community.

The CBP also intends to continue to address the community's needs by focusing on respect for the environment, conservation of resources and limiting property losses while contributing to the economic development.

Target Market:

The CBP focuses on small commercial and residential customers within the host communities, as well as schools and other municipal buildings. The CBP may provide a broad range of services to all segments of the communities through the Companies' current programs. Programs under the CBP intend to help residential consumers, commercial and municipal (such as schools, libraries and traffic signal systems) customers assess their current electric needs and usage and help them implement energy saving measures.

Program Description:

Partner communities were all established in 2004, and for 2005 emphasis will be on deepening existing relationships and seeing prospective larger projects come to fruition. The CBP primarily promotes participation in the Companies' existing energy efficiency programs and also provides enhanced and innovative ways for the communities to save resources.

The CBP addresses the energy needs of the Communities by showing residents, businesses, community leaders and municipal officials how saving energy through collaboration can benefit them in a way that may not be obvious. The program focus is to increase energy efficiency awareness throughout the communities, increasing their participation in all of the Companies' conservation programs and to transform the Communities from passive consumers of energy to active participants in selling the benefits of wise resource utilization, including:

- Advance the efficient use of energy
- Resource savings such as water, natural gas and oil
- Electric safety
- Reduce the negative impact of energy production and delivery
- Reduce air pollution
- Promote economic development

The community based structure has flexibility on how to implement and promote the program, such that the exact nature or the program is responsive to the driving forces within the host communities, for example local government and chambers of commerce.

The CBP coordinates with other economic or environmental improvement activities being undertaken in the communities. These could be associated with a number of different initiatives, including but not limited to the DOE/EPA's ENERGY STAR Programs, Rebuild America, Main Streets, Green Lights and or other utility sponsored efforts to make businesses more energy-efficient.

Marketing Strategy:

The CBP works with community leaders, municipal officials, businesses and volunteers on a coordinated campaign to raise the level of consciousness among the communities through an education and awareness campaign harnessing grassroots activism through the synergy between the Companies and community leaders/civic organizations.

Incentive Strategy:

Financial incentives are provided via the array of other C&LM programs.

Goals:

The Goal of the CBP is to provide an opportunity for the communities and the Companies to effectively support the development of energy efficient technologies that could provide broad benefits to the community's small businesses, commercial and industrial facilities. In addition, this program may advance economic development by directly supporting and encouraging the growth of research activities with the municipalities, which can enhance energy efficiency, productivity and competitiveness of all commercial facilities.

CL&P: Target Budget of \$250,000.

UI: Target budget of \$95,641.

Community Based Program

All	dollar	values	are	in	\$000
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Budget Projections	2002 Ac	tual	2003	<u>Actuals</u>	2004	Budget*	<u>200</u>	05 Budget	
Labor:									
NU Labor	\$	31	\$	15	\$	63	\$	63	
Contractor Staff	\$	-	\$		\$		\$		
Total Labor	\$	31	\$	15	\$	63	\$	63	
Outside Services	\$	155	\$	40	\$	-	\$	20	a)
Materials & Supplies	\$	-	\$	1	\$	5	\$	5	
Incentives	\$	188	\$	•	\$	25	\$	-	
Marketing	\$	132	\$	10	\$	140	\$	140	b)
Other	\$	-	\$	-	\$	12	\$	12	c)
Administrative Expenses	\$	1	\$		\$	5	\$	10	d)
Total	\$	125	\$	· 73	\$	250	\$	250	

^{*} Revised Budget as filed on 8/18/04

- a) Vendor support for events.
- b) The CBP will work with community leaders, municipal officials, businesses and volunteers on a coordinated campaign to raise the level of consciousness among the communities through an education and awareness campaign harnessing grassroots activism through the synergy between the utilities and community leaders & civic organizations.
 Marketing tools used: Joint community event advertising (print), Community outreach and PR, Cooperative grassroots marketing, Small Business Breakfast Seminar Series
- c) Funding for school bus trips from selected town(s) to Smart Living Center (UI's) 10 trips total for the year
- d) Employee expenses including mileage, training, conference attendance, misc.

2005 Goals and Metrics Information

Demand Savings (kW Reduction Goal)	N/A
Annual Energy Savings (kWh Reduction Goal)	N/A
Lifetime Energy Savings (kWh Reduction Goal)	N/A
Annual Cost Rate (\$/kWh)	N/A
Lifetime Cost Rate (\$/kWh)	N/A
Electric b/c ratio	N/A
Total Resource b/c ratio	N/A

Community Based Program

		Program Cos	<u>sts</u>				
Year	Budget 5	Actual	% of Budget	Cost/participant	\$/LT-kWh		
2000	n/a	n/a	n/a	n/a	n/a		
2001	\$250,000	\$84,377	34%	n/a	n/a		
2002	\$450,000	\$507,000	113%	n/a	n/a		
2003	\$76,000	\$73,000	96%	n/a	n/a		
2004 ⁶	\$250,000	n/a	n/a	n/a	n/a		
2005	\$250,000	n/a	n/a	n/a	n/a		
			4				
	7	<u> Goal - Participa</u>					
Year	Goal	Actual	% of Goal	•			
2000	n/a	n/a	n/a				
2001	n/a	n/a	n/a				
2002	· n/a	n/a	n/a				
2003	n/a	n/a	n/a				
2004 ⁶	8	n/a	n/a				
2005	n/a	n/a	n/a	•			
•	Cool	- Lifetime MWI	e equipae		Goal - I	nstalled kW	Savinas
				V			
Year	Budget ²	Actual	% of Budget	Year	Goal	Actual	%of Goal
2000	n/a	n/a	n/a	2000	n/a	n/a	n/a
2001	n/a	1,331 ³	n/a	2001	n/a	n/a	n/a
2002	n/a	1,760 4	n/a	2002	n/a	n/a	n/a
2003	n/a	n/a	n/a	2003 7	n/a	n/a	n/a
2004 ⁶	n/a	n/a	n/a	2004 ⁶	n/a	n/a	n/a
2005	n/a	n/a	n/a	2005	n/a	n/a	n/a

	ran		

	\$/Lifetii		\$/Annualized kW	
Year	Plan	Actual	Plan	Actual
2000	0.000	0.000	n/a	n/a
2001	0.000	0.063	n/a	n/a
2002	0.000	0.288	n/a	n/a
2003	0.000	n/a	n/a	n/a
2004	0.000	n/a	n/a	n/a
2005	0.000	n/a	n/a	n/a

- Educational program with primary objective of raising energy efficiency ethnicity in the community. 2004 program metric is to participate in 8 promotion/education events in SWCT.
- ² Energy Savings is included in the appropriate sector level metric.
- Energy Savings is based on POP and WRAP. Total Energy Savings in Vernon for 2001 is 37,169,787 Lifetime kWh.
- Energy Savings is based on Energy Advantage, Spectrum, and Draft Detectives. Total Energy Savings in Vernon for 2002 is 61,485,038 lifetime kWh.
- ⁵ 2002 budget includes \$200,000 for the Energy Efficient Mortgage Program. 2003 Budget includes \$200,000 for Energy Efficient Mortgage.
- Based on revised budgets and goals filed on 8/18/04.
- Demand saving goals reflect 1/13/03 goals.

Community Based Program (CBP)

CL&P Program Notes

Budget/FTE:

- 2005 budget reflects a decrease due to budget cuts.
- Staffing includes .6 FTE for program administration and oversight.

Goal:

• Not applicable.

Cost/kWh (Cost/Unit):

• Not applicable.

Goal Setting Methodology

• Not applicable.

Metric Changes:

• Participate in 8 educational/promotion events in SWCT.

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Community Based Program *

Budget Projections	2003 Act	2	004 Bud	2005 Bud
Ul Labor (a)	\$ 49,072	\$	23,950	\$ 24,699
Materials & Supplies	\$ 378	\$	-	\$ -
Outside Services (b)	\$ 1,666	\$	21,000	\$ 15,000
Other Labor	\$ •	\$	-	\$ -
Incentives	\$ 680	\$	-	\$ -
Marketing (c)	\$ 27,502	\$	45,691	\$ 50,000
Other	\$ -	\$	-	\$ -
Administrative Expenses	\$ 3,818	<u>\$</u>	5,000	\$ 5,942
Total	\$ 83,116	\$	95,641	\$ 95,641
All Other Charges	\$ 	\$		<u>\$ -</u>
Total	\$ 83,116	\$	95,641	\$ 95,641

^{*} Joint CL&P and UI Programs for 2005

⁽a) .25 FTE of UI staff

⁽b) Available for consulting support to towns(c) Print, events, collateral

Community Based Program

Goal - Program Costs (000's)

## ** ***	manurnu kirilin		% of Goal
Year	Budget	Actual	Achieved
2000	N/A	N/A	N/A
2001	\$339	\$139	41.0%
2002	\$307	\$125	40.7%
2003	\$191	\$83	43.5%
2004	\$96	N/A	0.0%
2005	\$96	N/A	0.0%

Goal - Number of Appliances

Year	Goal	Actual	% of Goal Achieved
2000	N/A	N/A	N/A
2001	N/A	N/A	N/A
2002	N/A	N/A	N/A
2003	N/A	N/A	N/A
2004	N/A	N/A	N/A
2005	N/A	N/A	N/A

Goal - Installed kWh Savings (000's kWh)

Goal - Installed kW Savings

Year	Goal	Actual	% of Goal Achieved	Year	Goal	Actual	% of Goal Achieved
2000	N/A	N/A	N/A	2000	N/A	N/A	N/A
2001	N/A	N/A	N/A	2001	N/A	N/A	N/A
2002	N/A	N/A	N/A	2002	N/A	N/A	N/A
2003	N/A	N/A	N/A	2003	N/A	N/A	N/A
2004	N/A	N/A	N/A	2004	N/A	N/A	N/A
2005	N/A	N/A	N/A	2005	N/A	N/A	N/A

Goal - Lifetime kWh Savings (000's kWh)

Year	Goal	Actual	% of Goal Achieved		
2000	N/A	N/A	N/A		
2001	N/A	N/A	N/A		
2002	N/A	N/A	N/A		
2003	N/A	N/A	N/A		
2004	N/A	N/A	N/A		
2005	N/A	N/A	N/A		

Community Based Program

Program Ratios

	\$/kWh		\$/LT kWh		\$/kW		
Year	Target	Actual	Target	Actual	Target	Actual	Cost/Appl
2000	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2001	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2002	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2003	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2004	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2005	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes

All program savings arise from and are also embedded in other programs such as Energy Blueprint and Energy Opportunities.

Community Based Program (CBP)

UI Program Notes

Budget/FTE

(Notes very preliminary, in progress effort as of 10/1/2004)

Budget/FTE

- 2004 staffing budgeted at .5 FTE for oversight and administration.
- 2005 staffing declines to .25 FTE as relationships mature and efforts become driven by other programs and vendors

Institute for Sustainable Energy (CL&P & UI)

Objective:

The objective of this program is to leverage the educational expertise of the Institute for Sustainable Energy (ISE) in a manner which complements the Companies' delivery and marketing of energy conservation programs. The activities described below are incremental to the scope provided by the ISE through the endowed chair of Sustainable Energy Studies at ECSU and related curriculum and will be formalized in appropriate contract documents between the Companies and ISE.

Target Market:

The target market of these programs includes local building code inspectors and builders, high school students and teachers, the residents and management of multi-family residential complexes and the efficiency program contractors that serve this market, and the Connecticut State University (CSU) system specifically ECSU, CCSU, SCSU and WCSU.

Program Description:

In 2005, the Institute will focus on the following four activities:

- 1. **Building Inspector Training** With input from the Companies, NEEP and the State Building Inspectors office, ISE will acquire, modify or develop and implement a series of four regional workshops for local Building Inspectors on energy related components and changes in the Connecticut Building Code, National Electrical Code and the Connecticut State Energy Conservation Code. The extent and scope of this will be coordinated with, but not duplicate, similar NEEP initiatives.
- 2. High School Energy Efficiency Curriculum The ISE will develop a high school energy education curriculum, conduct workshops to educate teachers on this curriculum, oversee the implementation of the curriculum into at least three schools, track the success of the program and recommend steps to expand the program throughout Connecticut.
- 3. Multi-Family Residential Customer Initiative The ISE will develop and provide implementation support for marketing, promotion and securing leads for a Customer Initiated Program third party RFP program targeted to multi-family residential building owners, operators and residents, and conduct demonstration projects on at least three locations in Connecticut.
- 4. Connecticut State University, Energy Efficient Campuses —
 The ISE will develop and initiate a comprehensive energy
 efficiency program for the four campuses in the Connecticut State
 University (CSU) system. The initiative will include establishing
 an energy use inventory and base case for each school. ISE will
 also provide benchmarking services and targeted preliminary
 facility evaluation (PFE) to identify the most cost effective energy
 efficient measures at the least efficient facilities at each campus as
 well as assist each school develop a long range plan to improve the
 overall campus efficiency.

Market Strategy:

The ISE may market these programs jointly under the ISE and C&LM program names.

Goals:

1. Building Inspector Training -

1st Qtr – Research the current application of the Connecticut Building Code, National Electrical Code, and the Connecticut State Conservation Code adopted from the 2003 International Energy Conservation Code. ISE will meet with the Office of the State Building Inspector, NEEP, the Companies and the ECMB Consultants to acquire, modify or develop training materials by the end of the first quarter.

2nd through 4th Qtr — Coordinated with the Office of the State Building Inspector and the Companies, ISE will conduct four regional seminars on energy conservation related requirements, concepts and recent changes in the Connecticut Building Code, National Electrical Code and the Connecticut Energy Conservation Code. ISE will create a baseline for the historic compliance to the code by the local inspectors through pre and post testing of participants and develop a means for identifying incremental energy savings from this training initiative.

2. High School Energy Efficiency Curriculum -

1st Qtr – ISE will create an advisory group composed of the high school teachers, curriculum coordinators, and representatives from the Companies, and research current best practices for energy education at the high school level nationally. ISE will develop sample teaching units for teaching energy education within multiple academic disciplines at the grade 9 – 12 level.(e.g.: General Science, Physics, Civics, etc.) The materials will be designed to support the Connecticut State Department of Education Grade 9 and 10 Core Science Curriculum Framework objectives.

2nd Qtr – ISE will pilot the energy education units in at least three schools. The advisory group will assist ISE in evaluating the effectiveness and results of the pilot projects, and recommend adjustments and improvements to the materials.

3rd and 4th Qtr – ISE will conduct four regional teacher education workshops and distribute the energy education materials to the workshop participants. Teaching units will have a web based interactive component to track the frequency of the programs use and collect feedback from the teachers and students on the effectiveness of the program. The regional workshops will be in coordination with the existing *eesmarts* infrastructure and delivery channels.

4th Qtr – By year-end, ISE will recommend a program for commercialization and widespread distribution to the ECMB and DPUC.

3. Multi-Family Residential Customer Initiative -

1st Qtr - The Institute will research effective multifamily conservation programs nationally, and develop an approach to penetrating Connecticut's Multi-Family Residential market using a customer initiated program (CIP) approach. ISE will work with the Companies and residential efficiency program providers to develop an effective RFP process, develop a strategic marketing plan that addresses all multi-family segments, including; public housing authorities, privately held subsidized and non-subsidized apartment complexes, condominium associations and senior citizen housing. The plan will integrate existing C&LM programs, Energy Star product promotions and available conservation financing programs. ISE will propose an approach to the ECMB based on the above integration and collaboration.

2nd and 4th Qtr – ISE will pilot the above marketing approach with at least three multi-family complexes with a goal of generating multiple, cost effective contractor bids for each project. ISE will collect feedback from participants and efficiency contractors to evaluate the programs effectiveness.

4th Qtr – By year-end, ISE, the Companies and the ECMB consultants will assess the effectiveness of the piloted marketing approach and recommend a fully commercialized program statewide for 2006, including cost estimates and projected kilowatt savings.

4. Connecticut State University, Energy Efficient Campuses – ISE will engage the CSU organization in the Connecticut Climate Change Action Plan "Green Campus Initiative."

1st and 2nd Qtr – ISE will gain commitment from the CSU Central Office and each schools' administration to perform energy, CO2 and building inventories and establish a baseline for energy consumption at each school. ISE will work with each administration to develop high level facility assessments of the efficiency of each campus using benchmarking and regionally adjusted national norms.

2nd and 4th Qtr – ISE will work with each administration to rank the relative efficiency of campus facilities and identify those facilities that are most likely to achieve the greatest benefit from participating in utility conservation programs. ISE will provide preliminary facility evaluations (PFE) on the least efficient facilities on each campus and calculate potential energy savings through participation in utility conservation programs, Energy Star programs and performance contracting.

4th Qtr – By year-end, ISE will quantify the kilowatt savings achieved at each campus and assist each of the schools' administration in developing an energy action plan with short and

long range goal for improving energy efficiency on their campuses.

Budget:

CL&P's estimated budget is \$616,000 and UI's estimated budget is \$150,000. (Breakdown by project will be available in December 2004)

In the event that the maximum allocated \$776,000 budget is more than sufficient to cover these four activities, the ISE may request ECMB approval for other activities which support their mission "to identify, develop and become an objective energy and educational resource regarding the means for achieving a sustainable energy future." Potential additional activities of the Institute include providing support for the formation of public policy, providing educational outreach, developing energy solutions and maintaining information resources on energy and sustainability, including but not limited to ISE's role in supporting the implementation of initiatives outlined in the Connecticut Climate Change Action Plan and ISE's role in assisting the State of Connecticut in the development of energy policy. However, the ISE should also pursue other sources of funding for these initiatives.

SPECIAL NEEDS

Low Income - CL&P WRAP and UI Helps (CL&P & UI)

Objective:

The objectives of the Low Income Program, CL&P WRAP and UI Helps, are:

- To provide comprehensive weatherization, energy conservation and education services to low-income customers in order to reduce their energy burden
- To make utility bills more affordable, and houses more energy efficient and comfortable

Target Market:

Customers with the following criteria: (a) income that is at or below 200 percent of the federal poverty level, (b) energy burden (percent of total annual income spent on energy) that is high, and (c) have not received weatherization services in the prior 18 months.

The Companies can also target financially challenged customers facing other challenges that may interfere with their ability to take advantage of conservation services. Examples of these customers include group living settings such as residential treatment facilities, group homes, halfway houses and shelters.

Program Description:

The program offers a full range of energy conservation measures to address inefficient lighting, water heating, inefficient heating equipment, refrigeration and insufficient insulation. Measures include (where applicable and cost-effective) CFLs, lighting fixtures, water heater wraps or replacement low-flow shower-heads, low-flow faucet aerators, waterbed insulated covers, door sweeps, thermostats, weatherization and insulation, energy efficient refrigerators and freezers, broken window replacement, and burner and furnace repairs or replacements.

The Neighborhood Canvassing Program provides weatherization services to financially challenged customers in targeted communities. Services can include CFLs, low-flow shower-heads, low-flow faucet aerators, waterbed insulated covers, energy efficient torchieres and table lamps. CL&P customers requiring additional weatherization services will be referred to WRAP for a follow-up visit.

The program coordinates CL&P and UI funded services with those funded by the State and the Department of Energy. Some conservation services are funded by The Connecticut Natural Gas Corporation and Yankee Gas Services Company. CL&P services are administered and coordinated by the Weatherization Residential Assistance Partnership (WRAP) Unit. UI's Program Administrator coordinates these services to low-income communities through its vendor and/or the local Community Action Agency (CAA). Such coordination enables CL&P and UI to leverage their outreach to low-income communities and to serve more families.

The following services may be delivered by contractors who have been selected through either a competitive bidding process or by a CAA:

- Conduct a fuel-blind energy survey of the household
- Identify causes of high electricity use related to lighting and appliances
- Identify solutions to high-use problems by working cooperatively with customers in their homes
- Install all cost-effective energy saving measures including those listed above
- Educate customers on use and care of conservation measures to ensure continued savings
- Provide budget and credit counseling when appropriate and requested
- "Piggy-back" service delivery whenever possible to services being delivered through public or utility funding, to reduce administrative costs as well as the inconvenience to the customer with multiple home visits
- Upon request, conduct periodic energy conservation workshops to reinforce education provided during home visits
- Conduct neighborhood canvassing to targeted areas to maximize program participation

Energy use education can be provided to every households visited and budget management and counseling may be provided when needed and requested. CL&P can also send a newsletter ("Help Line"), which contains energy education, conservation tips, safety information, and other useful resource listings to participants. CL&P and UI may also provide training for the network of CAAs that deliver direct services.

Intake can be conducted by several entities including CL&P and UI staff, the Special Assistance Unit within CL&P and UI's Collections Department, CAAs, and the Department of Social Services. INFOLINE also refers customers to these intake organizations.

CL&P may do an extensive mailing in 2005 to all identified hardship coded customers in SWCT and can continue to work closely with the CAAs' energy department to identify new clients who qualify for the WRAP program. WRAP applications may be available and provided to these newly identified customers by the CAAs' intake workers.

CAAs

CL&P and UI have an agreement with each of the CAAs within their respective service areas to offer expanded services to low-income customers. These services include:

- Working with the CAAs to develop educational materials to be provided to customers at the time of audits and installations by CAAs or subcontractors. The materials will focus on the end uses that require the highest electricity use in each home, including lighting, cooking, heating, cooling and appliances. Customers will be informed about the best ways to manage these uses more efficiently.
- CAAs will continue to expand their outreach activities in order to increase participation by customers not traditionally served.
- CAAs will continue to refer customers, if eligible, to CL&P (NU Start) and UI (Matching Payment Program) for appropriate payment assistance, winter protection, and/or to the appropriate human service agency for non-energy-related services.
- CAAs will provide fuel assistance funds if a customer is eligible and will follow up with all referred customers with telephone calls or home visits, if necessary, to ensure appropriate service delivery.

In 2004, CL&P's WRAP/Low Income Program received a silver Connecticut Innovations Prize from the Connecticut Quality Improvement Award Partnership, Inc.

Marketing Strategy:

The following initiatives can be undertaken pursuant to market low-income weatherization programs:

- Both CL&P and UI continue to provide updated information regarding Low Income programs to INFOLINE to enable INFOLINE to make direct referrals for services to customers for conservation measures. Specifically, build on INFOLINE's visibility and marketing of the 211 emergency help telephone number. (Both Companies still refer customers to 211 for assistance when a customer is in need of a service neither company provides).
- Expand outreach to CAAs, social service agencies, senior citizen organizations, family welfare agencies, and public housing authorities.
- UI's Program Administrator provides recruitment listings of identified hardship customers and identified Low Income Housing units for vendor and CAA.

Specific marketing tactics for low-income customers may include the following:

 UI will continue to participate in community events for financially challenged and elderly customers to promote participation in our Low Income Program.

Incentive Strategy:

Incentives are designed to pay for 100 percent of all measures that are cost effective regardless of heating or domestic hot water fuel source. Measures included in the program are lighting, low-cost water measures and replacing tenant-owned refrigerators to maximize the potential energy savings. There is a co-pay requirement for landlord owned refrigerators.

Goals:

CL&P's estimated budget is \$5,000,000 UI's estimated budget is \$1,073,149 to serve 6,500 customers.

New Program Issues:

In an effort to alleviate capacity constraints in SWCT, services may include replacements of inefficient window and sleeve air conditioners with ENERGY STAR models.

Low Income Program

All dollar values are in \$000

Budget Projections	2002 Actual		<u>20</u>	2003 Actuals		2004 Budget*		2005 Budget	
Labor:									
NU Labor	\$	340	\$	315	\$	315	\$	672	
Contractor Staff	\$	334	\$	371	\$	371	\$	272	a) '
Total Labor	\$	674	\$	686	\$	686	\$	944	
Outside Service	\$	367	\$	5 6	\$	80	\$	200	b)
Material & Supply	\$	1,338	\$	1,915	\$	-	\$	-	
Incentives	\$	2,175	\$	332	\$	3,415	\$	3,811	
Marketing	\$	-	\$	20	\$	20	\$	25	
Administrative Expense	\$	110	\$	71	\$	20	\$	20	c)
Other	_\$	52	\$	3	\$	29	\$		
Total	\$	4,716	\$	3,083	\$	4,250	\$	5,000	

^{*} Revised Budget as filed on 8/18/04

- a) Program administrator, data entry, accounting
- b) CHIF accounting services: Actual materials and work done by CAA.
- c) Employee expenses including mileage, training, conference attendance and misc.

2005 Goals and Metrics Information

Demand Savings (kW reduction Goal)	703.1
Annual Energy Savings (KWh Reduction Goal)	9,025,261
Lifetime Energy Savings (kWh Reduction Goal)	95,925,473
Annual Cost Rate (\$/kWh)	\$ 0.554
Lifetime Cost Rate (\$/kWh)	\$ 0.052
Electric b/c ratio	0.88
Total Resource b/c ratio	1.58

Low Income WRAP

		Program Co	osts				
Year	Budget	Actual	% of Budget	Cost/participant	\$/LT-kWh		
2000	\$5,000,000	\$4,406,000	88%	\$653	0.042		
2001	\$5,000,000	- \$5,036,000 -	10 1%.	\$754	0.040		
2002	\$4,420,000	\$4,716,000	107%	\$783	0.033	•	
2003	\$4,024,000	\$3,181,000	79%	\$864	0.038		
2004 ²	\$4,250,000	n/a	n/a	n/a	n/a		
2005	\$5,000,000	n/a	n/a	n/a	n/a		
		Goal - Particip	ation				
Year	Goal	Actual	% of Goal				
2000	6,000	6,749	112%				
2001	5,866	6,675	114%	•			
2002	4,900	6,022	123%				
2003	6,094	3,683	60%				
2004 ²	6,696	n/a	n/a				
2005	6,380	n/a	n/a				
	Go	oal - Lifetime MW	h savinos		Goal - In	stalled kW	Savinge
Year	Budget	Actual	% of Budget	Year	Goal	Actual	%of Goal
2000	160,261	104,812	65%	2000	n/a	n/a	n/a
2001	107,844	125,527	116%	2001	n/a	n/a	n/a
2002	86,326	144,198	167%	2002	n/a	n/a	n/a
2003	101,614	84,526	83%	2003 ³	531	427	80.4%
2004 ²	115,905	n/a	n/a	2004 ²	626	n/a	n/a
2005	95,925	n/a	n/a	2005	703	n/a	n/a
		Program Rat	ios				
	\$/Lifetim		\$/Annualized kW	Actual	•		
Year	Plan	Actual	Plan	8098			
2000	0.031	0.042	n/a	8407			
2001	0.046	0.040	n/a	6375			
2002	0.051	0.033	n/a	7450			
2003	0.039	0.038	8,176	n/a			
2004 ²	0.037 1	n/a	6,790	n/a			
2005	0.052	n/a	7,111				

Lifetime savings rate reflects a change in refrigerator assumptions from 2003-2004. Lifetime savings rate would be 0.29 if 2003 assumptions were used.

Based on revised budgets and goals filed on 8/18/04.

Demand saving goals reflect 1/13/03 goals.

Low Income - WRAP

CL&P Program Notes

Budget/FTE

• 6.4 FTE for program administration, vendor interaction, sales and field support

Goal

• Goal is 6,380 homes.

Cost/Unit

- The projected average cost per unit in 2005 is \$784. The average cost is based on historical performance. Note that 2005 projected measures include:
 - 680 refrigerators
 - 225 window AC units
 - 114,000 lighting products (bulbs/fixtures)
 - Heating measures including insulation, weather-stripping, air-sealing system repair and replacement, windows, thermostats.
 - Water saving measures including aerators, showerheads, tank-wraps.

Goal Setting Methodology

Goal was based on available dollars and average cost per home.

Metric Changes

- Old inefficient window AC units will be replaced.
- Note that the lighting savings has been adjusted to reflect recent lighting evaluation work. These updates were the main reason why the electric b/c ratio dropped in 2005.

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Low Income (UI Helps) *

Baseline Assumptions:

Market - Low Income customers at 150% of federal poverty guidelines

Budget Projections		2003 Act		2004 Bud	2005 Bud
Ul Labor (a)	\$	103,770	\$	119,544	\$ 116,432
Materials & Supplies (b)	\$	2,934	\$	5,659	\$ 22,485
Outside Services (c)	\$	32,082	\$	108,432	\$ 85,000
Other Labor (d)	\$	-	\$	-	\$ 85,000
Incentives (e)	\$	659,419	\$	530,548	\$ 755,500
Marketing	\$	60	\$	-	\$ -
Other	\$	-	\$	-	\$ -
Administrative Expenses	\$	419	_\$_	8,966	\$ 8,732
Total	\$	798,684	\$	773,149	\$ 1,073,149
All Other Charges	\$_		\$	_	\$
Total	\$	798,684	\$	773,149	\$ 1,073,149

^{*} Joint CL&P and UI Programs for 2005

- (a) 1.25 FTE of UI oversight
- (b) Includes reprint of program forms
- (c) Audit related services
- (d) Field measure installation
- (e) 6,500 Customers, 325 Fridge, 325 Room AC

Goals and Metrics Information:

Savings	<u>2005</u>
Demand Savings (kW)	444
Annual Energy Savings (kWh)	4,326,725
Lifetime Energy Savings (kWh)	15,630,550
Annual Cost Rate (\$/kWh)	\$ 0.248
Lifetime Cost Rate (\$/kWh)	\$ 0.069

Low Income (UI Helps) *

Goal - Program Costs (000's)

Year	Budget	Actual	% of Goal Achieved
2000	\$1,542	\$1,795	116.4%
2001	\$1,519	\$1,500	98.7%
2002	\$1,235	\$1,168	94.6%
2003	\$1,117	\$799	71.5%
2004	\$773	\$0	0.0%
2005	\$1,073	\$0	0.0%

Goal - Number of Customers Served

Year	Goal	Actual	% of Goal Achieved
2000	4,859	6,452	132.8%
2001	6,500	7,720	118.8%
2002	5,000	7,078	141.6%
2003	7,204	5,377	74.6%
2004	4,300	-	0.0%
2005	6,500	-	0.0%

Goal - Installed kWh Savings (000's kWh)

Goal - Installed kW Savings

% of · Goal Achieved	Actual	Goal	Year	% of Goal Achieved	Actual	Goal	Year
0.0%	-	e -	2000	127.4%	5,097	4,000	2000
0.0%	-	-	2001	118.5%	6,086	5,135	2001
0.0%	-	•	2002	143.2%	5,550	3,877	2002
96.9%	283	292	2003	77.2%	2,779	3,601	2003
0.0%	-	253	2004	0.0%	-	2,954	2004
0.0%	•	444	2005	0.0%	•	4,327	2005

Low Income (UI Helps) *

Goal - Lifetime kWh Savings (000's kWh)

Year	Goal	Actual	% of Goal Achieved
2000	40,027	50,971	127.3%
2001	51,350	60,860	118.5%
2002	38,773	55,500	143.1%
2003	31,597	24,412	77.3%
2004	14,700	-	0.0%
2005	15,631	-	0.0%

Program Ratios

	\$/kWh		\$/LT kWh		\$/kW		Cost
Year	Target	Actual	Target	Actual	Target	Actual	Customer
2000	\$0.386	\$0.352	\$0.039	\$0.035	\$0.000	\$0.000	\$278
2001	\$0.296	\$0.246	\$0.030	\$0.025	\$0.000	\$0.000	\$194
2002	\$0.319	\$0.210	\$0.032	\$0.021	\$0.000	\$0.000	\$165
2003	\$0.310	\$0.288	\$0.035	\$0.033	\$3,825.342	\$2,823	\$155
2004	\$0.262	\$0.000	\$0.053	\$0.000	\$3,056.232	\$0.000	\$179
2005	\$0.248	\$0.000	\$0.069	\$0.000	\$2,414.374	\$0.000	\$165

Low Income - UI Helps

UI Program Notes

Budget/FTE

- 2003 funds, allocated based on macro-level prioritization, maintains roughly 2002 level.
- Cost reductions enable relatively stable base services goals despite budget cuts.
- Staffing includes 1.25 FTE for oversight and program administration.

Goal

- 2003 Goal represents slight increase of 2002 goal.
- 2003 reflects conscious choice to target refrigerators rather than ramp up base services.
- 2004 goal reduces refrigerator emphasis to shore up base services goal.
- 2005 goal reflects increased funding for all-electric measures and addition of room a/c replacements:
 - o 6,500 Customers, base services
 - o 325 Room AC replacements
 - o 325 refrigerator replacements

Unit/Cost

- 2003 budgeted cost per customer driven down by DPUC imposed customer goal.
- 2004 budget of \$179 per customer attempts to address DPUC's guidance.
- 2004 increases also driven by inclusion of RCS audit budget (\$30,000) in Helps.
- 2005 cost rates for annual kWh improve slightly with volume, kW improve significantly with increased refrigerator funding and addition of room a/c funding, LT kWh deteriorates due to bulb life assumptions

Metric Changes

N/A

Municipal (CL&P)

Objective:

The objective of CL&P's Municipal Program is to provide the benefits of increased energy efficiency to all cities and towns in CL&P's service territory resulting in benefits to taxpayers.

Target Market:

For 2005, the target market is Municipalities, with an emphasis on Urban Act Towns and Distressed Cities.

Program Description:

Municipalities use substantial amounts of electricity to light streets and provide power to schools, public safety entities, office buildings, wastewater treatment plants and other public facilities. With these energy needs in mind, turn-key technical and financial assistance are offered to municipalities with thoughtful and well-designed plans for energy efficient retrofit improvements to their existing buildings.

In 2005, the project installed costs associated with implementing selected, relevant energy efficiency measures within cost-effectiveness constraints can be covered on the basis of a 50/50 split. CL&P may pay 50 percent of the project costs with the qualifying municipalities contributing 50 percent of the remaining project costs through "on the bill financing" which would be included on the monthly electric bill statements for cost effective projects. If a project is not cost-effective at 50 percent project costs, the qualifying amount will be offered as the incentive.

Marketing Strategy:

Meaningful energy efficiency improvement projects at the municipal level are often put on hold indefinitely, or are abandoned altogether, because of the high market barriers (e.g.,costs) often associated with those improvements. The Company intends to overcome these concerns and barriers through an aggressive, forward-thinking outreach effort utilizing field (customer account) personnel and managerial-level direction to identify municipalities with priority projects.

Such an effort needs to utilize relationships and regular communications between program administrators and municipal general government personnel as well as technical professional experts.

Selection for participation in the program will hinge upon several criteria, including the following:

- In order to participate in the program the municipality must sign a memorandum of understanding which broadly summarizes their responsibilities for involvement.
- The municipality must then work with the Company to specify particular measures to be installed and funding responsibilities.
- The municipality must have designated a single point-of-contact for the Company on all matters involving the project who is well-

- acquainted with the project and who is readily accessible to Company staff for communications and liaison activities.
- The project application must be specified in adequate detail to determine the cost-effectiveness of the program measures.
- If a project is not cost effective at 50 percent project costs, the qualifying amount will be offered as the incentive.

Participation in this program will not preclude a municipality from applying for incremental financing incentives offered through any of the Company's other energy efficiency programs such as the New Construction and Major Renovation Program, Express Services, etc.

In addition, the Company plans to work with the Rebuild America program to assess possibilities for coordination.

Incentive Strategy:

In 2005, incentives are intended to pay up to 50% of the 100 % installed cost within cost-effectiveness constraints. If a project is not cost-effective at 50% funding, the project may go forward if the municipality contributes a share of the costs.

The following is an example of an incentive breakdown for a typical municipal High School:

Project Installed Costs

New Light Fixtures	\$71,869
Retrofit Light Fixtures	\$ 9,750
Occupancy Sensors	\$51,429
CL&P Contribution (50%)	\$66,524
Customer Contribution (50%)	\$66,524
Annual kWh Savings	376,756 kWh
Lifetime kWh Savings	5,361,482 kWh

Financing cost to the customer/
12 month loan period – payable
through monthly electric bill statements \$2,772/month

Monthly energy savings based on: 376,756 kWh/12 months x \$0.08/kWh \$2,512/month

Net monthly cost to customer \$ 260/month

Financing will be offered with this program as described in the C&LM Financing section.

Goals:

The 2005 goal for the Municipal Building Program is to reduce or avoid the Municipal buildings energy consumption by 6,746,511 kWhrs annually and 107,733,881 kWhrs lifetime with a target budget of approximately \$2,000,000 dollars.

New Program Issues:

This program is open to all cities and towns in CL&P's service territory. CL&P will develop marketing strategies for non Urban Act Towns and Distressed Cities since the program was previously unavailable to these municipalities. CL&P staff intends to proactively promote to customers, through Account Executives, the change in 2005 to the 50% for CL&P and 50% for the customer project cost split.

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Municipal Program

All dollar values are in \$000

Budget Projections	2002 Actual		2003 Actuals		2004 Budget*		2005 Budget		
Labor:									
NU Labor	\$	146	\$	104	\$	126	\$	165	
Contractor Staff	\$	128	\$	***	\$	155	\$	80	
Total Labor	\$	274	\$	104	\$	281	\$	245	
Materials & Supplies	\$	-	\$	-	\$	5	\$	-	
Outside Services	\$	(30)	\$	5	\$	38	\$	38	
Incentives	\$	2,387	\$	2,178	\$	3,641	\$	1,697	a)
Marketing	\$	-	\$	3	\$	5	\$	5	b)
Administrative Expenses	\$	1	\$	27	\$	20	\$	5	c)
Other	\$		\$	-	\$	10	\$	10	
Total	\$	2,631	\$	2,317	\$	4,000	\$	2,000	•

^{*} Revised Budget as filed on 8/18/04

Note: Zero percent interest based on 12 month finance charge.

- a) Incentives paid for the installation of of cost effective conservation measures. Incentives budget does include dollars associated with zero percent financing (\$205).
- b) Marketing includes print advertising, direct mailing & customer contact to all CT municipalities,
 Urban Act Towns and Distressed Cities, with major concentration on the 14 critical towns in SWCT
- c) Employee expenses including mileage, training, conference attendance and misc.

2005 Goals and Metrics Information

Demand Savings (kW reduction Goal)		659.0
Annual Energy Savings (KWh Reduction Goal)		6,746,511
Lifetime Energy Savings (kWh Reduction Goal)	10	07,733,881
Annual Cost Rate (\$/kWh)	\$	0.296
Lifetime Cost Rate (\$/kWh)	\$.	0.019
Electric b/c ratio		2.61
Total Resource b/c ratio		1.79

Municipal Buildings Program

		Program Costs					
Year	Budget	Actual	% of Budget	\$/LT-kWh1			
2000	\$3,204,000	\$3,762,000	117%	0.029			
2001	\$3,465,000	\$3,444,000	99%	0.027			
2002	\$2,827,000	\$2,631,000	93%	0.019			
2003	\$1,300,000	\$2,318,000	178%	0.023			
2004 ³	\$4,000,000	n/a	n/a	n/a			
2005	\$2,000,000	n/a	n/a	n/a			
		Goal - Participation					
Year	Goal 2	Actual	% of Goal	•			
2000	2745	3,059	111%	,			
2001	2790	3,288	118%				
2002	2191	2,613	119%				
2003	44	32	73%				
2004 ³	78	n/a	n/a				
2005	35	n/a	n/a				
	Gos	al - Lifetime MWh Savi	inas		Goal	- Inctallad k	W Savings
	<u>000</u>	21 - CHERNIC INVALLA	1195		Cour	- motaneu r	W Cavillys
	<u>508</u>	ar - Elicume MVVII Gavi	<u> </u>		Ooai	- mstalled r	W Cavings
Year	Goal (MWh)	Actual (MWh)	% of Goal	Year	Goal	Actual	%of Goal
Year 2000	-			Year 2000			
	Goal (MWh)	Actual (MWh)	% of Goal		Goal	Actual	%of Goal
2000	Goal (MWh) 127,383	Actual (MWh) 131,924	% of Goal 104%	2000 2001 2002	Goal n/a	Actual n/a	%of Goal n/a
2000 2001	Goal (MWh) 127,383 121,379	Actual (MWh) 131,924 127,354	% of Goal 104% 105%	2000 2001	Goal n/a n/a	Actual n/a n/a	%of Goal n/a n/a
2000 2001 2002	Goal (MWh) 127,383 121,379 84,758	Actual (MWh) 131,924 127,354 139,278	% of Goal 104% 105% 164%	2000 2001 2002	Goal n/a n/a n/a	Actual n/a n/a n/a	%of Goal n/a n/a n/a
2000 2001 2002 2003	Goal (MWh) 127,383 121,379 84,758 35,331	Actual (MWh) 131,924 127,354 139,278 98,904	% of Goal 104% 105% 164% 280%	2000 2001 2002 2003 ⁵	Goal n/a n/a n/a 432	Actual n/a n/a n/a n/a 1,219	%of Goal n/a n/a n/a 282.2%
2000 2001 2002 2003 2004 ³	Goal (MWh) 127,383 121,379 84,758 35,331 159,477	Actual (MWh) 131,924 127,354 139,278 98,904 n/a	% of Goal 104% 105% 164% 280% n/a	2000 2001 2002 2003 ⁵ 2004 ³	Goal n/a n/a n/a 432 393	Actual n/a n/a n/a 1,219 n/a	%of Goal n/a n/a n/a 282.2% n/a
2000 2001 2002 2003 2004 ³	Goal (MWh) 127,383 121,379 84,758 35,331 159,477 107,734	Actual (MWh) 131,924 127,354 139,278 98,904 n/a n/a	% of Goal 104% 105% 164% 280% n/a	2000 2001 2002 2003 ⁵ 2004 ³ 2005	Goal n/a n/a n/a 432 393	Actual n/a n/a n/a 1,219 n/a	%of Goal n/a n/a n/a 282.2% n/a
2000 2001 2002 2003 2004 ³	Goal (MWh) 127,383 121,379 84,758 35,331 159,477 107,734	Actual (MWh) 131,924 127,354 139,278 98,904 n/a n/a Program Ratios	% of Goal 104% 105% 164% 280% n/a n/a	2000 2001 2002 2003 ⁵ 2004 ³ 2005	Goal n/a n/a n/a 432 393	Actual n/a n/a n/a 1,219 n/a	%of Goal n/a n/a n/a 282.2% n/a
2000 2001 2002 2003 2004 ³ 2005	Goal (MWh) 127,383 121,379 84,758 35,331 159,477 107,734	Actual (MWh) 131,924 127,354 139,278 98,904 n/a n/a Program Ratios	% of Goal 104% 105% 164% 280% n/a n/a	2000 2001 2002 2003 ⁵ 2004 ³ 2005	Goal n/a n/a n/a 432 393	Actual n/a n/a n/a 1,219 n/a	%of Goal n/a n/a n/a 282.2% n/a
2000 2001 2002 2003 2004 ³ 2005	Goal (MWh) 127,383 121,379 84,758 35,331 159,477 107,734 \$/Lifeti	Actual (MWh) 131,924 127,354 139,278 98,904 n/a n/a Program Ratios ime kWh	% of Goal 104% 105% 164% 280% n/a n/a \$/Annualiz	2000 2001 2002 2003 ⁵ 2004 ³ 2005	Goal n/a n/a n/a 432 393	Actual n/a n/a n/a 1,219 n/a	%of Goal n/a n/a n/a 282.2% n/a
2000 2001 2002 2003 2004 ³ 2005 Year 2000 2001 2002	Goal (MWh) 127,383 121,379 84,758 35,331 159,477 107,734 \$/Lifeti Plan 0.025	Actual (MWh) 131,924 127,354 139,278 98,904 n/a n/a Program Ratios me kWh Actual 0.029 0.027 0.019	% of Goal 104% 105% 164% 280% n/a n/a \$/Annualiz Plan n/a	2000 2001 2002 2003 ⁵ 2004 ³ 2005 zed kW Actual 1,869	Goal n/a n/a n/a 432 393	Actual n/a n/a n/a 1,219 n/a	%of Goal n/a n/a n/a 282.2% n/a
2000 2001 2002 2003 2004 ³ 2005 Year 2000 2001	Goal (MWh) 127,383 121,379 84,758 35,331 159,477 107,734 \$/Lifeti Plan 0.025 0.029	Actual (MWh) 131,924 127,354 139,278 98,904 n/a n/a Program Ratios me kWh Actual 0.029 0.027	% of Goal 104% 105% 164% 280% n/a n/a Plan n/a n/a	2000 2001 2002 2003 ⁵ 2004 ³ 2005 zed kW Actual 1,869 1,836	Goal n/a n/a n/a 432 393	Actual n/a n/a n/a 1,219 n/a	%of Goal n/a n/a n/a 282.2% n/a
2000 2001 2002 2003 2004 ³ 2005 Year 2000 2001 2002	Goal (MWh) 127,383 121,379 84,758 35,331 159,477 107,734 \$/Lifeti Plan 0.025 0.029 0.033	Actual (MWh) 131,924 127,354 139,278 98,904 n/a n/a Program Ratios me kWh Actual 0.029 0.027 0.019	% of Goal 104% 105% 164% 280% n/a n/a Plan n/a n/a n/a	2000 2001 2002 2003 ⁵ 2004 ³ 2005 zed kW Actual 1,869 1,836 1,466	Goal n/a n/a n/a 432 393	Actual n/a n/a n/a 1,219 n/a	%of Goal n/a n/a n/a 282.2% n/a

Actual Dollars spent divided by actual life time kWh savings achieved for 2000 to 2003 inclusive. Budget dollars spent divided by life time kWh savings goals for 2004.

Goal for 2000-2002 is incentive dollars. Goal for 2003-2005 is number of projects.

Based on revised budgets and goals filed on 8/18/04.

Program ratios have decreased due to the incentive change from 75% to 50%.

Demand saving goals reflect 1/13/03 goals.

Municipal Buildings

CL&P Program Notes

Budget / (FTE)

- Assumes 1.6 FTE.
 - 2005 budget decreased compared to 2004 budget.
 - Increased marketing focus to the SWCT critical towns.
 - Eligibility may be more difficult for Municipals to contribute 50% project cost due to their budget constraints.

Goal

- Demand Savings (kW Reduction Goal) = 659 kW.
- Lifetime Energy Savings (kWh Reduction Goal) = 107,733,881 kWh.

Cost/kWh (Cost/Unit)

- Annualized kW = 3,035/kW.
- $\frac{\text{S/Lifetime kWh} = \frac{0.019}{\text{kWh}}}{1.019}$

Goal Setting Methodology

- The 2005 planning model is based on 2002 actual results.
- Changes were made to incorporate rule- changes (50% incentive) realization rates and coincidence factors.

Metric Changes

• 2005 incentive level reduced to 50% of project cost.

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Municipal Energy (UI)

Objective:

The objective of UI's Municipal Energy program is to minimize lost opportunities in new construction, major renovation, equipment replacement, and to maximize the retrofit opportunities in existing facilities of the 17 municipalities within UI's service territory. These opportunities are captured by: 1) exchanging the functioning but inefficient equipment within the municipal environment with higher efficiency equipment; 2) improving a facility's building shell or facility's performance; 3) improving energy use or management practices; and 4) inducing efficiency where it was not previously present.

Target Market:

The target market consists of municipal office buildings, educational facilities, libraries, wastewater facilities, transportations facilities, and traffic signal signals systems in the seventeen cities and towns within UI's service territory.

Program Description:

Municipal Energy is a sub-program of both Energy Opportunities and Energy Blueprint. It offers a comprehensive and highly flexible menu of energy consulting services to existing municipal customers in order to assist them in retrofitting their facilities with cost effective C&LM measures and technologies. The services provided by Municipal Energy are varied and specifically designed to meet the needs of the individual customer. They include energy audits, single measure analyses, walk-through audits, energy and end-use analysis, product reviews, review of proposals submitted by contractors or vendors, cash incentives, project financing, and co-funded energy studies for advanced technologies.

Marketing Strategy:

UI's Energy Engineers, Marketing Representatives, and Account Managers market the Municipal Energy program directly to municipal customers through face-to-face meetings. UI personnel use tools such as UI's website, comprehensive information packets, case studies, direct mail, seminars, and trade shows. When applicable, UI integrates its marketing programs with Federal, State and Regional initiatives. Active participation and involvement with the vendor community influences building trade organizations, vendors, contractors, and energy services companies to become an extension of UI staff by delivering qualified leads for this program. In addition, UI's website will be utilized as an increasingly important marketing tool to the Municipalities.

The marketing plan designed for Energy Opportunities and Energy Blueprint is utilized as the umbrella plan and can be modified to include specific Municipal oriented activities on an as needed basis. Please refer to the marketing plan descriptions in the Energy Opportunities on pages 51-53 and Energy Blueprint text located on pages 30-36 of the Plan.

The Municipal program will utilize low value giveaway items such as pocket screwdrivers, or pens on an as needed basis. These giveaways are similar to ones available from either Energy Blueprint or Energy Opportunities. The intent of these giveaways is to create presence and awareness for the major program's name.

Incentive Strategy:

The Municipal program will utilize the same basic incentive structures as any eligible project in Energy Opportunities. Please refer to the filing descriptions in this document for detailed incentive strategies.

In addition to the cash incentive structures offered, UI will continue to offer interest free financing to eligible Municipal retrofit projects. The financing criterion is outlined in the C&LM Financing section of this filing document. The feasibility of offering the financing to retrofit projects as a supplement to a reduced cash incentive is being explored.

The Company anticipates continuing to pay the existing rebate amounts for LED traffic signal conversions.

Goals:

It is estimated that approximately 40% of UI's Municipal projects can be classified as retrofit opportunities. Therefore, the goal for municipal "retrofit" projects is to reduce the energy consumption by 2,863,960 kWh annually and 50,973,720 kWh lifetime with a budget target of \$411,000 dollars.

New Program Issues:

In an effort to be consistent with the recommendations of the Energy Management Conservation Board (ECMB) and CL&P, UI will begin including any Municipal "lost opportunity" projects in the 2005 budget and goals for Energy Blueprint.

The retrofit portion of the Municipal program will continue to focus on reducing demand where possible throughout UI's territory. Special considerations for peak demand reduction may be developed for the six critical towns.

The Program will also make an effort to promote and quantify nonelectric benefits for the customer. This may be facilitated by offering bonus incentives for non-electric measures. Currently, the feasibility of a bonus incentive is being reviewed.

Municipal Energy

Baseline Assumptions:

Market - All Municipal accounts (1,2)

Budget Projections	2003 Act	2	2004 Bud		2005 Bud
UI Labor	\$ 61,285	\$	55,820	\$	58,865
Materials & Supplies	\$ 4	\$	500	\$	485
Outside Services (a)	\$ -	\$	71,000	\$	26,515
Other Labor (b)	\$ -	\$	-	\$	25,000
Incentives (c)	\$ 512,073	\$	474,494	\$	291,485
Marketing (d)	\$ -	\$	5,000	\$	3,450
Other	\$ -	\$	-	\$	-
Administrative Expenses (e)	\$ -	\$_	4,186	\$	5,200
Total	\$ 573,362	\$	611,000	\$	411,000
All Other Charges	\$ _	<u>\$</u>		<u>\$</u>	-
Total	\$ 573,362	\$	611,000	\$	411,000

- (1) The Municipal Energy program is extended to all municipal accounts
- (2) In 2005 the program will only include retrofit projects, major construction projects are included in Energy Blueprint
- (a) Project financing
- (b) Engineering services
- (c) Customer incentives
- (d) Selected advertising
- (e) Employee training, mileage, etc.

Goals and Metrics Information:

Savings	<u>2005</u>
Demand Savings (kW)	832
Annual Energy Savings (kWh)	2,863,960
Lifetime Energy Savings (kWh)	50,973,720
Annual Cost Rate (\$/kWh)	\$ 0.144
Lifetime Cost Rate (\$/kWh)	\$ 0.008

Municipal Energy

Goal - Program Costs (000's)

Year	Budget	Actual	% of Goal Achieved
2000	\$1,166	\$785	67.3%
2001	\$987	\$934	94.6%
2002	\$763	\$775	101.6%
2003	\$816	\$573	70.2%
2004	\$611	\$0	0.0%
2005	\$411	\$0	0.0%

Goal - Installed kWh Savings (000's)

Goal - Installed kW Savings

Year	Goal	Actual	% of Goal Achieved	Year	Goal	Actual	% of Goal Achieved
2000	5,776	4,249	73.6%	2000	-	-	0.0%
2001	5,073	4,278	84.3%	2001	•	-	0.0%
2002	4,051	5,511	136.0%	2002	-	-	0.0%
2003	4,010	4,240	105.7%	2003	1,260	1,317	104.5%
2004	4,080	-	0.0%	2004	896	-	0.0%
2005	2,864	-	0.0%	2005	832	-	0.0%

Goal - Lifetime kWh Savings (000's)

Year	Budget	Actual	% of Goal Achieved
2000	86,640	63,735	73.6%
2001	76,095	64,170	84.3%
2002	60,765	82,665	136.0%
2003	60,150	63,600	105.7%
2004	61,200	-	0.0%
2005	50,974	-	0.0%

Program Ratios

	\$/kWh		\$/LT kWh		\$/kW	
Year	Target	Actual	Target	Actual	Target	Actual
2000	\$0.202	\$0.185	\$0.013	\$0.012	\$0.000	\$0.000
2001	\$0.195	\$0.218	\$0.013	\$0.015	\$0.000	\$0.000
2002	\$0.188	\$0.141	\$0.013	\$0.009	\$0.000	\$0.000
2003	\$0.203	\$0.135	\$0.014	\$0.009	\$647.619	\$435.080
2004	\$0.150	\$0.000	\$0.010	\$0.000	\$639.509	\$0.000
2005	\$0.144	\$0.000	\$0.008	\$0.000	\$494.203	\$0.000

Notes

- 1. 2000-2002 data from filed in 03-01-01
- 2. 2003 data reflects budgets approved in 03-01-01
- 3. 2004 data represents the revised budget allocations
- 4. 2005 budgets and goals reflect retrofit opportunities only

Municipal Energy

UI Program Notes

Budget/FTE

- 2005 final budget decreased 33% from 2004 revised budget.
- Budget includes project financing costs.
- Budget represents funding for "retrofit" type municipal projects only.
- Budget does not represent any "lost opportunity" type projects.
- "Lost opportunity" type projects will be funded through Energy Blueprint.
- Budget does not account for any estimated carryover from unspent 2004 dollars.
- Budget includes .55 FTEs for staffing.

Goal

- Target = 60 projects installed in 2005.
- Project eligibility has been modified to allow only "retrofit" projects for 2005.
- A realization rate of 98.5% has been calculated, staying consistent with EO, SMB.
- Ratios between the budget and actuals in 2002 show a significant increase in kWh targets.
 - o '05 final budget decreases by 33% compared to the '02 budget
 - o '05 final budget decreases by 50% compared to the '03 budget
 - '05 kWh target decreased 29% compared to '02 kWh target which included "lost opportunities"
 - o '05 kWh target is 48% below '02 actuals which included "lost opportunities"
- Ratios between the 2005 budget and kWh target compared to 2004.
 - Approximately 58% of the 2004 budget and kWh targets were allocated to "retrofit only"
 - o '05 final budget is 16% greater than the '04 retrofit budget allocation
 - o '05 kWh target is 21% greater than the '04 kWh retrofit target

Cost/Unit

- 2002 actual cost rates: annual = \$.1883/kWh, lifetime = \$.0126/kWh.
- 2002 actual cost rates: annual = \$.1406/kWh, lifetime = \$.0094/kWh.
- 2004 revised projected cost rates: annual = \$.1496/kWh, lifetime = \$.00998/kWh.
- 2005 projected cost rates: annual = \$.1435/kWh, lifetime = \$.0081/kWh.
- 2005 projected LT kWh cost rate reduced by 18% compared to '04 projected LT kWh cost rate.
- Project financing costs have been budgeted and increase the \$\$/kWh.
- Adopted CL&P measure life values for end uses; for example lighting increases to 19 years.

Metric Changes

• kWh saved is the basic metric for all C&I programs.

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Energy Conservation Loan (CL&P & UI)

Objective: The objective of the joint CL&P and UI Energy Conservation Loan

program is to provide financing to customers who would otherwise find it

difficult to fund C&LM measures.

Target Market: The Program should target owners of residential single and multifamily

buildings with an average annual income below 115 percent of the median

income in Connecticut.

Program Description: This is a state mandated program subsidized by CL&P and UI that offers

favorable interest rates for loans designed for energy conservation. This program is available for all fuel types. Interest rates are based on the annual income of the owner, family size, and the town in which the house exists. Owners of one-to-four unit dwellings can receive loans of up to \$15,000. Owners of multifamily properties of five or more units can receive loans of up to \$2000 per dwelling with a cap of \$60,000 per building through the Multifamily Energy Loan Program ("MEL"). The Companies subsidize these loans so that low interest rates (six percent)

are available.

Connecticut Housing Investment Fund (CHIF) administers the program for the State of Connecticut. Homeowners meet with their CHIF loan officer and then customers arrange for the measures to be installed using

moneys secured through the loan.

Marketing Strategy: The state Department of Economic and Community Development

(DECD) and CHIF are the primary marketers of this program. In

addition, the Companies market this program to all new service hookups

and at the UI SmartLiving Center.

Goals: CL&P's estimated budget is \$120,000.

UI's estimated budget is \$89,250.

New Program Issues: The Companies intend to promote the program by reaching audiences

unfamiliar with the program, particularly by the emphasis at the UI SmartLiving Centers, in an attempt to create a greater pool of potential

candidates.

The Companies found that the features of the program are primarily targeted to non-electric improvements. Since the primary features of the current conservation programs are focused on electric energy savings, there is no overlap between this program and the current C&LM offerings

of the Companies.

The Companies believe that the most beneficial way to work with this program is to increase awareness in the target market as part of the ongoing marketing activities of the current C&LM programs.

Energy Conservation Loan Program

All dollar values are in \$000

Budget Projections	2002	Actuals	2003	Actuals	2004	Budget*	2005	Budget	
Labor:									
NU Labor	\$	2	\$	2	\$	-	. \$	•	
Contractor Staff	\$		\$		\$		\$	-	
Total Labor	\$	2	\$	2	\$	-	\$	_	
Materials and Supplies	\$	-	\$	1	\$	•	\$	-	
Outside Services	\$	-	\$	120	\$	119	\$	119	
Administration	\$	256	\$. 1	\$	1_	\$	<u>. 1</u> a	a)
Total	\$	258	\$	126	\$	120	\$	120	

^{*} Revised Budget as filed on 8/18/04

a) Vendor: CT Housing Investment Fund (CHIF); Services: loans and advertising for energy related home improvements; Reason: state mandated program and designated organization.

2005 Goals and Metrics Information

Demand Savings (kW reduction Goal)	0.3
Annual Energy Savings (KWh Reduction Goal)	39,962
Lifetime Energy Savings (kWh Reduction Goal)	727,312
Annual Cost Rate (\$/kWh)	\$ 3.003
Lifetime Cost Rate (\$/kWh)	\$ 0.165
Electric b/c ratio	0.22
Total Resource b/c ratio	0.53

Energy Conservation Loans

	Program Costs						
Year	Budget	Actual	% of Budget	Cost/participant	\$/LT-kWh		
2000	\$300,000	\$277,000	92%	\$1,131	1.131		
2001	\$300,000	\$258,000	86%	\$1,296	1.296		
2002	\$270,000	\$258,000	96%	\$1,856	1.856		
2003	\$120,000	\$124,000	103%	\$2,138	0.412		
2004 1	\$120,000	n/a	n/a	n/a	n/a		
2005	\$120,000	n/a	n/a	n/a	n/a		
	Goal - Participation						
Year	Goal	Actual	% of Goal	•			
2000	200	245	123%	•			
2001	297	199	67%				
2002 -	200	139	70%				
2003	150	58	39%				
2004 1	86	n/a	n/a				
2005	92	n/a	n/a	•			
	Goal - Lifetime MWh savings				Goal - Installed kW Savings		
Year	Budget	Actual	% of Budget	Year	Goal	Actual	%of Goal
2000	1,201	1,264	105%	2000	n/a	n/a	n/a
		-		2001			n/a
2007	1.261	1 023	017/0		n/a	n/a	117 CL
2001 2002	1,261 940	1,023 782	81% 83%		n/a n/a	n/a n/a	n/a
2002	940	782	83%	2002	n/a	n/a	n/a 65.0%
2002 2003	940 441	782 301	83% 68%	2002 2003 ²	n/a 0.2	n/a 0.13	65.0%
2002 2003 2004 ¹	940 441 682	782 301 n/a	83% 68% n/a	2002 2003 ² 2004 ¹	n/a 0.2 0	n/a 0.13 n/a	65.0% n/a
2002 2003	940 441	782 301	83% 68%	2002 2003 ²	n/a 0.2	n/a 0.13	65.0%
2002 2003 2004 ¹	940 441 682 727	782 301 n/a	83% 68% n/a	2002 2003 ² 2004 ¹	n/a 0.2 0	n/a 0.13 n/a	65.0% n/a
2002 2003 2004 ¹	940 441 682 727 Program Ratios	782 301 n/a	83% 68% n/a	2002 2003 ² 2004 ¹ 2005	n/a 0.2 0	n/a 0.13 n/a	65.0% n/a
2002 2003 2004 ¹ 2005	940 441 682 727 <u>Program Ratios</u> \$/Lifetime kWh	782 301 n/a n/a	83% 68% n/a n/a \$/Annualized kW	2002 2003 ² 2004 ¹	n/a 0.2 0	n/a 0.13 n/a	65.0% n/a
2002 2003 2004 ¹ 2005	940 441 682 727 <u>Program Ratios</u> \$/Lifetime kWh Plan	782 301 n/a n/a	83% 68% n/a n/a s/Annualized kW Plan	2002 2003 ² 2004 ¹ 2005 Actual n/a	n/a 0.2 0	n/a 0.13 n/a	65.0% n/a
2002 2003 2004 ¹ 2005 Year 2000	940 441 682 727 Program Ratios \$/Lifetime kWh Plan 0.250	782 301 n/a n/a Actual 0.219	83% 68% n/a n/a */Annualized kW Plan n/a	2002 2003 ² 2004 ¹ 2005 Actual n/a n/a	n/a 0.2 0	n/a 0.13 n/a	65.0% n/a
2002 2003 2004 ¹ 2005 Year 2000 2001	940 441 682 727 Program Ratios \$/Lifetime kWh Plan 0.250 0.238	782 301 n/a n/a Actual 0.219 0.252	83% 68% n/a n/a \$/Annualized kW Plan n/a n/a	2002 2003 ² 2004 ¹ 2005 Actual n/a n/a	n/a 0.2 0	n/a 0.13 n/a	65.0% n/a
2002 2003 2004 ¹ 2005 Year 2000 2001 2002	940 441 682 727 Program Ratios \$/Lifetime kWh Plan 0.250 0.238 0.287	782 301 n/a n/a Actual 0.219 0.252 0.330	83% 68% n/a n/a \$/Annualized kW Plan n/a n/a n/a	2002 2003 ² 2004 ¹ 2005 Actual n/a n/a n/a	n/a 0.2 0	n/a 0.13 n/a	65.0% n/a
2002 2003 2004 ¹ 2005 Year 2000 2001 2002 2003	940 441 682 727 Program Ratios \$/Lifetime kWh Plan 0.250 0.238 0.287 0.340	782 301 n/a n/a Actual 0.219 0.252 0.330 0.412	83% 68% n/a n/a s/Annualized kW Plan n/a n/a n/a	2002 2003 ² 2004 ¹ 2005 Actual n/a n/a n/a n/a	n/a 0.2 0	n/a 0.13 n/a	65.0% n/a
2002 2003 2004 ¹ 2005 Year 2000 2001 2002	940 441 682 727 Program Ratios \$/Lifetime kWh Plan 0.250 0.238 0.287	782 301 n/a n/a Actual 0.219 0.252 0.330	83% 68% n/a n/a \$/Annualized kW Plan n/a n/a n/a	2002 2003 ² 2004 ¹ 2005 Actual n/a n/a n/a	n/a 0.2 0	n/a 0.13 n/a	65.0% n/a

Based on revised budgets and goals filed on 8/18/04.

Demand saving goals reflect 1/13/03 goals.

Energy Conservation Loan Program

CL&P Program Notes

Budget / (FTE)

• Not applicable.

Goal

• Not applicable.

Cost/kWh (Cost/Unit)

• Not applicable.

Goal Setting Methodology

• Goal methodology based on historical data and program dollars.

Metric Changes

• Not applicable.

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Conservation & Load Management Financing (CL&P & UI)

Objective:

The objective of the joint CL&P and UI Conservation & Load Management Financing program is to provide interest-free financing to the Companies' Small Business and Municipal customers and participants of Customer Initiated Projects program enabling these customers, in conjunction with the existing incentive offerings, to implement cost-effective energy efficiency projects.

Target Market:

The target market consists of two distinct groups of commercial and industrial customers, Small Business and the Municipalities within both Companies' service territories. The Companies intend to also target the residential sector through the Customer Initiated Projects program. The Companies have modified the definition of Small Business in order to increase service to the smaller mid-size customers. Therefore, UI defines its small businesses as those customer accounts that experience a twelvemonth average peak demand of up to 150 kW or less; CL&P uses 200 kW as the maximum criteria. Municipal customers are a well-defined group including all of the accounts paid for by municipal governments.

Program Description:

Many obstacles must be addressed en route to educating these customers as to the benefits of energy efficiency. These obstacles include financial limitations, time constraints, decision-making policies, and a general lack of awareness of the benefits of energy efficient measures. Offering a financing option such as this program mitigates these obstacles, allowing customers to participate and enhance their operations by reducing energy costs.

This financing program is designed to supplement the existing incentive structures by offering interest free financing to Small Business, Municipal, and CIP customers, as ordered by the Department in its May 28, 2003 Decision in Docket No. 03-01-01. The Companies' financing mechanism enables the Companies to possibly provide financing to customers in an aggregate amount greater than would be possible if only C&LM revenues were used as the source of funds. The Companies provide the funds to make loans to customers and to charge the C&LM Fund only for certain costs related to the financings. First, the C&LM Fund is the source of interest, which is paid to the Companies on the aggregate principal amount of loans outstanding at an annual rate equal to each Company's weighted cost of capital. For purposes of this program, the applicable interest rate for new loans is reviewed from time to time, but at least annually, and adjusted as appropriate. Second, unlike the PAYS Program that would terminate electric services for non-payment of loans, the C&LM Fund is also used to fund a Loan Default reserve account to compensate for any defaulted and charged-off loans. The

amount of compensation is limited to the outstanding principal balance of the customer's loan.

The Companies have received the Department's approval, under CGS §16-43(b), to lend moneys to qualified customers on the terms and conditions described in the section headed "Incentive Strategy" below, including the provision of loans with repayment periods of one year or more.

Marketing Strategy:

The C&LM Financing program is marketed to the Small Business and Municipal customers and Customer Initiated Projects program through marketing channels that are currently used in our C&LM programs. The primary marketing methodologies are direct customer contact and direct mail. There is no timeline associated with this program because it follows the existing marketing plans for Small Business, Municipalities and Customer Initiated Projects.

Incentive Strategy:

The Companies offer customers interest free financing so that the customer's share of project costs can be billed to customers as a line item on their electric bills and paid with a single check. Currently CL&P's financing program requires separate billing. Billing system modifications that would permit line-item billing are underway and expected to be fully implemented by mid-2005. The plan for 2005 is to offer this financing program subject to the Department's approval under Conn. Gen. Stat. §16-43(b).

The terms and conditions of the C&LM Financing Program include the following:

- 1. Maximum cumulative amount outstanding (between Small Business, Municipal and Customer Initiated projects) is \$10 million over three years for CL&P projects and \$3 million over three years for UI projects.
- 2. Maximum term for loans is 30 months for Small Business and Customer Initiated projects and 36 months for municipal projects.
- 3. Maximum dollar amount eligible for financing is \$37,500 per project for UI projects. Maximum dollar amount eligible for financing is \$100,000 per project for CL&P projects.
- 4. Minimum dollar amount eligible for financing is \$500 per project. If the amount is less than \$500 it defaults to a one time receivable.
- 5. The source of the funding principal for the loan is from the Companies.
- 6. Interest is paid to the Companies at the Department approved weighted cost of capital from C&LM funds.

Goals:

The primary goal for the program is to provide Small Business financing achieving the same customer response as with the previous offering. For Municipalities and Customer Initiated Projects, the goal is to create

general awareness and acceptance of this program. Controls are in place to ensure the amount of outstanding loans in any given year will not exceed one-third of the allocated funds.

New Program Issues:

In response to the Department's request, the Companies addressed the legal issues surrounding the financing proposal in briefs submitted to the Department on October 1, 2003. The Companies request the Department to approve the C&LM Financing Program proposal under Conn. Gen. Stat. §16-43(b).

UI is increasing the Small Business customer criteria to 150 kW to better serve the smaller mid size sector. Therefore, the maximum loan amount for financing has been increased to \$37,500.

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Small Industrial and Commercial Conservation Loan (CL&P)

Objective: The objective of the CL&P Small Industrial and Commercial

Conservation Loan Program is to provide 3rd Party financing for

customers who would otherwise find it difficult to fund C&LM measures.

Target Market: Small industrial customers, defined as less than 100 employees in

CL&P's service territory within SIC 2000 – 3999 and have been in business for three years. Small commercial customers, defined as having

an average demand of 350 kW or less over the past 12 months and within

SIC 4000-9000 and have been in business for three years.

Program Description: Interest-free 3rd Party loans from a minimum of \$5,000 to a maximum of

\$100,000 per customer for energy efficient equipment replacements only. Application requirements are made through Account Executives, Project Administrators or the customer's contractors. CL&P provides program

support and quality assurance.

A 3rd party could provide loans and assume all risks associated with repayment. The interest portion of the loan should continue to be funded by a past conservation loan fund contribution which buys down the interest to zero percent. This program is not applicable with Energy Conscious Construction, Municipal, Small Business Energy Advantage and Customer Initiated Project programs as these program (excluding Energy Conscious Construction) are possibly eligible for interest free financing under CL&P's Financing program. The maximum loan payment period is six years (based on a simple payback).

In 2004, CL&P's Small C&I Loan Program received a silver Connecticut Innovations Prize from the Connecticut Quality Improvement Award

Partnership, Inc.

Marketing Strategy: Encourage a higher market penetration of energy-efficient equipment by

providing financing which supplements other program incentives for small C&I customers. Eligible customers involved with CL&P's C&I

programs (e.g. Custom Services; RFP) will be advised of loan participation requirements upon qualification of their intended

conservation projects.

New Program Issues: While this program is self-funding, available funds should be adequate for

2005, based upon past participation levels. If demand for funds is found

to be excessive, the program may be terminated.

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LOAD MANAGEMENT

ISO-NE Load Response Program Support (CL&P & UI)

Objective: The objective of the joint CL&P and UI ISO-NE Load Response Program

("Load Response Program") is to provide support to customers interested in participating in the ISO-NE Load Response Program with financial and

technical assistance.

Target Market: C&I customers capable of enrolling 100 kW of curtailable load, either at a

single site or through aggregation of multiple facilities are eligible for this

program.

Program Description: This Load Response Program is designed to promote customer enrollment

in one of several ISO-NE operated load response programs. Under the Load Response Program, customers may choose to enroll with ISO-NE through their distribution utility or through their own curtailment service provider. As necessary, CL&P and UI intend to provide enrolling customers with the ISO-NE required internet based communications system, as appropriate. CL&P and UI also can provide enrolling

costs for data, phone, or metering connections.

Utilizing a current Department of Environmental Protection (DEP) Permit, customers may be able to run their emergency generators to reduce load off of the grid under emergency conditions. CL&P and UI

customers with a one-time set-up incentive of \$400 - \$1,500 to cover

will provide direction to customers interested in pursuing the

requirements of compliance regarding the operation of their emergency

generators for load response purposes.

Marketing Strategy: The Load Response Program will be marketed directly by CL&P and UI

through face-to-face sales contacts and through participation in C&I Load

Management Services or other C&LM program participation, as appropriate. The principal customer contact for the Load Response

Program is the CL&P or UI Account Executive. Marketing tools consist of written program descriptions and program offerings provided to

customers. Also, CL&P and UI may conduct a Load Response Program seminar, if appropriate, in late spring 2005 to highlight program changes

for the coming year.

Incentive Strategy: Under the Load Response Program, incentives are provided by ISO-NE as

part of its load response program. CL&P and UI offer enrolling

customers a one-time set-up incentive of \$400-\$1,500 to cover costs for

data, phone or metering connections.

Goals:

CL&P Goals: The goal for the ISO-NE Load Response Program support is for enrollment in the ISO program of 10 MW with a program budget of \$400,000.

UI Goals: The goal for the ISO Load Response Program support is for enrollment in the ISO program of xx(TBD) MW with a program budget of \$113,119.

New Program Issues:

Common to both CL&P and UI:

The Connecticut DEP is considering modifying the provision of the current emergency engine permit for customer standby generation to allow for operation of these engines under the emergency engine permit when ISO-NE calls Demand Response events. If this permit change is in place when the companies finalize their program designs in the spring of 2005, this permit change may be conveyed to customers at the spring kick-off meeting.

Load Management

ISO-NE Response Program Support

All dollar values are in \$000

Budget Projections	2002 A	ctuals	<u>2003</u>	Actuals	2004	Budget*	2005	Budget	
Labor:									
NU Labor	\$	294	\$	530	\$	158	\$	98	
Contractor Staff	\$	263	\$	130	\$	_	\$	<u>58</u>	
Total Labor	\$	557	\$	660	\$	158	\$	156	
Materials & Supplies	\$	-	\$	-	\$	2	\$	5	
Outside Services Incentives (Supplemental	\$	663	\$	2,850	\$	125	\$	160	a)
Payments)	\$	492	\$	2,642	\$	_	\$	75	b)
Incentives (Site equipment, meter, phone, etc)	\$	-	\$	-	\$	20	\$	30	c)
Marketing	\$	11	\$	40	\$	15	\$	20	d)
Administrative Expenses	\$	-	\$	-	\$	15	\$	20	e)
Other	\$		\$	375_	\$	15	\$	9	_
Total	\$	1,723	\$	6,250	\$	350	\$	475	

^{*} Revised Budget as filed on 8/18/04

- a) Includes communications software usage fees and meter maintenance fees.
- b) On October 19, 2004, the ECMB recommended that CL&P implement an ISO-NE Price Response Supplemental Payment Pilot Program.
- c) Incentives paid to customers for facility upgrades that help enable load response.
- d) Dollars for providing the participants with the latest program information and refresher training
- e) Employee expenses including mileage, training, conference attendance and misc.

2005 Goals and Metrics Information

Demand Savings (kW Reduction Goal)	10,000	
Annual Energy Savings (kWh Reduction Goal)	N/A	
Lifetime Energy Savings (kWh Reduction Goal)	N/A	
Annual Cost Rate (\$/kWh)	N/A	
Lifetime Cost Rate (\$/kWh)	N/A	
Electric b/c ratio	3.84	based on \$150/kW
Total Resource b/c ratio	3.84	based on \$150/kW

Load Management

ISO-NE Load Response Supplemental Payments & ISO-NE Response Program Support

		Program Costs		
Year	Budget	Actual	% of Budget	\$/MW
2000	\$1,799,000	\$2,750,000	153%	
2001	\$1,270,000	\$2,750,000	217%	
2002	\$1,908,000	\$1,722,000	90%	n/a
2003	\$2,805,000	\$2,437,000	87%	n/a
2004 1	\$350,000	n/a	n/a	n/a
2005	\$475,000 ²	n/a	n/a	n/a
		SWCT Goal - MW Enrollment		
Year	Budget	Actual	% of Budget	
2002	n/a	n/a	n/a	•
2003 ³	20	17	85%	
	nc	on-SWCT Goal - MW Enrollme	<u>nt</u>	
Year	Budget	Actual	% of Budget	
2002	n/a	n/a	n/a	
2003 ³	20	25	125%	
	_			
		tatewide Goal - MW Enrollmen		
2004 1	16 ⁴	n/a	n/a	
2005	10 4	n/a	n/a	
		Program Ratios		
	\$/Lifetin	ne kWh	\$/Annualized k	W
Year	Plan	Actual	Plan	Actual
2002	n/a	n/a	n/a	n/a
2003	n/a	n/a	\$70	\$58
2004 1	n/a	n/a	\$22	n/a
2005	n/a	n/a	n/a	n/a

Based on revised budgets and goals filed on 8/18/04.

Includes Supplemental Price Response Pilot Program.

Prior to 2004 goals were split between SWCT and non-SWCT.

ISO-NE Load Response Program Support.

Load Management

CL&P Program Notes

Budget / (FTE)

- .93 FTEs.
- 2004 budgets-decreased compared to 2003 actuals.
 - For 2005 supplemental incentives will be offered for Price Response participants.
 - 2005 budgets decreased compared to 2004 estimated actuals.

Goal

• For 2005 goals are associated with price sensitive load response programs. Supplemental incentives will be offered.

Cost/kWh (Cost/Unit)

• For 2005, using budgeted costs, the estimated average cost / kW enrolled is \$47.5/kW.

Goal Setting Methodology

• The goals for 2005 were derived by modifying the 2004 goals based on program and market changes.

Metric Changes

N/A

ISO Load Response Program Support (Including ISO Load Supplemental Payments)

Budget Projections	2003 Act		2004 Bud		2005 Bud
Ul Labor	\$ 29,437	\$	22,419	\$	23,604
Materials & Supplies	\$ 9	\$	-	\$	-
Outside Services	\$ 96,879	\$	86,119	\$	84,934
Other Labor	\$ -	\$	-	\$	-
Incentives	\$ 47.938	\$	-	\$	50,000
Marketing	\$ 2,867	\$	4,581	\$	4,581
Other	\$ 	\$	-	\$	•
Administrative Expenses	\$ 194	\$_	•	<u>\$</u>	
Total	\$ 177,324	\$	113,119	\$	163,119
All Other Charges	\$ (7,896)	\$	_	\$	_
Total ·	\$ 169,428	\$	113,119	\$	163,119

Power Factor Improvement Program (CL&P)

Objective:

The Power Factor Improvement Program improves the power factor of eligible Rate 58 customers that might have their demand charges billed on the basis of kVA, instead of kW. This change is anticipated to begin on or about June 1, 2005. The Power Factor Improvement Program may continue to be available to eligible Rate 57 customers that did not participate in 2004. Rate 57 customers have had their demand charges billed on a kVA basis since June of 2004.

Target Market:

In 2004, the Power Factor Improvement Program targeted industrial customers on Rate 57 that had a trailing twelve month average power factor value, coincident with peak kW (during the on-peak period), that was less than 0.766. In 2005, the Power Factor Improvement Program will target eligible commercial customers on Rate 58. CL&P will generate a list of eligible Rate 58 customers. These eligible Rate 58 customers can be encouraged to participate in the Power Factor Improvement Program. Upon completion of eligible Rate 57 customers and Rate 58 customers, CL&P can attempt to enroll eligible Rate 55, and Rate 56 customers in the Power Factor Improvement Program, if deemed appropriate at that time.

Program Description:

The Power Factor Improvement Program is prescriptive in nature. CL&P will offer incentives to its eligible Rate 58 customers and will offer incentives to raise the level of the power factor at their respective facilities to the revenue neutral point. CL&P can offer the customers an incentive to help offset the cost of capacitors needed to accomplish the power factor improvement. CL&P may file more details with the DPUC once the rate tariff has been submitted, if found to be appropriate.

The Power Factor Improvement Program may continue to be available to eligible Rate 57 customers that did not participate in 2004, as appropriate.

Marketing Strategy:

Under the Power Factor Improvement Program, CL&P may conduct a program roll-out for the services targeting Rate 58 customers. This roll-out may encompass a pre-approval process for customers and/or vendors seeking pre-approval of their intent to install capacitors in order to improve the power factor of their facility (or their customer's facility in the case of a vendor). The Power Factor Improvement Program will be administered by a CL&P Program Administer assigned to the program. Generally, CL&P uses two approaches for marketing the Power Factor Improvement Program, as appropriate. First, CL&P personnel can be utilized to call on target market customers. Second, leads can be generated by vendors and/or manufacturer representatives making calls on eligible customers.

Incentive Strategy:

Under the Power Factor Improvement Program, customer incentives can be based on fifty percent (50%) of the installed cost for capacitors, and ancillary equipment, necessary to improve the power factor to a revenue neutral level. The capacitors can be identified in terms of the total kVAR necessary to accomplish the desired improvement. Incentives can be provided up to \$60 per kVAR, including the cost of ancillary equipment, such as, harmonic filters, switches or extraordinary installation expenses.

Goals:

CL&P has designed its Power Factor Improvement Program to free-up system load (kW) and mitigate the potential negative rate impacts on customers with below average power factors. The free-up system load (kW), for Rate 58 and Rate 57 in calendar year 2005 are 5,000 kW respectively. The estimated budget is \$854,000.

Power Factor Improvement Program

All dollar values are in \$000

Budget Projections	2004 Budget*		2005 B	<u>udget</u>	
Labor:					
NU Labor	\$	60	\$	61	
Contractor Staff	\$	20	\$	32	
Total Labor	\$	80	\$	93	
Materials & Supplies	\$	2	\$	2	
Outside Services	\$	25	\$	20	a)
Incentives	\$	238	\$	734	. b)
Marketing	\$	-	\$	-	
Administrative Expenses	\$	5	\$. 5	
Other	\$		\$		
Total	\$	350	\$	854	

^{*} Revised Budget as filed on 8/18/04

a) Fees to assess power factor data analysis reports and project applications submitted by power factor vendors, conduct post installation inspections and provide general technical support.

b) Incentives: Incentives paid to customers to install power factor correction equipment.

2005 Goals and Metrics Information

Damas d Carle as (AM) as deather (Carl	
Demand Savings (kW reduction Goal)	5,000.0
Annual Energy Savings (KWh Reduction Goal)	N/A
Lifetime Energy Savings (kWh Reduction Goal)	N/A
Annual Cost Rate (\$/kWh)	N/A
Lifetime Cost Rate (\$/kWh)	N/A
Electric b/c ratio	7.65
Total Resource b/c ratio	4.11

Power Factor

		Program Cos	<u>ts</u>	
Year	Budget	Actual	% of Budget	\$/MW
2004 1	\$350,000	n/a	n/a	n/a
2005	\$854,000	n/a	n/a	n/a
		Goal - MW Enrol	lment	
Year	Budget	Actual	% of Budget	
2004 1	9	n/a	n/a	
	Goz	al – MW Enrolled or	Installed	
Year	Budget	Actual	% of Budget	
2005	5.0	n/a	n/a	
		Program Ratio	os	
	\$/Lifetime	kWh	\$/Annualized k	w
Year	Plan	Actual	Plan	Actual
2004	n/a	n/a	n/a	n/a
2005	n/a	n/a	171	n/a

Based on revised budgets and goals filed on 8/18/04.

Power Factor

CL&P Program Notes

Budget / (FTE)

- 0.6 FTEs.
- 2005 labor budget increased (16%) compared to 2004 budget.

Goal

- For 2005 goals are associated with contracted or installed projects associated with eligible Rate 58 customers that choose to participate and contracting projects associated with eligible Rate 57 customers, that were not contracted in 2004, or installing projects associated with eligible Rate 57 customers that were contracted in 2004 or 2005.
- For 2005, goals are lower than 2004 because the MW loads associated with eligible Rate 58 customers are lower than those associated with eligible Rate 57 customers and most of the eligible Rate 57 customers were contracted in 2004.

Cost/kW (Cost/Unit)

• For 2005, estimated average cost / kW contracted has increased. This is the case because there is a similar quantity of eligible Rate 58 customers compared to 2004's Rate 57 customers, but each one has less contractible kW, however administrative costs track the quantity of customers not contractible load.

Goal Setting Methodology

• The goals for 2005 were derived based on contracted and installed MW associated with eligible Rate 58 customers and contracted MW associated with eligible Rate 57 customers that were not contracted in 2004 or installed MW associated with eligible Rate 57 customers that were contracted in 2004 or 2005.

Metric Changes

 Quantity for contracted MWs was the metric in 2004, but the metric for 2005 will be contracted or installed MWs associated with eligible Rate 58 customers and contracted MWs associated with eligible Rate 57 customers that were not contracted in 2004 or installed MW associated with eligible Rate 57 customers that were contracted in 2004 or 2005. This page intentionally left blank.

Demand Reduction Program (CL&P)

Objective:

The objective of the CL&P Demand Reduction program is to help customers understand how much demand (kW) they use at different times of the day. Other objectives are to provide the customer insight on potential load reduction opportunities and to develop a facility-specific strategy to reduce kW demand.

Target Market:

The Demand Reduction program (DRP) targets C&I customers of any size that are capable and willing to control kW demand during peak times through real time monitoring and control.

Program Description:

The Companies can provide incentives for cost effective projects which provide peak load kW (or kW and kWh) reductions in C&I and large Residential Complex applications. Measures to support these markets include remote load control and curtailment (e.g., HVAC, lighting, water heating, vending machines, etc.) and load aggregation projects. The Companies may build on experience gained from their 2004 Demand Reduction Program, where it was determined that the size of the incentive has limited participation.

Marketing Strategy:

This program may be marketed by emphasizing a combination of energy and demand savings to customers, if found to be appropriate.

The program was introduced in July 2003. In 2005 the program will be marketed under the Custom Services umbrella, if appropriate, to enable and promote a more comprehensive approach to kW and kWh savings. Marketing will be directed to SWCT Towns with an overall budget of \$10,000.

The program may also be marketed at Trade Shows and through the Community Based Program.

Incentive Structure

Incentives for qualifying projects are intended to be the lesser of \$500/kW or 50% of installed cost in SWCT and \$300/kW or 50% of installed cost outside of SWCT. Based on a typical 2004 Infrastructure project incentives are offered as follows:

Small Commercial Customer (@ \$300/kW):

Project Cost: \$10,914

Measure	kW Savings	<u>Incentive</u>
Hot Water Heater Control	6.01	\$1,803
Vending Machine Control	1.15	\$345
Water Cooler Control	1.23	\$369
Lighting (dimming control)	.20	\$60
Total	8.59	\$2,577

Goals:

The 2005 goal for the Demand Reduction Program is to reduce or avoid commercial, industrial and municipal demand by 606 kW with a target

budget of \$400,000.

New Program Issues:

In 2005 DRP will be administered under the Custom Services program. This may allow CL&P to efficiently and effectively offer comprehensive kWh and kW saving project technical support, analysis and incentives.

Demand Reduction

All dollar values are in \$000

All size Commercial and Industrial customers **Budget Projections** 2003 Actuals 2004 Budget* 2005 Budget Labor **NU Labor** \$ \$ 21 \$ 51 \$ Contractor Staff Total Labor \$ 21 \$ \$ 51 **Outside Services** \$ 15 \$ 30 a) \$ Materials & Supplies \$ Incentives \$ \$ 50 303 b) Marketing \$ 10 \$ 10 C) Administrative Expenses \$ \$ 2 \$ 3 d) Other. 3 \$ Total 100 400

- a) Outside engineering services to Review / QA proposals. New kW savings strategies will be proposed that will require detailed QA to determine savings and verify costs prior to committing project funding.
- b) Incentives paid for the installation of cost effective demand saving projects
- c) Market program to customers, trade allies and professional organizations.
- d) Employee expenses including mileage, training, conference attendance and misc.

2005 Goals and Metrics Information

Demand Savings (kW reduction Goal) Annual Energy Savings (kWh Reduction Goal) Lifetime Energy Savings (kWh Reduction Goal)		606.0 2,068,964 20,689,641
Annual Cost Rate (\$/kWh) Lifetime Cost Rate (\$/kWh)	\$ \$	0.193 0.019
Electric b/c ratio Total Resource b/c ratio		4.16 2.54

^{*} Revised Budget as filed on 8/18/04

Demand Reduction

2003

2004 2

2005

		Program Costs					
Year	Budget	Actual	% of Budget				
2003	\$250,000	n/a	n/a				
2004 ²	\$100,000	n/a	n/a				
2005	\$400,000	n/a	n/a				
		Goal - Participation	<u>1</u>				
Year	Goal	Actual	% of Goal				
2003	n/a	n/a	n/a				
2004 ²	n/a	n/a	n/a				
2005	88	n/a	n/a	•			
		Goal - kW Savings	i.		Goa	al - Installed I	kW Savings
Year	Goal (kW)	Actual (kW)	% of Goal	Year	Goal	Actual	%of Goal
2003	n/a ¹	n/a	n/a	2003	n/a	n/a	n/a
2004 ²	5,463	n/a	n/a	2004 ²	n/a	n/a	n/a
2005	20,690	n/a	n/a	2005	n/a	n/a	n/a
		Program Ratios					
	\$/Lifet	ime kWh	\$/Annualized	kW			
Year	Plan	Actual	Plan	Actual			

n/a

625

660

n/a

n/a

n/a

n/a

0.018

0.019

n/a

n/a

n/a

Included in Load Management for 2003. Based on revised budgets and goals filed on 8/18/04.

Demand saving goals reflect 1/13/03 goals.

Demand Reduction Program

CL&P Program Notes

Budget / (FTE)

- .5 FTEs.
- Increase in outside services budget to provide technical QA service for emerging Demand Reduction technologies

Goal

- Demand Savings (kW Reduction Goal) = 606 kW.
- Lifetime Energy Savings (kWh Reduction Goal) = 20,689.641 kWh.

Cost/kWh (Cost/Unit)

- $\frac{1}{2}$ \$\text{Annualized kW} = \frac{1}{2}660/\text{kW}.
- $\frac{\text{$}/\text{Lifetime kWh} = \$0.019/\text{kWh}.}{\text{}}$

Goal Setting Methodology

• The Demand Reduction program was based on 2003 actuals since the program did not exist in 2002.

Metric Changes

• Not Applicable.

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RENEWABLES INCENTIVES (CL&P & UI)

Objective: To encourage the use of various renewable technologies which

involve an overall electric energy efficiency improvement for the site.

Target Market: The program will target CL&P and UI customers.

Program Description: This program is intended to encourage the use of renewable

technologies. This program will offer installation incentives and provide a forum for making potential renewable technology users aware of the opportunities associated with these technologies. Projects with renewable technologies can be evaluated on a case by case basis and if deemed cost effective, may be eligible for incentives

depending based on the application.

Marketing Strategy: Both CL&P and UI may promote this Program to the customers

within their respective service territories. The renewable program may be accomplished by utilizing several strategies which are under

review.

Incentive Strategy: CL&P and UI intend to evaluate projects involving renewable

technologies on a case by case basis with incentives based on the application. In each case any incentives awarded will not be less than the amount identified in the Final Decision of Docket 03-11-01 PH1.

Goals: Promotion of renewable energy.

CL&P's estimated budget is \$400,000. UI's proposed budget is \$150,000.

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Renewables (Pilot)

All dollar values are in \$000

	All size Commercial and Industrial customers				
Budget Projections	2004 Bu	2004 Budget*		<u>udget</u>	
Labor:					
NU Labor	\$	15	\$	35	
Contractor Staff	\$	5	\$	5	
Total Labor	\$	20	\$	40	
Materials & Supplies	\$	- .	\$	5	
Outside Services	\$	5	\$	40	
Incentives	\$	23	\$	300	
Marketing	\$	-	\$	5	
Administrative Expenses	\$. 1	\$	5	
Other		11	. \$	5	
Total	\$	50	\$	400	

^{*} Revised Budget as filed on 8/18/04

2005 Goals and Metrics Information

Demand Savings (kW reduction Goal) Annual Energy Savings (kWh Reduction Goal) Lifetime Energy Savings (kWh Reduction Goal)	N/A N/A N/A
Annual Cost Rate (\$/kWh) Lifetime Cost Rate (\$/kWh)	N/A N/A
Electric b/c ratio Total Resource b/c ratio	N/A N/A

Renewable Incentives (Pilot)

Not a goals based program.

Renewable Incentives (Pilot)

CL&P Program Notes

Budget / (FTE)

- 0.4 FTEs.
- The Budget increased based on a modification of the program.

Goal

• Not applicable

Cost/kWh (Cost/Unit)

• Not applicable

Goal Setting Methodology

• Not applicable

Metric Changes

• Education and program development were the metrics for 2004, the metric for 2005 will be providing incentives for a "to be determined" (kW amount) worth of renewable projects.

Renewables Incentives *

Budget Projections	2003 Act		2004 Bud			2005 Bud
UI Labor	\$	-	\$	-	\$	-
Materials & Supplies	\$	-	\$	1,000	\$	1,000
Outside Services (a)	\$	-	\$	27,000	\$	27,000
Other Labor	\$	-	\$	-	\$	-
Incentives (b)	\$	-	\$	146,500	\$	106,500
Marketing (c)	\$	-	\$	15,000	\$	15,000
Other	\$	-	\$	-	\$	-
Administrative Expenses	\$	-	\$_	500	<u>\$</u>	500
Total	\$	-	\$	190,000	\$	150,000
All Other Charges	\$		<u>\$</u>	-	<u>\$</u>	
Total	\$	-	\$	190,000	\$	150,000

^{*} Joint CL&P and UI Program for 2005

- (a) Consultant services
- (b) Customer incentives
- (c) Bill stuffer, selected advertising

RESEARCH, DEVELOPMENT AND DEMONSTRATION (CL&P & UI)

Objective:

The objective of CL&P's Research, Development and Demonstration Program ("RD&D Program") is the advancement of new energy efficient measures and more cost effective and efficient renewable energy. CL&P and UI participate in the one common RD&D program.

Target Market

Under the RD&D Program, the market will be limited to energy efficiency and distributed resources RD&D projects funded in previous years. No new RD&D projects will be funded in 2005, but CL&P will continue to administer continuing projects.

Program Description:

The ECMB has approved 2005 budgeting for the multi year fuel cell technology advancement project being performed by GenCell (formerly Allen Engineering). The GenCell program has leveraged co-funding from the Connecticut Clean Energy Fund and is actively seeking additional funding from the U.S. Department of Energy (DOE) and others. GenCell Corporation of Southbury, CT is located within SWCT. GenCell's fuel cell development program is in direct support of resolving the capacity constraints in SWCT.

The RD&D Program will also continue active participation on the Daylight Dividends Program Steering Committee during 2005. Daylight Dividends Program is a three year joint research program led by the U.S. DOE and New York State Energy Research and Development Authority (NYSERDA) in partnership with CL&P and the Association of State Energy Research and Technology Transfer Institutions (ASERTTI) members collectively as sponsors. ASERTTI members include: California Energy Commission, Iowa Energy Center, Lighting Research Center, North Carolina Daylighting Consortium, and Northwest Energy Efficiency Alliance. The Steering Committee reviews existing programs, research results and technological barriers to effective, energy efficient use of day-lighting and sets priorities for project activities to be undertaken to overcome these barriers and/or knowledge gaps. Current activities of the Daylight Dividends Research Program may be reviewed at their web site: www.daylightdividends.org.

Engineering and marketing support may be provided for RD&D projects previously funded to help them acquire alternative funding, review their reports, and help commercialize their projects to the extent possible.

In 2004, CL&P's Research Development and Demonstration Program received a silver Connecticut Innovations Prize from the Connecticut Quality Improvement Award Partnership, Inc.

Goals:

The goal of the RD&D Program is to maximize prior-year investments of RD&D project funding, and assist with leveraging additional funding from other sources for follow-on development and/or commercialization activities with an estimated budget of \$1,044,000 for CL&P and

\$221,860 for UI.

New Program Issues:

The 2005 RD&D program funding level does not accommodate the RFP solicitation of new energy saving or distributed resource projects for project funding consideration.

Research, Development and Demonstration

All c	tollar	values	are	in	\$000
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Budget Projections	2002 A	ctuals	2003 Actuals		2004 Budget*		2005 Budget	
Labor:								
NU Labor	\$	370	\$	485	\$	53	\$	58
Contractor Staff	\$	200	\$	-	\$	-	\$.	-
Total Labor	\$	570	\$	485	\$	53	\$	58
Marketing and Materials	\$	140	\$	25	\$	-	\$	-
Outside Services	\$	3,233	\$	3,900	\$	1,137	\$	976 a)
Fees and Incentives	\$	-	\$	-	\$	-	\$	<u>-</u>
Administrative Expense	\$	•	\$	-	\$	5	\$	5
Other	\$		\$.	<u> </u>	\$	5	. \$	5
Total	\$	3,943	\$	4,410	\$	1,200	\$	1,044

^{*} Revised Budget as filed on 8/18/04

a) Funding for: Continuation of GenCell Fuel Cell Development Project \$500K.
 Daylight Dividends Program Steering Committee with LRC \$50K;
 Engineering consultant(s) due diligence reviews & site visits as required \$25;
 Anticipated continuation of one or more on-going RD&D projects - subject to RD&D Staff and Policy Working Group (PWG) review, recommendation and ECMB funding approval \$401K.

2004 Goals and Metrics Information - The RD&D Program does not have a kWh savings metric.

Demand Savings (kW Reduction Goal)	N/A
Annual Energy Savings (KWh Reduction Goal)	N/A
Lifetime Energy Savings (kWh Reduction Goal)	N/A
Annual Cost Rate (\$/kWh)	N/A
Lifetime Cost Rate (\$/kWh)	N/A
Electric b/c ratio	N/A
Total Resource b/c ratio	N/A

Note: The target goal is two RD&D projects advanced to the "ready-to-go" status.

This includes projects that become commercialized and those that have major pilot initiatives launched. Only those projects that have significant kWh or kW savings that meet benefit cost criteria will qualify for the "ready-to-go" status. Performance criteria is developed by the RD&D Policy Working Group and/or ECMB.

Research, Development & Demonstration

Budget Projections	2003 Act		2004 Bud		2005 Bud
UI Labor	\$	- \$	-	\$	-
Materials & Supplies	\$	- \$	-	\$	-
Outside Services	\$	- \$	121,860	\$	221,860
Other Labor	\$	- \$	-	\$	-
Incentives	\$	- \$	-	\$	-
Marketing	\$	- \$	-	\$	-
Other	\$	- \$	-	\$	-
Administrative Expenses	<u>\$ 6,00</u>	<u>o</u> \$	-	<u>\$</u> _	-
Total	\$ 6,00	0 \$	121,860	\$	221,860
All Other Charges	<u>\$ 22,14</u>	<u>o</u> <u>\$</u>		\$	_
Total	\$ 28,14	0 \$	121,860	\$	221,860

Administration

All dollar values are in \$000

Budget Projections	2002 Ac	<u>tuals</u>	2003 Actuals		2004 Budget*		2005 Budget	
Labor:								
NU Labor	. \$	799	\$	463	\$	495	\$	440
Contractor Staff	\$	•	\$	35_	_ \$		\$.	100
Total Labor	\$	799	\$	498	\$	495	\$	540
Geo Thermal Consortium	\$	50	\$	-	\$	•	\$.
Materials & Supplies	\$	28	\$	18	\$	16	\$	16
Outside Services	\$	-	\$	256	\$	- ,	\$	
Incentives	\$	-	\$	114	\$	•	\$	-
Marketing	\$	- .	\$	126	\$	-	\$	-
Other	\$	21.	\$	-	\$	90	\$	50 a)
Administration	\$	-	\$	1,304	\$	-	\$	<u>:</u>
Employee Expenses	\$	33	\$	15	\$	19	\$	20
Employee Training	\$		\$	-	\$\$		\$	20
Total	\$	931	\$	2,331	\$	620	\$	646

^{*} Revised Budget as filed on 8/18/04

a) Budget includes industry association expenses, sponsorship fees, outside services

<u>Administration</u>

Budget Projections		2003 Act		2004 Bud		2005 Bud
Ul Labor (a)	\$	333,770	\$	269,440	\$	275,662
Materials & Supplies	\$	29,491	\$	5,000	\$	5,000
Outside Services	\$	100,334	\$	76,319	\$	71,097
Other Labor	\$	49,247	\$	-	\$	**
Incentives	\$	-	\$	-	\$	-
Marketing	\$	2,031	\$	-	\$	-
Other	\$	193	\$	-	\$	-
Administrative Expenses	<u>\$_</u>	10,802	\$_	3,000	<u>\$</u>	2,000
Total	\$	525,868	\$	353,759	\$	353,759
All Other Charges	<u>\$_</u>	_	<u>\$</u>		<u>\$</u>	-
Total	\$	525,868	\$	353,759	\$	353,759

⁽a) 3.2 FTE

CL&P Standard Filing Requirement

Planning and Evaluation

All dollar values are in \$000

Budget Projections	2002 A	ctuals	2003	<u>Actuals</u>	200	4 Budget*	200	5 Budget
Labor:								
NU Labor	\$	598	\$	382	\$	378	\$	614
Contractor Staff	\$	167_	\$	11_	\$	30	\$	42
Total Labor	\$	765	\$	393	\$	408	\$.	656 a)
Outside Services	\$	425	\$	142	\$	484	\$	1,603 b)
NEEP PEARL - Lighting	\$	81	\$	-	\$	85	\$	-
Research	\$	14	\$	-	٠ \$	-	\$. •
Materials & Supplies	\$	3	\$	3	\$	5	\$: 3
Incentives	\$	-	\$	99	\$	-	\$	
Marketing	\$		\$	- 5	\$	•	\$	-
Administration	\$	-	\$	163	\$	-	\$	-
Other	\$	15	\$	6	\$\$	18	\$	15
Total	\$	1,303	\$	811	\$	1,000	\$	2,277

^{*} Revised Budget as filed on 8/18/04

a) Includes Planning, Evaluation and Regulatory tracking, reporting and compliance

b) 2004 Outside Services Budget increase due to reduction in number of planned evaluation studies

UI Standard Filing Requirement

Planning & Evaluation

Baseline Assumptions:

Market - C&I new construction, renovation, equipment replacement, and fit-out

Budget Projections		2003 Act		2004 Bud		2005 Bud
Ul Labor (a)	\$	392,927	\$	319,800	\$	280,050
Materials & Supplies	\$	185	\$	-	\$	-
Outside Services	\$	85,397	\$	215,574	\$	455,324
Other Labor	\$	-	\$	-	\$	-
Incentives	\$	-	\$	-	\$	-
Marketing	\$	623	\$	-	\$	-
Other	\$	-	\$	-	\$	-
Administrative Expenses	\$	8,112	\$_	7,637	<u>\$</u>	7,637
Total	\$	487,244	\$	543,011	\$	743,011
All Other Charges	\$_	-	\$_	_	<u>\$</u>	_
Total	\$	487,244	\$	543,011	\$	743,011

⁽a) 2.5 FTE

CL&P Standard Filing Requirement

Information Technology

All dollar values are in \$000

Budget Projections	2002	<u>Actuals</u>	2003	Actuals	<u>2004 I</u>	Budget*	2005 B	ludget	
Labor:									
NU Labor	\$	679	\$	152	\$	80	\$	41.	
Contractor Staff	\$	242	\$	50	\$	-	\$	105	
Total Labor	\$	921	\$	202	\$	80	\$	146	
Leases Software, Hardware and	\$	46	\$	-	\$	-	\$	-	
Leases	\$	- .	\$	-	\$	-	\$	64	a)
Outside Services Desktop Operations	\$	17	\$	(3)	\$	- .	\$,=	
Support Application Enhancements	\$	-	\$	-	\$	85	\$	50	b)
& Development .	\$	-	\$	-	\$	857	\$	1,665	c)
Materials & Supplies/Other	\$	291	\$	28	\$	11	\$	-	
Incentives	\$	-	\$	(7)	\$	-	\$	-	
Administration	\$	-	\$	87	\$		\$	-	
Employee Expenses	\$	3	\$	11	\$	-	\$	_	_
Total	\$	1,278	\$	308	\$	1,033	\$	1,925	

^{*} Revised Budget as filed on 8/18/04

a) Process and tracking software

b) Day-to-day support of desktop hardware and operating system software, including problem resolution and repairs

c) Enhancements to existing applications in response to changing business requirements or NU computing infrastructure; Development of new applications to support new C&LM programs and reporting requirements. The C&LM Tracking and Reporting Improvement Initiative and WRAP are included.

UI Standard Filing Requirement

Information Technology

Budget Projections	2003 Act	<u>2</u>	004 Bud	2	005 Bud
UI Labor	\$ 5,954	\$	34,341	\$	37,794
Materials & Supplies	\$ 162,476	\$	73,504	\$	73,504
Outside Services	\$ (1,688)	\$	98,408	\$	12,000
Other Labor	\$ 131,661	\$	-	\$	136,738
Incentives	\$ -	\$	-	\$	-
Marketing	\$ -	\$	-	\$	-
Other	\$ -	\$	191,783	\$	138,000
Administrative Expenses	\$ 4,088	_\$_		.\$	-
Total	\$ 302,491	\$	398,036	\$	398,036
All Other Charges	\$ _	\$		\$	<u>-</u> ,
Total	\$ 302,491	\$	398,036	\$	398,036

CHAPTER FIVE: ACTIVITIES IN SOUTHWESTERN CONNECTICUT

Since the spring of 2002, there has been a large interest in using C&LM programs to alleviate potential electricity shortages and reduce transmission constraints in SWCT. The Department addressed these issues in Docket Nos. 02-01-22, 02-04-12, 03-01-01 and 03-11-01. In this Plan, the Companies propose to continue focusing many of the C&LM programs and activities to support this critical area. In 2004, the Companies provided targeted efforts in the priority towns of the Norwalk-Stamford sub-area as designated by ISO-NE. This focus extended to two additional towns in UI's territory (Stratford and Shelton) that are partially supplied from the Norwalk-Stamford sub-area. This group of towns is referred to as the Norwalk-Stamford sub-area. The remaining SWCT region² was also the focus of increased C&LM program emphasis in 2004. Within this secondary region, an additional priority was placed on the Danbury area.

The SWCT C&LM focus has been successful in enhancing electric system reliability during peak periods and reducing the Federally mandated congestion charges to customers. While SWCT represents approximately 18% of the Companies' revenues, in 2005 the Companies plans to focus approximately 31% of the overall C&LM statewide program budget to continue with conservation and load management successes in that critical area.

As part of the continuing SWCT focus, the Companies seek to deepen their relationships previously established with the priority towns of Norwalk and Shelton under the Community Based Programs. The Companies are continuing to promote participation in existing energy efficiency programs and provide enhanced and innovative ways for the communities to save resources

The Companies continue with the successful strategy of using proven delivery mechanisms from the existing stable of core programs to provide the focused initiatives in Norwalk-Stamford. These programs have proven their ability to provide energy and capacity reductions across the state for a number of years. The Companies utilize a combination of focused marketing tactics as well as special increased incentives to provide the desired load relief. CL&P continues to leverage the

Wallingford, while located within the SWCT geographic area, is served by the Municipal Electric Co, and doesn't contribute to the C&LM fund. It is, therefore, not eligible for participation in C&LM programs.

¹ The CL&P Norwalk-Stamford sub-area is comprised of Darien, Greenwich, New Caanan, Norwalk, Redding, Ridgefield, Stamford, Weston, Westport and Wilton.

The UI Norwalk-Stamford sub-area is comprised of Bridgeport, Easton, Fairfield, Trumbull, Stratford and Shelton.

² The CL&P SWCT towns, exclusive of the Norwalk-Stamford sub-area, include Beacon Falls, Bethany, Bethel, Branford, Bridgewater, Brookfield, Cheshire, Danbury, Meriden, Middlebury, Monroe, Naugatuck, New Fairfield, New Milford, Newtown, Oxford, Prospect, Roxbury, Seymour, Sherman, Southbury, Southington, Waterbury, Watertown, Wolcott and Woodbury.

The UI SWCT towns, exclusive of the Norwalk-Stamford sub-area, include Ansonia, Derby, East Haven, Hamden, Milford, New Haven, North Branford, North Haven, Orange, West Haven and Woodbridge.

existence of its regional offices in the SWCT area. These regional offices provide CL&P the opportunity to maximize resources and opportunities to reach out to design and architect teams in the New York area that provide services to SWCT. The following program features may be used to increase participation in Norwalk-Stamford.

SWCT MARKETING CAMPAIGN

The Companies seek to continue their successful campaign to raise consumer awareness of the importance of shifting loads away from peak hours. The Companies plan to build on the previous years successes of the "Wait 'til Eight" campaign with additional general awareness advertising in 2005.

RESIDENTIAL PROGRAMS

- The Community Based Program is aimed at increasing awareness of and interest in energy efficiency by having a marketing umbrella for all of the Companies programs, with a special emphasis on small commercial and residential customers, as well as schools and other municipal buildings. The increased emphasis on tune-ups of existing equipment and the opportunities such services create for potential sales of new, Energy Star qualifying equipment to replace existing but inefficient and under-performing equipment, will likely lead to intense, localized campaigns for/by the Residential Heating and Cooling in these communities. The Companies seek to continue their partnerships with the towns in the Norwalk-Stamford sub-area in 2005.
- The Appliance Retirement program continues to focus on SWCT in 2005, in addition to using turn-in events and the retailer co-op initiative. This program may remove unnecessary second and third appliances and increase energy efficiency in homes by increasing the penetration of ENERGY STAR refrigerators.
- Retail Lighting and the ENERGY STAR Appliance programs may continue to focus on SWCT. The Companies plan to use a combination of approaches to reach the consumers in the Norwalk-Stamford sub-area. These approaches include such things as turn-in events, direct mailings, and other advertising targeted to this area.

C&I PROGRAMS

- The Small Business Energy Advantage ("SBEA") program has a strong focus in SWCT. CL&P's marketing strategies for this program in SWCT currently focuses on the Norwalk—Stamford sub-area to identify as many opportunities as possible in that critical area.
- The C&I RFP program has bid rounds specifically for SWCT.
- The O&M RFP program plans to continue focused efforts in SWCT in 2005.
- The O&M Services program incentive is increased from a payment of 50% of the customer's cost in installing conservation measures that meet program objectives to 100% in SWCT towns.
- A joint Retro-Commissioning Pilot is planned to be offered within the O&M program structures of both companies.

DEMAND REDUCTION PROGRAM

The Demand Reduction program efforts focus on SWCT towns and help customers understand their daily energy demand (kW) profiles. The program provides customers with insights on potential load reduction opportunities and facility-specific strategies to reduce kW demand.

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CHAPTER SIX: COST-BENEFIT ANALYSIS

The Companies previously developed and implemented common cost-effectiveness testing methodologies for use with the 2003-2004 Plan filed in January 2003. For this Plan the Companies have continued to use common cost-effectiveness screening tools and similar assumptions for key variables, including: discount rate; inflation rate; avoided cost of energy; avoided cost of generating capacity; avoided cost of transmission capacity; avoided cost of distribution capacity; and avoided cost of fossil fuels. Use of common cost-effectiveness testing methodologies allows the Department, the ECMB and others to compare the benefit cost ratios (BCRs) of both Companies on an "apples to apples" basis.

The Companies use the same conservation program screening tool.

The philosophy upon which the tool is based is: the present value of the future avoided cost of not having to generate, transmit and distribute kWh from generating plants to customers can be divided by all costs necessary in implementation of conservation programs to yield a BCR. The Companies use the same screening tool and, when possible, the same inputs and assumptions, which facilitate comparison.

The Companies use the same version of cost effectiveness tests.

Several different versions of cost effectiveness tests have been developed in the industry during past years. The Electric System Test, The Total Resource Test and the Societal Test are the three major types of tests used most commonly to measure the cost effectiveness of C&LM programs.

The Electric System Test compares the present value of future program electric system savings to present conservation fund expenditures. The Total Resource Test compares the present value of future electric system and other customer savings to the total of the conservation expenditures and customer costs necessary to implement the programs. While certain programs may have low BCRs when assessed by the Electric System Test, the Total Resource Test provides a more comprehensive measure of program effectiveness since such programs may often have some value that is not recognized in the Electric System Test. The Societal Test is similar to the Total Resource Test, but includes estimates for environmental, economic and low income benefits which can be controversial and difficult to estimate.

For analysis of the proposed 2005 programs the Companies used the same two tests: the Electric System Test and the Total Resource Test. The Companies are developing plans to monitor and track non-electric savings.

The Companies use the same discount rate.

The discount rate is the interest rate used to discount the value of future savings in a standard, present worth economic analysis. A higher rate discounts the present value of future savings more deeply than a lower rate. Thus higher rates result in lower BCRs and lower rates result in higher BCRs. For 2005, the Companies used the same discount rate for both tests, which was the Prime

Rate, the rate that banks charge their best customers. A rolling, five-year average from the Federal Reserve website was used (http://www.federalreserve.gov), which was the rate of 6.59 percent.

The Companies use the same inflation rate.

The inflation rate is used to adjust the discount rate in future years. The Financial Trend Forecaster website (http://www.inflationdata.com) was used as the source for this value. A rolling, five year average of the consumer price index for all items in U.S. cities was used. The inflation rate used was 2.002 percent.

The Companies use the same avoided cost of energy and will monitor the level for possible future changes.

At the time of the stranded cost dockets, the avoided cost of electric energy projected in those proceedings was the best estimate available at that time. Since then, wholesale spot markets have matured and ISO-NE spot market prices are now available.

Since historical market data is now available, the Companies used this data for the avoided cost of energy. Four different average avoided energy costs were used, corresponding to four ISO-NE defined periods: Summer Peak and Summer Off-peak, and Winter Peak and Winter Off-peak. Approximate average historical values for these four periods are \$58/MWh, \$38/MWh, \$48/MWh and \$37/MWh respectively.

These energy prices, from the ISO web site, include a congestion component.

The Companies use the same avoided cost of generating capacity.

Average ISO-NE spot market electric prices do not adequately reflect the cost of building new generating capacity. In this plan, the Companies are using the methodology of calculating capacity savings in \$/kW instead of \$/kWh since calculations on a \$/kWh basis do not adequately recognize that demand reductions which occur in programs during peak demand have a relatively high value when compared to spreading the avoided capacity value over all hours of the year by using \$/kWh.

At this time, the value of installed capacity as an ISO traded commodity is very low, and does not adequately reflect the cost of building new generating capacity. The value of capacity used in the program screenings for 2005 is the same as that used for the 2004 programs, \$58.44/kW year. This value was approved by FERC a couple of years ago and was based on the cost of building new plants in New Jersey.

To allocate the capacity between summer and winter, UI and CL&P have developed the following approach by using the TMOR (thirty minute operating reserve) as reported in ISO-NE historical, ancillary market data. This is the value that the ISO-NE pays Class 1 Load Response Program participants when they are called to reduce load during peak demand periods.

An average value was calculated for the four summer month period and the five winter month period for the last three years, and a summer to winter ratio was created. (Five years of rolling data will be used in future years when it becomes available.) The summer to winter ratio is 11.36/1

which results in 8.8% of the capacity value being applied to winter and the remaining 91.2% being applied to the summer period. The resulting avoided generating capacity values will be approximately \$54 for summer and \$5 for winter.

The Companies use Company-specific avoided cost of transmission capacity.

As a consequence of FERC's open access to transmission policies, each transmission owner has published transmission tariffs that are posted on the ISO-NE website. The Companies calculate the tariffs using FERC approved methods, and the tariffs are updated annually. The transmission tariffs represent the average costs borne by the companies in constructing and maintaining their transmission systems.

The published transmission tariffs are unique to each Company because the cost of constructing and maintaining transmission systems is very much dependent on their location within the state. The Companies used their published transmission tariffs to value the savings resulting from the avoided cost of transmission. UI's transmission tariff is \$18/kW while CL&P's is approximately \$23/kW, but this reflects the differences in their territories.

The Companies use Company-specific avoided cost of distribution capacity.

Conservation programs over time also lessen the need for distribution system expansion and upgrades. This results from a reduction in the demand growth rate. Thus there is a value for the avoided cost of distribution resulting from conservation measures and programs. The Companies have estimated their avoided costs for distribution on a \$/kW basis using Company financial data as presented in the annual FERC Form 1 filings.

A rolling average of five years of data was used to smooth out costs that may vary from year to year. The average cost to carry the investment in the distribution system, the annual O&M costs associated with the demand placed on the system, and the property taxes are totaled and divided by the historic system peak in kW. This gives the average value for the avoided cost of distribution in \$/kW. The basic philosophy supporting this method is similar to that used by FERC in determining transmission tariffs. UI's avoided cost of distribution capacity is \$58 while CL&P uses \$61.

The Companies use the same avoided fossil fuel costs.

Certain programs, such as the ENERGY STAR Homes Program, derive much of their savings from reductions in the use of fossil fuels such as natural gas and No. 2 heating oil. Avoided costs must be determined for these fuels in order to predict annual savings in dollars. Historic fossil fuel costs are available from the Energy Information Administration website (www.eia.doc.gov). Rolling five-year averages were used for the cost of gas and oil in order to smooth out annual price spikes. For oil the level of \$10.83/MMBTU was used.

The Companies use the same avoided costs for emissions from fossil power plants.

Conservation measures avoid the burning of fossil fuels and hence the emission of various pollutants. As a result, BCR calculations should recognize avoided costs of emissions. Active markets exist for S0₂ and N0_x emissions, and avoided emission quantities of these pollutants

resulting from conservation programs can be projected from the "2000 NEPOOL Marginal Emission Rate Analysis," from ISO-NE. The Companies used: (1) trading values available on the EPA website for S02 www.epa.gov/airmarkets/trading/so2market/index.html) and (2) values for N0x obtained from the NatSource and Cantor Fitzgerald websites (www. natsource.com and www.emissionstrading.com). S02 has traded at approximately \$180/Ton and N0x at \$800/Ton. N0x may trade in the \$2,000 to \$4,000/Ton range in the near future because of tightening regulations beginning in 2003.

There is no real market in the U. S. at this time for trading of C02. Small quantities of C02 have been traded in some countries, but these trades involved offset projects such as planting trees and capturing landfill gas for power generation. Capture and sequestration of C02 from large sources such as power plants at this time is expected to cost from \$26 to \$49/Ton depending on the type of power plant, when the technology becomes commercial. This is based upon "The Cost of Carbon Capture" by Jeremy David Howard Herzog at the Massachusetts Institute of Technology under DOE award DE-FG02-99ER62748. Until more concrete market data are available, the Companies will use a value of \$10/Ton for C02 which reflects the small number of trades already completed on a worldwide basis.

CHAPTER SEVEN: PROGRAM EVALUATION

The Companies have a long history of providing quality C&LM programs to the energy consumers of Connecticut. An integral part of creating, delivering and maintaining quality programs is the process of performing independent evaluations of those programs and the markets they serve. Over the past fourteen years, the Companies have performed more than 180 evaluations.

There has been an increase in the Planning and Evaluation budget from past years, due to an increase in regulatory duties which have resulted from DPUC decisions. The 2005 Planning and Evaluation budget has experienced an additional increase because this area of evaluation was underaddressed in 2003 and 2004. This increase should be limited to the year 2005, as the current plans for evaluations should provide the Companies with an updated status for their C&LM programs.

There are several major purposes of evaluations. First, through careful market evaluation, the Companies can understand the most effective way to influence the key players in any market. Evaluations are also used to determine the efficacy of the programs, provide for improved program delivery and increase customer satisfaction. Lastly, the evaluation process is also a critical tool to measure energy savings as well as other key attributes of each program to allow careful management of consumer funds.

Several types of evaluations are conducted to monitor program performance: including impact, process and baseline evaluations, as well as market assessments. Impact evaluations verify the magnitude of energy savings and determine if efficiency measures were properly installed. Process evaluations verify the effectiveness of program delivery. Baseline evaluations and market assessments survey overall market conditions related to efficiency products and services, including current standard practices, average efficiency of equipment, consumer purchasing practices and identification of market barriers. Each of these evaluations provides the Companies with critical information that is then used in the program planning process.

During the evaluation planning process, the Companies, using a systematic approach, consider many factors, including, but not limited to: the maturity level of the program, the stability of results, market conditions, recent or planned program changes and the cost and energy savings associated with the program. The Companies also work in a broad regional manner when planning evaluation activities for the upcoming program year. Through a collaboration of the two Companies with regional agencies and utilities with similar interests, it is possible to take full advantage of opportunities to gather information in the most cost effective manner. Occasionally, opportunities to participate in evaluation studies are unforeseen and therefore are not included in the planning process. If an unplanned opportunity proves to be in the best interest of the Connecticut customers, the utilities will commit resources to those efforts as well. The Companies plan to work with the ECMB consultants to identify specific areas for evaluation.

The Energy Conservation Management Board is presently developing a process for the selection and content of third party program evaluations to assure independence from the Companies.

The Companies recognize the ever increasing importance of conducting thorough and timely evaluations. They inform regulatory bodies and their consultants, utility management, program

planners and administrators of the value of their programs and initiatives. The following is a list of the proposed evaluations for 2005:

Residential Evaluation Studies

Joint CL&P/UI

- 1. Energy Star® Room Air Conditioner Study: In 2004, CL&P and UI conducted several room air conditioner turn-in events in addition to in-store rebate coupons for the purchase of Energy Star® rated room air conditioners. This study focuses on this market to determine the effect that the point of purchase rebates and the "bounty" given at the turn-in events had on customer purchasing decisions; determine the market penetration of Energy Star® room a/c units; investigate the models and their sizes being sold; and the effect the lower priced non Energy Star® rated a/c units have had on the market.
- 2. UI Helps / WRAP Impact Study: These seasoned programs continue to serve the Companies low income customers and communities throughout Connecticut. This impact evaluation will review and analyze the measures being offered and determine their claimed energy savings; review the process of the programs' delivery systems and determine the quality of the services being provided and assess customer satisfaction levels. Barriers to participation and program improvements may also be studied.
- 3. The Low Income Study: This study focuses on benchmarking the WRAP and UI Helps Programs against similar utility programs nationwide.

C&I Evaluation Studies

Joint CL&P/UI

- 4. Energy Conscious Construction and Energy Blueprint Programs Process Study: A thorough review will be conducted to assess both programs' goals and objectives; communications with the customers, contractors and vendors; program designs; resources and training; similarities and differences in program delivery and the programs' strengths and weaknesses; investigate lost opportunities, identify synergies between the programs' and determine if the programs' are meeting the customers needs.
- 5. Energy Conscious Construction and Energy Blueprint Programs Impact Study: This study will focus on the comprehensive and prescriptive track projects; identify the claimed energy savings, programs benefits, free-ridership and spillover; examine what measures and equipment are being successfully installed and determine the influence of the incentive levels and program structures on the measure installations. The Companies shall obtain information to benefit future program implementation and design including methodology improvements and customer satisfaction levels in order to update incentive levels and investigate the current incentive levels to determine what effect they have on program participation.

- 6. Request for Proposal (RFP) Program Impact Study: This study shall verify claimed energy savings; examine what measures and equipment are being successfully installed and determine the influence of the incentive levels and RFP program structure on the measure installation; assess free-ridership and spillover; obtain information to benefit future program implementation and design including methodology improvements and customer satisfaction levels in order to update incentive levels and investigate what effect the current incentive levels have on program participation. An abbreviated process study will examine who the program is serving, how well it is serving its customers and identify how effectively the program is communicating with the potential customer base and participating customers and vendors.
- 7. Retro-commissioning Pilot Study: This study focuses on reviewing the five pilot projects completed in 2004 to determine their energy savings; examine what measures and equipment were successfully installed, review incentive levels and customer satisfaction levels. An abbreviated process study shall examine who the program is serving and how well it is communicating with the potential customer base and participating customers and vendors.

CL&P C&I Evaluation Studies

- 8. Municipal Program Impact Study: Since 2000, the Municipal Program has offered its customers a 100% incentive level. In 2004, the incentive was reduced to 75% with a customer contribution of 25%. The object of this study is to determine energy savings; examine what measures and equipment are being successfully installed and determine the influence the reduced incentive levels have had on program participation.
- 9. Prime Audit Program Impact Study: The results of the 2004 Prime Program savings algorithm study will be used as a basis for this effort. The Prime Program uses Lean Manufacturing principles to enable manufacturers to reduce their electrical energy consumption and dramatically increase productivity by reducing lead time and overhead costs. The study shall focus on verifying claimed program savings, identify and quantify non-energy benefits, determine if manufacturers are internalizing Lean principles in other areas of production and installing energy saving technologies.
- 10. Custom Services Process Evaluation: This study shall assess the programs' goals and objectives; communications with the customers, contractors and vendors; program design; resources and training; similarities and differences in program delivery including its strengths and weaknesses and investigate lost opportunities to determine if the program is meeting the customers' needs.

Regional Studies

11. Builder Operator Training Certificate Program Impact Study (BOC): CL&P and UI are interested in participating in this NEEP sponsored study to determine how savings can be claimed for this program. The specific scope of work has not been determined at this time.

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CHAPTER EIGHT: IT INITIATIVE (CL&P)

The objective of C&LM IT Tracking and Reporting Improvement Initiative is to implement an automated tracking and reporting system in accordance with the DPUC's directive to develop a comprehensive presentation of tracking data for each C&LM program as part of the annual filings beginning in 2006. This initiative is required to meet increasing financial and reporting requirements by the Department, such as the SFR. These improvements are designed to improve operating efficiency of the CL&P staff. The project also intends to fulfill the Department's requirement to develop a Technical Reference Manual (TRM): a detailed, comprehensive documentation of all claimed resource costs and savings corresponding to individual C&LM technologies. All tracking entries of C&LM projects should be traceable and cross-referenced to the TRM. The project is expected to result in improved accountability and independence in the process of tracking, monitoring and verification of C&LM information.

This is a C&LM project that is planned to create a central data repository accessible to all C&LM personnel, streamline the current environment, and create the most efficient and consistent business procedures possible. The project has two phases. The first phase maps the current business processes and tracking systems. The second phase is the architecture and modeling phase.

Phase One, the mapping phase, creates the business process flows for each program within C&LM. The process flows are developed from the detailed information provided by each program administrator and planner. From each of these maps portions of the TRM can be derived. Also, improvements in each process can be identified. Any improvements are planned to be implemented in the second phase of the project.

Phase Two, the modeling and architecture phase, consists of the development of a data warehouse and tracking system. The data warehouse and the reports to be generated from the tracking system are planned to be created based on the information gained in phase one. The data warehouse acts as a central repository for data from each program within C&LM. It should allow for more easily accessible data for better tracking and reporting. The C&LM Tracking and Reporting Improvement Initiative contains both standard reporting and ad hoc reporting.

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Exhibit CL&P/UI 1 Attachment 1

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1. Robert Fromer

Exhibit CL&P/UI 1

						Attachment 1
Name and Organization	Method/ Date of Contact		Request	Companies' Position	ECMB Consultant's Position	ECMB Position
1. Robert Fromer	Written comments 8/24/04 & 8 9/21/04	1(a)	Upgrade the Solar Home Planbook.	1(a) Obtain preliminary cost estimates. Vet through ECMB Roadmap process.		
		(q)	Place the Planbook on the Companies Internet websites.	(b) Obtain preliminary cost estimates. Vet through ECMB Roadmap process.		
		(2)	Conduct seminars for town planners and planning commission members on the benefits of passive solar and the Book.	(c) The Companies are actively considering conducting seminars at Smart Living Center. Vet through ECMB Roadmap process.		
		(p)	(d) Create public access program videos discussing energy issues which are distributed to every cable station.	(d) Vet through ECMB Roadmap process.		

		2005 Public C	2005 Public Comment Matrix	Ex	Exhibit CL&P/Ul 1 Attachment 1
Name and Organization	Method/ Date of Contact	Request	Companies' Position	ECMB Consultant's Position	ECMB Position
Robert Fromer (cont)		(e) Use billboards asking people to conserve energy by reducing waste, using solar energy, etc.	(e) Consider expansion of Wait 'til 8 print media and radio campaign to include general conservation messages. Vet through ECMB Roadmap process.		
		(f) Create a master plan for marketing conservation	(f) Being addressed in the Companies C&LM plan which is reviewed and adjusted annually to reflect market conditions, budget, and industry experience. Additional efforts on-going with the ECMB sub-committee on Fund logo and branding.		

Exhibit CL&P/UI 1

Attachment 1 Position **ECMB Consultant's** Position ECMB to reduce congestion cost appropriate measures to existing grade K-5, soon portion of Fund portfolio. allow the ECMB to track C&LM programs are not residents or businesses. available to Long Island (h) The Companies support SWCT focus is needed renewables. Television the development of the impacts statewide. CT to be released 6-8 and curriculum all address Companies' Position balanced Renewable energy consumption. expensive relative to eeSmarts Program Vet through ECMB Roadmap process. programming and development are envisioned 9-12 (b) \equiv **Environment News Channel on** schools and The Energy or the capita, and total user demand. Plans should include all forms curriculums in all engineering ECMB goals, energy use per (h) Develop an energy efficiency cable and network television ethic to include definitions of Reduce focus on Fairfield (g) Create renewable energy County and Long Island. Request of energy. \equiv Method/ Contact Date of Organization Robert Fromer Name (cont)

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P/UI 1

					Attachment 1
Name and Organization	Method/ Date of Contact	Request	Companies' Position	ECMB Consultant's Position	ECMB Position
Robert Fromer (cont)		(j) Lifecycle energy analysis should be used for efficiency projects.	(j) The Companies currently consider design life and avoided costs when calculating Benefit to cost ratios.	-	
		(k) Building Officials and Code Administrators (BOCA) code needs to incorporate passive solar.	(k) The Companies plan to continue working with industry partners such as NEEP, CEE and ACEEE to continue refining building codes.		
		(I) Increase focus on energy consumption in state buildings.	(I) In 2002 the State Department of Public Works (DPW) received \$12 million from the C&LM Fund for energy conservation projects (PA- 01-9). A Memorandum of Understanding has been		
			established with the DPW. Qualifying projects not funded by the DPW are eligible to apply for C&LM Funding.		

uc ad action and action action and action action and action action and action ac	ear 2(a) Companies agree and have budgeted for continuation of project subject to continued successful completion of project milestones. ogram (b) Proposal should be vetted through the RD&D Policy Working Group and the ECMB Roadmap process.	(b) (b)
	(Q)	Propose a new C&LM Program to operate multi-carbonate fuel cell systems on both a liquid ethanol fuel source or pipeline natural gas. Project would involve a short technical
osal d th y W he E ess.	eu ercial 3."	"Validation Phase", followed immediately, by a "Commercial Size Demonstration Phase."
Working with ECMB to provide an equitable and balanced approach for cost effective energy efficiency. Currently working toward a partnership with CT Clean Energy Fund to leverage resources.	3(a) cally s at for	3(a) Wcase the 2005 C&LM Budget for Renewables Initiatives. Facilitate the geographic targeting of locally identified and supported renewable energy facilities at renewable resource sites for commercial operation.

ECMB Position	
ECMB Consultant's Position	
Companies' Position	(b) The short term objectives for resource acquisition in SWCT limit the current funding available for RD&D. The companies continue to seek a balanced program portfolio that reflects the proper ratio of resource acquisition and support of technology development. Specific RD&D proposals should be vetted through the RD&D Policy Working Group and the ECMB Roadmap process. (c) The C&LM budgets for Administration/Planning are for program operation only. The companies continue to work with the ECMB to set the appropriate balance between long term initiatives and short term resource acquisition.
Request	 (b) Increase the 2005 C&LM Budget for RD&D. Facilitate the application and commercialization of locally identified and supported facilities using advanced technology to improve efficiency and environmental performance of energy facilities (c) Increase the 2005 C&LM Budget for Administration/Planning Expenditures. Facilitate the development of a pilot structure to advance locally integrated energy planning and information management.
Method/ Date of Contact	
Name and Organization	3. Connecticut Center for Advanced Technology (cont)

Exhibit CL&P/Ul 1 Attachment 1	ECMB 's Position			
	ECMB Consultant's Position			
2005 Public Comment Matrix	Companies' Position	4(a) The Companies continually review incentive levels. The avoided costs, equipment costs and relative energy savings limit the incentive due to cost effectiveness constraints.	(b) The Companies' budgets after the securitization process include higher funding for marketing of programs than was available in 2003 during the program interruption.	(a) The Companies support the implementation of selfsustaining O&M RFP programs.
2005 Public C	Request	4(a) Program incentive levels for installation of high efficiency geothermal or equipment for heating, cooling and domestic hot water are inadequate.	(b) The current rebate program does not provide sufficient incentive and is not well publicized.	(a) Supports continuation of the 0&M RFP 1-5 program as it provides sustainable savings and was resulted from lessons learned from safety and total quality management programs.
	Method/ Date of Contact	Written Comments 9/21/04		9/21/04
<u> </u>	Name and Organization	4. Advanced Geothermal Systems		5. EnVinta

Name and Organization	Method/ Date of Contact	Request	Companies' Position	ECMB Consultant's Position	ECMB Position
6. NEEP	9/21/04	6(a) Request ECMB support of Companies' proposals for regional initiatives on long- term market transformation.	(a) The Companies will continue to work with the ECMB to balance market transformation with resource acquisition for SWCT.		
		(b) Request support of the Companies' proposal for enforcement of the state building code as a part of the Residential New Construction program and to maintain the linkage between energy efficiency programs and energy code upgrades.	(b) The Companies recognize the need for code upgrades and education as part of the programs, and are working with Institute for Sustainable Energy to help support enforcement of C&I and Residential building codes.		
	·	(c) Increased savings may be realized in residential HVAC through promotion of high efficiency furnace fans related to other regional and national programs.	(c) The Companies have continued to work with the ECMB consultants on the best mix of measures for the available C&LM funds.		

Exhibit CL&P/UI 1

2005 Public Comment Matrix

Attachment 1 ECMB Position **Consultant's** Position ECMB tempered with the need for forward to participating in initiatives with a variety of vetted through the ECMB acquisition in SWCT and Companies' Position savings as a metric and recently begun tracking participate in selected (f) The Companies have market actors. These (d) The Companies look regional evaluations. welcome cooperative measurable resource non-electric program a variety of regional initiatives. initiatives must be (e) The Companies process. administrators to gain economies (f) NEEP encourages opportunities opportunity to establish regional guidelines and provide training between the companies and Schools Exchange offers an coordination of evaluations to better integrate gas and (d) NEEP High Performance for construction of energy electric energy efficiency. (e) NEEP encourages the other regional program Reduest efficient schools. of scale. Method/ Contact Date of Organization 6. NEEP (cont) Name and

		2005 Public C	2005 Public Comment Matrix	Ë	Exhibit CL&P/UI 1 Attachment 1
Name and Organization	Method/ Date of Contact	Request	Companies' Position	ECMB Consultant's Position	ECMB Position
6. NEEP (cont)		(g) NEEP supports shifting from consumer rebates to a more balanced mix of incentives to retailers, manufacturers and consumers.	(g) The Companies have embraced this strategy in the residential lighting and appliance programs.		
		(h) Suggests the ECMB should support examining and potentially revising the Energy Star Appliance strategies.	(h) The Companies continually work with the ECMB consultants and a variety of industry partners to review strategies for gaining increased efficiency.		
		 (i) Re-examine the need for a \$50 consumer incentive for Energy Star Clothes Washers: proved support on more limited, promotional basis promote levels of efficiency above current Energy Star washer specifications 	(i) The Companies continually balance the need for rebates with the status of a particular market. The companies strive to find ways to maximize efficiency while enhancing the current well established Energy Star brand recognition.		

Exhibit CL&P/UI 1

2005 Public Comment Matrix

Attachment 1 Position **ECMB** Consultant's Position ECMB promote energy efficiency (m) A pilot program has been products is included in the Energy Star homes Program. Construction program to (I) The installation of lighting (j) Working with retailers on Companies' Position (k) The eligible fixtures for rebates are continually in high profile building help emphasize and stocking practices is included in the plan. created within the Residentiall New design and new reviewed by the construction. Companies. through Energy Star Fixtures and Energy Star CFL's. product for Energy Star Interior Fixture rebates. fans with lighting as an eligible (k) Include Energy Star ventilation efficient lighting in new homes equipment only to a systems exclusively stock Energy Star Room Air Conditioners. residential HVAC shift from (I) Support the penetration of retailers/manufacturers to (m) Support the Companies Request approach. (j) Work with Method/ Contact Date of Organization 6. NEEP (cont) Name and

Attachment 1 Position ECMB Consultant's Position ECMB of wide array of measures 7(a) The Companies welcome opportunities to work with the design community to develop the most energy efficient environmentally welcome opportunities to support for the adoption (n) The Companies plan to members of the ECMB, Companies' Position community to provide geared toward better work with the HVAC compatible facilities. create awareness of (b) The Companies, as energy efficiency. nstallations of equipment. from a more precise description the ECMB to generate a culture Cooling program would benefit architect selection made clear selected architect will work with alternative energy sources to The Residential Heating and Center's design in varying that they were looking for 7(a) The RFP for the Center's be incorporated into the (b) Expectations are that the of what constitutes "best sustainable design and of awareness and habit. nstallation practices". Request degrees. Ξ **Method/** Contact Date of 9/21/04 Organization 6. NEEP (cont) Science and Connecticut Exploration Center for Name