

In the early and mid 1990s The Results Center produced 126 case studies of the most successful energy efficiency and renewable energy programs in the United States and around the world. With the support of the John D. and Catherine T. MacArthur Foundation, Ted Flanigan directed a research team at Colorado-based IRT Environment to produce and distribute these exceptional examples.

#23 EXECUTIVE SUMMARY

BOSTON EDISON, RESIDENTIAL EFFICIENT LIGHTING

Boston Edison Company (BECo) has been encouraging the use of efficient lighting in homes in its service territory through mail-in rebates, “instant rebates”, and special promotions since 1987. Through 1991, over 480,000 energy-efficient lamps have been distributed, of which 272,000 were OSRAM 15-watt compact fluorescent lamps which were sold by Lions Club members for \$3 each to 52,308 residential customers. The promotion’s success stimulated over 95 print news stories in local and national newspapers, including The Wall Street Journal, USA Today, and the Boston Globe.

BECo’s Residential Efficient Lighting Program (formerly called Lite Lights) has two primary long-term goals: to increase customer demand for energy-efficient lighting and to enhance the availability of efficient lighting technologies in retail markets in the Boston area. To accomplish these goals, The Residential Efficient Lighting Program has evolved significantly, thanks in large part to continual feedback and program adjustments and detailed process and impact evaluations.

BECo began the Residential Efficient Lighting Program in 1987 by offering mail-in rebates of \$1.50-5.00 on qualifying efficient lamps. Customers could also use a mail order service, coordinated by a contractor selected by BECo through competitive bid, to receive rebates on their purchases in the form of monthly electric bill deductions.

In 1989, “instant rebates” became available whereby customers could walk into BECo’s Energy Centers (bill paying centers) and get instant rebates on the purchase of efficient lamps. At that time, compact fluorescents became eligible for rebates equal to 66% of the purchase price, and halogen rebates were 25% of the purchase price. Additionally, in 1991 instant rebates were introduced at a select number of retail stores.

Between 1987 and 1991, The Residential Efficient Lighting Program saved 19 GWh in annual energy savings, with 171 GWh lifecycle savings. Annual winter peak capacity savings have totalled more than 10 MW for the period 1987 to 1991, with summer peak capacity savings totalling about 2.1 MW. These savings are discounted to account for anticipated premature bulb removal as well as free riders.

Total utility costs of the program from 1987 to 1991 have totalled \$8,334,000. Expenditures increased significantly between 1989 and 1990, in part to accommodate the Lite for Sight promotion but also as a result of the New England Collaborative DSM program planning and design process. The 1990 expenditure of \$5,420,000 was fourteen times greater than the 1989 expenditure of \$392,000. In 1991, costs were \$2,028,000.

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BOSTON EDISON Residential Efficient Lighting	
Sector:	Residential
Measures:	Energy-efficient lamps and fixtures
Mechanism:	Mail-in rebates, instant rebates, and special promotions
History:	Started in 1987 with mail-in rebates; very successful Lions Club promotion in 1990
1991 Program Data	
Energy savings:	5.6 GWh
Lifecycle energy savings:	50.1 GWh
Peak capacity savings:	0.951 MW Winter 0.036 MW Summer
Cost:	\$2,028,000
Cumulative Data (1987 - 1991)	
Energy savings:	33.3 GWh
Lifecycle energy savings:	171.1 GWh
Capacity savings:	10.7 MW Winter 2.1 MW Summer
Cost:	\$8,334,000
Participation rate:	~14%
CONVENTIONS	
For the entire 1992 profile series all dollar values have been adjusted to 1990 U.S. dollar levels unless otherwise specified. Inflation and exchange rates were derived from the U.S. Dept of Labor's Consumer Price Index and the International Monetary Fund's International Financial Statistics Yearbook: 1991.	
The Results Center uses three conventions for presenting program savings. Annual savings refer to the annualized value of increments of energy and capacity installed in a given year, or what might be best described as the first full-year effect of the measures installed in a given year. Cumulative savings represent the savings in a given year for all measures installed to date. Lifecycle savings are calculated by multiplying the annual savings by the assumed average measure lifetime. Caution: cumulative and lifecycle savings are theoretical values that usually represent only the technical measure lifetimes and are not adjusted for attrition unless specifically stated.	