

2002 Public Utilities Commission Conservation Report

**presented to
the Utilities and Energy Committee**

December 1, 2002

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ADDITIONAL COMMENTS OF COMMISSIONER STEPHEN DIAMOND

BACKGROUND

I. Brief History Of Energy Efficiency Programs In Maine

➤ Mid 1970s through March 1, 2000

- During the 1970's, growth in electrical use made it necessary to build new electric generating facilities in Maine. Because of rising costs, these plants were sometimes costly and controversial.
- The Electric Rate Reform Act of 1977 set the stage for improved efficiency of electrical use.
- In the 1980's, the Maine Public Utilities Commission (Commission) established procedures and criteria that governed energy efficiency programs run by electric utilities. Programs were considered a cost effective means of avoiding costly generation.
- Utilities implemented a wide array of programs. Annual statewide spending exceeded \$20M. Maine became a national leader in efficiency programs.

➤ March 1, 2000 through March 2002

- The Electric Restructuring Act of 1999 set the stage for separation of electric generation from electric delivery.
- On March 1, 2000, restructuring began. Electric utilities became "transmission and distribution" utilities that delivered, but did not generate, electricity.
- The Restructuring Act invested the State Planning Office (SPO) with responsibility for developing a statewide energy efficiency plan. Utilities would implement the programs.
- Utilities continued to implement a reduced number of efficiency programs. After restructuring, utilities no longer had the same incentive to cause a reduction in electricity use as they had when conservation could offset generation production costs.
- SPO completed its energy efficiency plan in early 2002, but the Plan was not implemented.

➤ April 2002 and beyond

- The Conservation Act, enacted in April 2002, vested the Public Utilities Commission with responsibility for developing the statewide electric energy efficiency plan and for implementing efficiency programs. The Act establishes broad goals for the programs.
- To facilitate quick introduction of new programs, the Act allows the Commission to implement "interim programs" that need not accomplish all the Act's goals. On June 13, 2002, the Commission

approved eleven interim programs (later expanded to twelve), which are currently in various stages of implementation.

- The Act requires the Commission to establish goals and objectives and cost effectiveness criteria for efficiency programs. On September 24, 2002, the Commission established program goals and objectives. On November 5, the Commission established cost effectiveness criteria.
- The Act requires the Commission to establish an “ongoing” (as opposed to interim) statewide plan to begin no later than 2004. The Commission is currently gathering input to establish this plan.
- The Act requires the Commission to establish the level of funding that each utility will contribute toward the statewide plan. The Commission will establish the funding levels at the same time it establishes the ongoing statewide plan.

II. Commission Procedures

- We have sought and received extensive public input on all our decisions. Our general approach has been to issue a proposal regarding a single topic or a related group of topics, solicit written input, and hold a public hearing. When we reach a conclusion, we issue a Commission order that describes our proposal, the issues surrounding the topic, the input we received, our decisions, and the reason for our decisions. We have requested comments on ten topics, we have held nine public hearings and technical conferences, and we have had numerous meetings with individuals and groups with expertise on energy efficiency.
- We have established an energy efficiency web page (www.state.me.us/mpuc/electric_conservation.electricconservation.htm). We place orders, meetings, requests for input, bid solicitations, monthly status reports, and all other related material on the web page.
- We have established a broad email distribution list, to whom we send all material of general interest.

III. Report

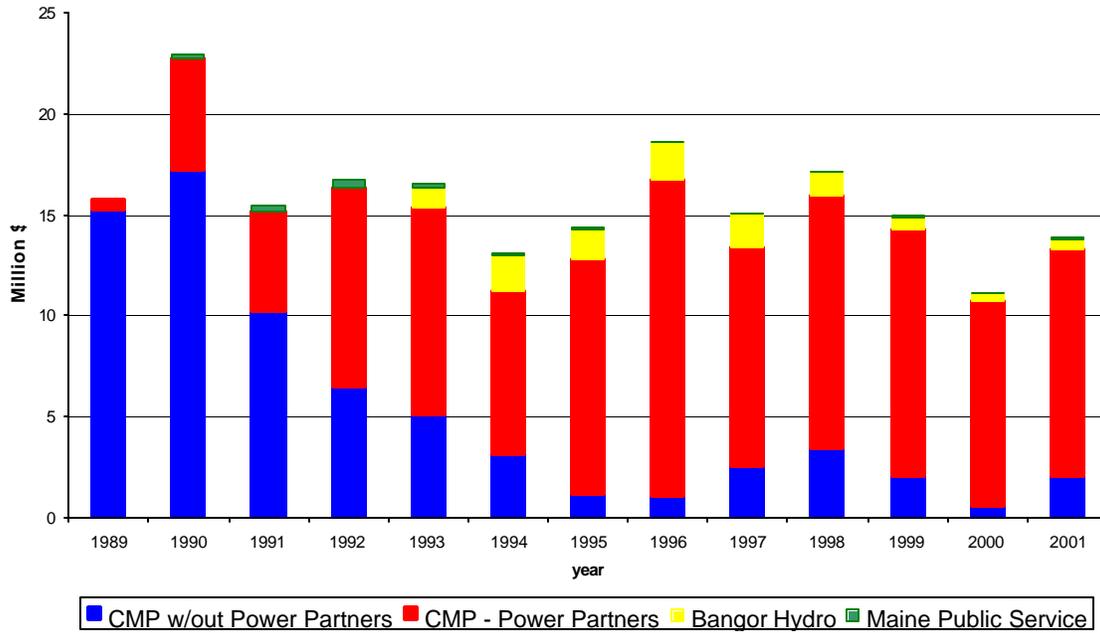
- The Act requires that, no later than December 1 of each year, the Commission submit to the Utilities and Energy Committee a report that describes various components of the year’s energy efficiency activities.
- This first issue of the annual report is organized by topics that have required Commission action pursuant to the Act. Our activity can be divided into two discrete areas. First, we developed and began implementing interim programs. These activities are described in the early sections of the report. Second, we made decisions required by the Act to

govern ongoing programs. This second step requires considerably more time and will continue during 2003. Activities are described in the later sections of the report.

- For each topic, we include two types of material. First, we include a quick overview – usually in the form of bullet points and tables. A reader may wish to read these sections first, to obtain an overview of all topics. For readers who wish more information on background, interested persons' comments, our decisions, and the reasoning behind our decisions, we include Commission orders containing that information.

IV. Historical Conservation Spending

Energy Efficiency Spending in CMP, BHE, and MPS
Since the Late 1980s



BHE unavailable before 1993
 MPS unavailable before 1990
 Consumer-Owned Utility spending not shown

V. The Conservation Act**CHAPTER 624****H.P. 330 - L.D. 420****An Act to Strengthen Energy Conservation**

Emergency preamble. Whereas, Acts of the Legislature do not become effective until 90 days after adjournment unless enacted as emergencies; and

Whereas, funds for conservation programs have been collected pursuant to existing law and there is an immediate need to put in place changes to the law in order to ensure efficient and effective use of those funds; and

Whereas, in the judgment of the Legislature, these facts create an emergency within the meaning of the Constitution of Maine and require the following legislation as immediately necessary for the preservation of the public peace, health and safety; now, therefore,

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 5 MRSA §3305-B, sub-§§2 to 5, as enacted by PL 1999, c. 336, §2, are repealed.

Sec. 2. 35-A MRSA §3153-A, sub-§1, ¶E, as amended by PL 1999, c. 398, Pt. A, §58 and affected by §§104 and 105, is further amended to read:

E. Transmission and distribution utility financing or subsidization of capital improvements undertaken by ratepayers to conserve electricity used by the ratepayers in the future. This paragraph applies to future programs for

utility financing of energy conservation or load management as long as the goal of such programs is to economically defer or eliminate the need for transmission and distribution plant upgrades. In addition to programs undertaken pursuant to this paragraph, programs may be undertaken pursuant to section ~~3211~~ 3211-A to achieve goals other than that identified in this paragraph;

Sec. 3. 35-A MRSA §3211, as repealed and replaced by PL 1999, c. 336, §3, is repealed.

Sec. 4. 35-A MRSA §3211-A is enacted to read:

§3211-A. Conservation programs

1. Definitions. As used in this section, unless the context otherwise indicates, the following terms have the following meanings.

A. "Administrative costs" means costs of the commission that are funded pursuant to and associated with the implementation of this section, including, but not limited to, costs of program planning and evaluation, costs of securing necessary expertise, costs associated with contract formation and administration and costs of monitoring and enforcing contractual obligations.

B. "Administration fund" means the conservation administration fund established by the commission pursuant to subsection 6.

C. "Available funds" means funds available in the program fund.

D. "Conservation programs" means programs developed by the commission pursuant to this section designed to reduce inefficient electricity use.

E. "Prior conservation efforts" means programs to promote conservation undertaken at the direction or with the authorization of the commission prior to March 1, 2002.

F. "Program fund" means the conservation program fund established by the commission pursuant to subsection 5.

G. "Service provider" means a public or private provider of energy conservation services or an entity selected by the commission to contract with such providers or otherwise arrange the delivery of conservation programs.

H. "Total conservation expenditures" means expenditures of a transmission and distribution utility associated with prior conservation efforts plus assessments paid by the utility pursuant to this section.

2. Programs. The commission shall develop and, to the extent of available funds, implement conservation programs in accordance with this section. The commission shall establish and, on a schedule determined by the commission, revise objectives and an overall energy strategy for conservation programs. Conservation programs implemented by the commission must be consistent with the objectives and an overall energy strategy developed by the commission and be cost effective, as defined by the commission by rule or order. In defining "cost effective," the commission may consider the extent to which a program promotes sustainable economic development or reduces environmental damage to the extent the commission can quantify or otherwise reasonably identify such effects.

A. The commission shall consider, without limitation, conservation programs that:

(1) Increase consumer awareness of cost-effective options for conserving energy;

(2) Create more favorable market conditions for the increased use of efficient products and services; and

(3) Promote sustainable economic development and reduced environmental damage.

B. The commission shall:

(1) Target at least 20% of available funds to programs for low-income residential consumers, as defined by the commission by rule;

(2) Target at least 20% of available funds to programs for small business consumers, as defined by the commission by rule; and

(3) To the greatest extent practicable, apportion remaining available funds among customer groups and geographic areas in a manner that allows all other customers to have a reasonable opportunity to participate in one or more conservation programs.

C. The commission shall hold at least one public hearing and invite, accept, review and consider comments and suggestions from interested parties prior to adopting or

substantially revising conservation programs or the objectives and overall strategy for conservation programs.

D. The commission shall monitor conservation planning and program development activities in the region and around the country.

E. The commission shall implement conservation programs by contracting with service providers in accordance with subsection 3.

F. The commission shall monitor and evaluate the delivery of conservation programs by service providers and assess the cost-effectiveness of programs in meeting the objectives and overall strategy established by the commission.

G. The commission, to the extent possible, shall coordinate its efforts with other agencies of the State with energy-related responsibilities.

H. The commission shall secure sufficient technical and administrative expertise to carry out its responsibilities pursuant to this section by:

(1) Contracting with appropriate entities with relevant expertise and experience;

(2) Establishing one or more advisory groups composed of persons with relevant expertise and experience; or

(3) Any other reasonable means developed by the commission.

I. The commission may coordinate its efforts under this section with similar efforts in other states in the northeast region and enter into agreements with public agencies or other entities in or outside of the State for joint or cooperative conservation planning or conservation program delivery, if the commission finds that such coordination or agreements would provide demonstrable benefits to citizens of the State and be consistent with this section, the conservation programs and the objectives and overall strategy for the conservation programs.

3. Implementation. The commission shall seek to implement the delivery of conservation programs in all regions of the State on an equitable basis and to citizens at all income levels. The commission may arrange the delivery of conservation programs by contracting with service providers. The commission shall select service providers in accordance with this subsection.

A. The commission shall select service providers through a competitive bidding process.

B. To the extent practicable, the commission shall encourage the development of resources, infrastructure and skills within the State by giving preference to in-state service providers.

C. Notwithstanding paragraph A:

(1) The commission may select a service provider for one or more conservation programs without employing a competitive bidding process if the commission finds that the selection of the service provider will promote the efficient and effective delivery of conservation programs and is consistent with the objectives and overall strategy of the conservation programs; and

(2) For the delivery of conservation programs to low-income residential consumers, the commission, without employing a competitive bidding process, may utilize the delivery system for the Weatherization Assistance for Low-income Persons Program administered through the United States Department of Energy and the network of for-profit and not-for-profit entities who have held contracts with transmission and distribution utilities to deliver conservation services to low-income and residential customers.

Notwithstanding Title 5, section 1831, the commission is not subject to rules adopted by the State Purchasing Agent in selecting service providers pursuant to this subsection. The commission shall adopt rules establishing procedures governing the selection of service providers under this subsection. The commission shall consult with the State Purchasing Agent in developing the rules.

4. Funding level. The commission shall assess transmission and distribution utilities to collect funds for conservation programs and administrative costs in accordance with this subsection. The amount of all assessments by the commission under this subsection plus expenditures of a transmission and distribution utility associated with prior conservation efforts must result in total conservation expenditures by each transmission and distribution utility that:

A. Are based on the relevant characteristics of the transmission and distribution utility's service territory, including the needs of customers;

B. Do not exceed .15 cent per kilowatt-hour;

C. Are no less than 0.5% of the total transmission and distribution revenues of the transmission and distribution utility; and

D. Are proportionally equivalent to the total conservation expenditures of other transmission and distribution utilities, unless the commission finds that a different amount is justified; however, any increase in an assessment on a transmission and distribution utility by the commission must be based on factors other than the achievement of proportional equivalency.

5. Conservation program fund. The commission shall establish a conservation program fund to be used solely for conservation programs.

A. The commission shall deposit all assessments collected pursuant to this section, other than funds deposited in the administration fund, into the program fund.

B. Any interest earned on funds in the program fund must be credited to the program fund.

C. Funds not spent in any fiscal year remain in the program fund to be used for conservation programs.

D. The commission may apply for and receive grants from state, federal and private sources for deposit in the program fund and also may deposit in the program fund any grants or other funds received by or from any entity with which the commission has an agreement or contract pursuant to this section if the commission determines that receipt of those funds would be consistent with the purposes of this section. If the commission receives any funds pursuant to this paragraph, it shall establish a separate account within the program fund to receive the funds and shall keep those funds and any interest earned on those funds segregated from other funds in the program fund.

6. Conservation administration fund. The commission shall establish a conservation administration fund to be used solely to defray administrative costs. The commission annually may deposit funds collected pursuant to this section into the administration fund up to a maximum in any fiscal year of \$1,300,000. Any interest on funds in the administration fund must be credited to the administration fund and any funds unspent in any fiscal year

must either remain in the administration fund to be used to defray administrative costs or be transferred to the program fund.

7. Prior conservation efforts. Except as otherwise directed by the commission, transmission and distribution utilities shall continue to administer contracts associated with prior conservation efforts. Such contracts may not be renewed, extended or otherwise modified by transmission and distribution utilities in a manner that results in any increased expenditures associated with those contracts.

8. Resolution of disputes. Upon receipt of an appropriate filing by a party to a contract relating to prior conservation efforts, the commission shall adjudicate a dispute relating to the interpretation or administration of the contract by the transmission and distribution utility.

In the case of a dispute filed after the effective date of this subsection, the commission shall refer the dispute to commercial arbitration in accordance with this paragraph. Each party to the contract shall select an arbitrator who is not a current employee of the party. The selected arbitrators shall then select a 3rd arbitrator. If the arbitrators can not agree on the 3rd arbitrator, each party shall submit to the commission a list of at least 3 arbitrators who have no previous or current interest in the contract and, to the extent practicable, have special competence and experience with respect to the subject matter involved in the dispute. The commission shall choose the 3rd arbitrator from among the persons on the lists provided by the parties. After their selection, the arbitrators shall promptly hear and determine the controversy pursuant to the rules of the American Arbitration Association for the conduct of commercial arbitration proceedings, except that if such rules conflict with any procedural rules established by the commission or applicable provisions of the laws of this State relating to arbitration, the applicable commission rules or provisions of state law govern the arbitration. The arbitrators shall submit their decision to the commission.

A. The commission shall accept or reject the decision within 30 days of its submission, unless the commission requires additional time, in which case it may extend its review for another 30 days.

B. If the commission does not reject the decision within 30 days or, if it extends its review period an additional 30 days, within 60 days, the decision is deemed accepted.

C. If the commission rejects the decision, the commission shall adjudicate the dispute.

A decision by the commission under this subsection, including a decision by the arbitrators that is deemed accepted by the commission pursuant to paragraph B, is enforceable in a court of law.

9. Cost recovery. The commission shall include all assessments under this section in the rates of transmission and distribution utilities.

10. Rules. The commission shall adopt rules necessary to implement this section. Rules adopted under this section are routine technical rules as defined in Title 5, chapter 375, subchapter II-A.

11. Report. The commission shall report by December 1st of each year to the joint standing committee of the Legislature having jurisdiction over utilities and energy matters. The report must include:

A. A description of actions taken by the commission pursuant to this section, including descriptions of all conservation programs implemented during the prior 12 months and all conservation programs that the commission plans to implement during the next 12 months, a description of how the commission determines the cost effectiveness of each conservation program and its assessment of the cost effectiveness of programs implemented during the prior 12 months;

B. An accounting of:

(1) Assessments made on each transmission and distribution utility pursuant to this section during the prior 12 months and projected assessments during the next 12 months;

(2) Total deposits into and expenditures from the program fund during the prior 12 months and projected deposits into and expenditures from the program fund during the next 12 months;

(3) The amount and source of any grants or funds deposited in the program fund pursuant to subsection 5, paragraph D during the previous 12 months and the projected amount and source of any such funds during the next 12 months; and

(4) Total deposits into and expenditures from the administration fund during the prior 12 months and

projected deposits into and expenditures from the administration fund during the next 12 months; and

C. Any recommendations for changes to law relating to energy conservation.

Sec. 5. PL 1997, c. 316, §5, as amended by PL 1997, c. 558, §2, is further amended to read:

Sec. 5. Conservation and qualifying facility contracts. All existing contracts and agreements in effect as of March 1, 2000 between electric utilities and energy resource providers, including but not limited to qualifying facilities, continue in effect notwithstanding any other provision of this Act, and the rights of the parties to these contracts and agreements may not be abrogated or diminished as a result of implementing this Act.

All existing electric utilities shall provide each qualifying facility, each party to a contract entered into solely for the purpose of restructuring a contract with a qualifying facility except an affiliated interest and each demand-side management or conservation provider, broker or host with whom it has contracts as of March 1, 2000 the option to have the contract or contracts:

1. Retained by the transmission and distribution utility if it is the same legal entity as the electric utility that entered into the contract or contracts; or
2. Assigned by the existing electric utility to the transmission and distribution utility if it exists as a distinct legal entity after implementation of the provisions of this Act.

If contracts with qualifying facilities in existence on March 1, 2000 contain provisions for the simultaneous purchase of energy, or energy and capacity, by an electric utility from a qualifying facility and by a qualifying facility from an electric utility, the transmission and distribution utility shall continue to sell at retail all transmission and distribution services to the qualifying facility, including the transmission of any energy, or energy and capacity, the qualifying facility may obtain in the competitive market. In the case of each such qualifying facility contract ~~and each demand-side management or conservation contract~~ assigned or retained as provided for in this section, any requirement pursuant to the contract that the qualifying facility or customer ~~or host implementing demand-side management or conservation measures~~ remain a customer of the electric utility that was an original party to the contract or any requirement pursuant to the contract to purchase a certain amount of electricity from that electric utility is deemed to be

fully satisfied by the qualifying facility; ~~or customer; or host~~ (a) remaining a customer of the transmission and distribution utility that has retained the contract, or to whom it has been assigned pursuant to the option provided for in this section, (b) receiving any such required amounts of electricity by making purchases in the competitive energy market, and (c) receiving such purchases over the facilities of the transmission and distribution utility. ~~The transmission and distribution utility shall make payments required under any such demand-side management or conservation contracts or this Act and is entitled to collect those payments in rates and charges as provided for in the Maine Revised Statutes, Title 35-A.~~

The Legislature finds that the execution of contracts relating to programs to promote conservation undertaken at the direction or with the authorization of the Public Utilities Commission prior to September 19, 1997, the effective date of this Act, occurred prior to the restructuring of the electric industry, the divestiture of generation assets by transmission and distribution utilities and the creation of a real-time market in New England for the purchase and sale of electricity and that these significant legal, physical and financial changes in the electric industry justify certain changes in the legal standards under which such contracts are administered and interpreted. Therefore, the Public Utilities Commission and arbitrators shall use the standards established in this paragraph when deciding any contract disputes pursuant to the Maine Revised Statutes, Title 35-A, section 3211-A, subsection 8. Notwithstanding any provision of Title 35-A, a contract relating to programs to promote conservation undertaken at the direction or with the authorization of the commission prior to September 19, 1997 and administered subsequent to March 1, 2000 is deemed to be performed in accordance with the terms of that contract if (a) the project subject to the contract reduces by at least any amount specifically required by the contract the electric consumption of the facility at which the project is installed in comparison with the consumption that would have occurred but for the installation of the project, regardless of the source of electricity used by the facility; (b) the demand-side management or conservation measures are of the same general purpose and nature as those originally installed; even if not identical to those originally installed; (c) the facility at which the project was installed remains interconnected with the transmission and distribution utility's system; and (d) if the contract requires a specific minimum kilowatt-hour quantity of electricity to be purchased through the transmission and distribution utility, such purchases are made. However, all other terms and provisions of the contract not related to (a), (b), (c) or (d) in the previous sentence or the source, delivery or purchase of power remain in full force and effect.

The transmission and distribution utility shall make payments required under any such demand-side management or conservation contracts or this Act and is entitled to collect those payments in rates and charges as provided for in the Maine Revised Statutes, Title 35-A.

Sec. 6. Transition benefits; utility employees. A transmission and distribution utility may file with the Public Utilities Commission a plan in accordance with this section for providing transition services and benefits for eligible employees. For the purposes of this section, "eligible employees" means full-time or part-time employees of a transmission and distribution utility who are not officers of the utility; who are responsible for administering programs to promote conservation undertaken by the utility at the direction or with the authorization of the commission; who are employed by the utility on February 1, 2002; and who are laid off as a result of the transfer of the administration of programs to promote conservation to the Public Utilities Commission pursuant to this Act.

The plan must be filed prior to the transmission and distribution utility laying off eligible employees or 120 days after the effective date of this Act, whichever is first. If the plan is consistent with this section and the Public Utilities Commission finds the plan reasonable, the commission shall approve the plan. In approving a plan, the commission may establish a reasonable date after which employees who are laid off are considered not to be eligible employees.

1. Employee notice. Prior to filing the plan with the Public Utilities Commission, the transmission and distribution utility shall inform its employees and their certified representatives of the provisions of the proposed plan and, in accordance with applicable law, shall confer with those employees or their certified representatives regarding the impact of the proposed plan on those employees and measures to minimize any resulting hardships on those employees.

2. Commission notice. While a plan is in effect, a transmission and distribution utility shall file notice with the Public Utilities Commission within 5 business days of laying off any eligible employees.

3. Substantive plan. The transmission and distribution utility's plan must:

A. Include a program to assist eligible employees in maintaining fringe benefits and obtaining employment that makes use of their potential;

B. For 2 years after the effective date of this Act, provide to eligible employees retraining services and out-placement services and benefits, including intensive screening for vocational interests and aptitude;

C. Provide full tuition for 2 years at the University of Maine or a vocational or technical school in the State or provide other reasonable retraining services of value equal to full in-state tuition for 2 years at the University of Maine, at the discretion of the eligible employee;

D. For 24 months or until permanent replacement coverage is obtained through reemployment, whichever comes first, provide continued health care insurance at the benefit and contribution levels existing during employment with the utility; and

E. Provide severance pay equal to 2 weeks of current base pay for each year of full-time employment and one week of current base pay for each year of part-time employment.

The plan may include provisions for providing early retirement benefits.

4. Cost recovery. The Public Utilities Commission shall allocate the reasonable accrual increment cost of the services and benefits provided under a plan approved by the commission pursuant to this section to ratepayers through charges collected by the transmission and distribution utility. All charges collected must be transferred to a system benefits administrator in the transmission and distribution utility and used to provide services and benefits pursuant to the requirements of this section.

Sec. 7. Interim programs. In order to avoid a significant delay in the implementation of conservation programs pursuant to the Maine Revised Statutes, Title 35-A, section 3211-A, the Public Utilities Commission may use funds from the conservation program fund established pursuant to Title 35-A, section 3211-A, subsection 5 to implement on a short-term basis conservation programs that the commission finds to be cost effective. The commission is not required to satisfy the requirements of Title 35-A, section 3211-A before implementing such programs. Any programs implemented under this section must terminate no later than December 31, 2003. Funds in the conservation program fund

not used for short-term programs under this section must be used in accordance with Title 35-A, section 3211-A.

Sec. 8. Report. The Public Utilities Commission shall examine the feasibility of requiring transmission and distribution utilities to transfer the administration of contracts associated with prior conservation efforts to the commission. The commission shall report its findings and recommendations to the joint standing committee of the Legislature having jurisdiction over utilities and energy matters no later than January 1, 2004. The joint standing committee of the Legislature having jurisdiction over utilities and energy matters may report out legislation to the 121st Legislature relating to the administration of contracts associated with prior conservation efforts.

Sec. 9. Appropriations and allocations. The following appropriations and allocations are made.

EXECUTIVE DEPARTMENT

State Planning Office

Initiative: Deallocates funds to reflect the repeal of the energy conservation program within the State Planning Office and the consequent elimination of one Policy Development Specialist position. The deallocation amount for fiscal year 2001-02 assumes an effective date of April 1, 2002.

Other Special Revenue Funds	2001-02	2002-03
Positions - Legislative Count	(-1,000)	(-1,000)
Personal Services	(\$16,476)	(\$82,050)
All Other	(15,438)	(68,652)
Total	<u>(\$31,914)</u>	<u>(\$150,702)</u>

EXECUTIVE DEPARTMENT DEPARTMENT TOTALS

	2001-02	2002-03
OTHER SPECIAL REVENUE FUNDS	(\$31,914)	(\$150,702)
DEPARTMENT TOTAL - ALL FUNDS	<u>(\$31,914)</u>	<u>(\$150,702)</u>

PUBLIC UTILITIES COMMISSION

Conservation Administration Fund

Initiative: Allocates funds for 3 Utility Analyst positions and related costs associated with the administration of energy conservation programs.

Other Special Revenue Funds	2001-02	2002-03
Positions - Legislative Count	(3,000)	(3,000)
Personal Services	\$77,175	\$324,135
All Other	1,222,825	975,865
Total	<u>\$1,300,000</u>	<u>\$1,300,000</u>

Conservation Program Fund

Initiative: Allocates funds to capitalize the conservation program fund to support the development of energy conservation programs.

Other Special Revenue Funds	2001-02	2002-03
All Other	\$500	\$500

PUBLIC UTILITIES COMMISSION DEPARTMENT TOTALS

	2001-02	2002-03
OTHER SPECIAL REVENUE FUNDS	\$1,300,500	\$1,300,500
DEPARTMENT TOTAL - ALL FUNDS	<u>\$1,300,500</u>	<u>\$1,300,500</u>

SECTION TOTALS

	2001-02	2002-03
OTHER SPECIAL REVENUE FUNDS	\$1,268,586	\$1,149,798
SECTION TOTAL - ALL FUNDS	<u>\$1,268,586</u>	<u>\$1,149,798</u>

Emergency clause. In view of the emergency cited in the preamble, this Act takes effect when approved.

SELECTION CRITERIA FOR INTERIM PROGRAMS

I. Background

- The Legislature recognized that developing a statewide conservation plan that fulfilled all the requirements of the Conservation Act could take many months. To avoid delay, the Act authorizes the Commission to implement interim programs that need not satisfy the requirements of the Act. Interim programs must terminate by the end of 2003.
- We investigated programs in Maine and other states and obtained public input through written comments and a public hearing. From these sources, we established the cost effectiveness tests and other criteria by which we would choose interim programs. We approved 11 programs in June, 2002 and a twelfth in November 2002.

II. Criteria For Interim Programs

The Commission established criteria to govern the choice of interim energy efficiency programs. These criteria balanced the goals of the Act with the objective of implementing the programs quickly. Program criteria are:

- Likely to be cost effective
- Attains a goal stated in the Act
- Is (preferably) a primary effects program (i.e., funding directly causes kWh savings) as opposed to a secondary effects program (where funding causes actions that in turn cause kWh savings)
- Has an established delivery system, so implementation can begin quickly
- Potential as a pilot
- Proven successful elsewhere

III. Cost Effective Tests For Interim Programs

- The Conservation Act directs the Commission to determine the definition of cost effectiveness.
- Since the mid-1970s, cost effectiveness tests have been used to screen efficiency programs. The established test in Maine has been the All Ratepayers Test, which generally compares the cost of the program to the savings caused by avoiding generation and delivery of the electricity saved by the program. Features of commonly used cost effectiveness tests are displayed in a later section of this report.

- We approved cost effectiveness tests for interim programs that mirror the tests currently established in Commission rules and used to choose the programs run by utilities today.
 - All Ratepayers Test (ART) – The ART is the primary screen for cost effectiveness.
 - Rate Impact Test (RIT) – We will consider whether the programs will cause a significant increase in rates.
 - Other Programs – We may implement a program that cannot be shown to pass the ART if it accomplishes other goals of the Act or if it lays the foundation for offering an ongoing cost effective program.

FUNDING FOR INTERIM PROGRAMS

I. Background

- Immediately before Maine's restructured electricity market became operational on March 1, 2000, utility funding for energy efficiency programs varied. Central Maine Power Company (CMP) spent approximately \$0.0015 per kWh, while most other utilities spent \$0.0003 per kWh or less. A significant portion of CMP's spending was for their Power Partners program, under which payments to customers who installed efficiency measures will continue for a number of years into the future.
- The Restructuring Act established a spending cap of \$0.0015 per kWh (CMP's existing level) and a floor of 0.5% of revenue (Bangor Hydro-Electric Company's and Maine Public Service Company's existing level). Utilities collected these amounts in their rates pending completion of the State Planning Office Plan. Most utilities spent less on programs than the amounts they collected.
- The Conservation Act maintains this cap and floor, and directs the Commission to determine the appropriate funding level for each utility.
- The Conservation Act directs the Commission to assess each utility to collect funds for the efficiency programs the Commission implements.

II. Assessment and Collection For Interim Programs

- Currently, we assess utilities based on the level contained in their rates, except that the assessment will not fall above the statutory cap or below the statutory floor. We are collecting the following amounts for the months beginning March 1, 2000.
 - CMP: approximately \$0.0015 per kWh
 - BHE, MPS, and most consumer-owned utilities: approximately 0.5% of revenues, which is approximately \$0.0003 per kWh for most utilities
- To fund Commission-sponsored efficiency programs, we collect from utilities the assessed amount (at the rate shown above) less the amounts that utilities spend on utility-run programs.

III. Assessments And Collections For Each Utility

Assessments and Collections 3/1/2000 – 12/31/2002

Utility	Assessment	Spent on Utility-Run Programs	Amount Collected for Commission-Run Programs (includes interest)
Central Maine Power	\$38,844,183	\$34,149,179	\$ 4,984,145
Bangor Hydro-Electric	1,526,609	828,995	740,824
Maine Public Service	433,413	168,061	279,986
Eastern Maine Electric Coop	124,378	10,785	119,906
Van Buren Light & Power	4,384	0	4,401
Houlton Water Co.	31,693	26,475	5,250
Madison Electric Works	13,009	0	13,009
Fox Islands Coop	12,206	0	12,533
Swans Island Coop	4,126	0	4,221
Kennebunk Light & Power	93,811	100,958	0
State Total	\$41,087,812	\$35,284,453	\$6,164,275

Estimated Assessments and Collections 2003

Utility	Estimated Assessment	Spending on Utility-Run Programs	Amount to Collect for Commission-Run Programs
Central Maine Power	\$12,844,255	\$8,088,000	\$ 4,756,255
Bangor Hydro-Electric	571,352	222,663	348,689
Maine Public Service	157,705	50,361	107,344
Eastern Maine Electric Coop	30,888	6,810	24,078
Van Buren Light & Power	1,748	0	1,748
Houlton Water Co.	11,095	0	11,095
Madison Electric Works	4,837	0	4,837
Fox Islands Coop	4,934	0	4,934
Swans Island Coop	1,500	0	1,500
Kennebunk Light & Power	U/K	matches assessment	0
State Total	\$13,628,314	\$8,367,834	\$5,260,480

IV. Order On Interim Funding

STATE OF MAINE
PUBLIC UTILITIES COMMISSION

Docket No. 2002-161

June 13, 2002

PUBLIC UTILITIES COMMISSION
Interim Electric Energy Conservation
Programs

ORDER ON
INTERIM FUNDING

WELCH, Chairman; NUGENT and DIAMOND, Commissioners

I. SUMMARY

By this Order, we assess transmission and distribution utilities for the full amount of money collected from ratepayers, since March 1, 2000, that was collected to be spent on conservation programs, but has not been spent on such programs. From now until the “permanent” program plan, including funding level, is established in Docket No. 2002-162, we will assess T&D utilities for the amount of conservation expenses included in each T&D utility’s rates, less any amounts spent on “prior conservation efforts” as defined in 35-A M.R.S.A. § 3211-A(1).

II. BACKGROUND

By Proposed Order on April 26, 2002, we established a process to decide whether to implement any interim conservation programs pursuant to subsection 7 of P.L. 2001, ch. 624 (the Conservation Act). In that Order, we stated that we read subsection 7 to constitute a legislative preference to implement conservation programs before the Commission has completed the tasks required for “permanent” programs that are stated within subsections 2 and 3 of the Act. We remain on schedule to implement interim programs during June through August, 2002. To implement interim programs, we must have money in the Conservation Program Fund (established pursuant to subsection 5). Therefore, initial funding decisions must be made now, and cannot be delayed until the “permanent” program decisions are made in Docket No. 2002-162.

On March 1, 2000, when electric restructuring was implemented and transmission and distribution (T&D) utilities were created, conservation programs were governed by now-repealed 35-A M.R.S.A. § 3211. We promulgated the current version of Chapter 380 to implement the policy established by section 3211. By section 3211 and Chapter 380, T&D utilities were required to implement conservation programs consistent with a plan developed by the State Planning Office (SPO). The costs of the conservation programs were to be recovered in

rates from customers of the T&D utilities. The State Planning Office had not completed its program plan by March 1, 2000, when the initial rates for the newly-created T&D utilities had to be established. In the various T&D ratemaking proceedings, the Commission adopted a policy on conservation spending by which rates were to be set using the best estimate for prospective conservation program spending, with the understanding that the actual conservation spending would be reconciled with the estimate used to set rates.

For Maine Public Service Company (MPS) and Bangor Hydro-Electric Company (BHE), which had minimal conservation spending in the years immediately prior to restructuring, we set rates assuming conservation spending at the statutory floor, 0.5% of the total T&D revenue. For Central Maine Power Company (CMP), which had been spending on conservation programs close to the statutory maximum, 1.5 mils per kWh, rates were set assuming CMP spent at the statutory maximum. The level of collection for conservation was not explicitly stated in most COUs' rate proceedings.

For various reasons, although a State Planning Office program plan was developed, it was never implemented. Accordingly, CMP, BHE and MPS have significantly underutilized conservation funds since March 1, 2000. Although CMP budgeted to spend on its "prior conservation programs" at the amount reflected in rates, actual spending has been less. For the period March 1, 2000 through December 31, 2001, CMP underspent approximately \$2,257,000, including carrying costs, for its Power Partner Program, and approximately \$67,000, including carrying costs, for all other conservation programs.

In Docket No. 2002-124, its annual price change filing made as part of the ARP 2000 rate plan, CMP proposed to return the unspent money associated with its Power Partner Program to customers.¹ CMP did not propose to return to customers the unspent dollars associated with its other conservation programs. In Docket No. 2002-124, the Examiner suggested that the issue of the proper treatment of the Power Partner underspending not be decided in the ARP annual review proceeding, but rather in one or more of the Conservation Act proceedings. CMP and the other parties accepted the Examiner's suggestion.

Because the interim program decisions were scheduled to be made in June, the Commission Staff assigned to this docket brought CMP's funding issue to the Commission on an expedited basis. The staff advisors issued a recommendation on interim funding, allowing CMP and other interested persons

¹The estimated underspending would result in a 0.98% decrease in distribution rates.

the opportunity to file written comments or exceptions before the issue was presented to the Commission for decision.²

The Advisors recommended that, for interim program funding, the Commission assess T&D utilities for, and put into the Commission's Conservation Program Fund, the full amount of the pre-Conservation Act underspending. For the interim period going forward, until the long-term funding decisions are made by the Commission, the Advisors recommended that the Commission assess the T&D utilities in the amount that was included in the initial rate cases (the so-called mega cases) for conservation-related spending. This would result in CMP's being assessed at (or near) the statutory maximum while BHE, MPS and the COUs would be assessed at the statutory minimum during the interim period.

Comments or exceptions were filed by the Public Advocate, CMP, Richard M. Esteves on behalf of the Residential/Small Commercial Service Providers Coalition (the Coalition), the Industrial Energy Consumers Group (IECG), Blue Rock Industries and FMC Corporation.

The Public Advocate generally supported the Advisors' recommendations. CMP, however, disagreed with both recommendations. In CMP's view, the Advisors erred in concluding the Conservation Act was ambiguous and in referring to the Act's preamble to resolve that ambiguity. CMP concluded the Act is clear and prohibits adding unspent conservation expenses to the Commission's Conservation Program Fund.³ CMP stated that, for the future, the Act creates a presumption that all T&D utilities will be assessed at a proportionate level, unless the Commission finds a different amount is justified. Because the Commission has decided to postpone such funding issues to the long-term program proceeding, CMP concluded that the Commission should assess CMP

²By means of data requests, the Commission staff has attempted to confirm the precise amounts of underspending that is available either to put into the conservation fund or be returned to customers. The precise amounts cannot be confirmed without further investigation into how CMP's and BHE's (and some of the COUs') megacase orders and stipulations should be interpreted for purposes of accounting for conservation spending (the MPS stipulation appears clear in this matter) and whether the utilities' accounting treatment complies with Chapter 380 §3(B)(2). We estimate the pre-Conservation Act assessments of CMP, BHE and MPS to total approximately \$3 million. However, further analysis must occur before the precise amounts are determined. With this analysis, further process will be granted to interested persons, likely including a technical conference with the T&D utilities' revenue requirement and accounting experts.

³CMP does not explain why unspent Power Partners expenses should be treated differently than unspent funds associated with other conservation programs.

proportionately and therefore should reduce CMP'S assessment to the statutory floor, the amount all other T&D utilities are assessed.⁴

The Coalition agreed with the Advisors' Recommendations. The Coalition disagreed with the Advisors' description that the funds unspent were an "overcollection." The utilities collected the correct amount, the amount reflected in their rates. The correct description of the funds, in the Coalition's view, should be that they are unspent or under-utilized. The Coalition stated that the residential, low-income and small commercial customers should receive a more representative amount of the interim funding. The Coalition also suggested that because significant cost effective conservation is available, to assure itself that conservation funding is more beneficial than rate reductions, the Commission should require conservation spending to produce at least twice the utility bill savings than would returning the funds to ratepayers.

The IECG stated that it opposed CMP's proposal to return unspent Power Partners dollars to ratepayers and supported the use of these dollars to fund interim programs. The IECG reasoned that the funds were collected for conservation-related spending and ratepayers expected the money to be spent for that purpose. The IECG also objected to CMP's proposal (actually made in Docket No. 2002-124) to return the funds only to distribution customers. The IECG stated that little or none of the funds would then be returned to industrial customers, even though 25% to 40% of the funds were collected from them.⁵

Blue Rock Industries and FMC Corporation stated that they objected to using the unspent funds for conservation. As customers, they preferred lower rates. They also objected to requiring CMP's customers to pay for a disproportionate level of conservation spending compared to other T&D customers.

III. DECISION

In conjunction with the interim program decisions, we must decide two funding questions. Prior to the Conservation Act, the T&D utilities collected significantly more conservation-related revenue than they spent on conservation programs. We must decide whether those pre-Conservation Act funds should be

⁴If CMP is assessed at the statutory floor, CMP describes that entire amount as available for "new" conservation programs, and not to be used to fund its existing Power Partners program. If assessed at the statutory maximum, CMP states that the assessment will be used to fund both Power Partners and new programs.

⁵CMP filed a response to this last assertion. CMP stated that since distribution and stranded cost rates were unbundled, all conservation costs are recovered from distribution-level customers. Transmission-level customers do not pay for conservation expenses.

transferred to the Commission's Conservation Program Fund or continue to be deferred by the T&D utilities for later return to ratepayers. In addition, we must decide the amount to assess the T&D utilities during this interim program period, either to fund interim programs or to fund future programs implemented as part of the Commission's "permanent" conservation program plan, until final funding decisions are made in the "permanent" conservation proceeding.

A. Funds Collected Before the Conservation Act

The Conservation Act authorizes the Commission to assess T&D utilities for money to pay for conservation programs and Commission administrative costs. The Act directs the Commission to establish a Conservation Program Fund and a Conservation Administrative Fund as the accounts in which to deposit the money received from utilities. The language of the Act, however, does not refer to or otherwise mention the money that utilities have collected from ratepayers for conservation programs pursuant to repealed section 3211 but that remain unspent.

CMP asserts that the failure of the Legislature to mention funds collected by utilities pursuant to now-repealed section 3211 in the newly-enacted section 3211-A(5) is a clear and unambiguous statement that such funds should not be placed in the Commission's Conservation Program Fund.

We disagree that subsection 5 is a clear and unambiguous statement that prohibits the Commission from assessing the utilities for their unspent pre-Conservation Act funds. Subsection 5 establishes the Commission's program fund, and directs the Commission to deposit all conservation program assessments in the fund. It also directs the treatment for interest earned by the fund and for any grants received by the Commission from other government or private sources. Last, it requires that unspent program funds in any fiscal year be carried forward to be used for conservation programs.⁶ Subsection 5 merely

⁶The complete text of subsection 5 is:

5. Conservation program fund. The commission shall establish a conservation program fund to be used solely for conservation programs.

A. The commission shall deposit all assessments collected pursuant to this section, other than funds deposited in the administration fund, into the program fund.

B. Any interest earned on funds in the program fund must be credited to the program fund.

C. Funds not spent in any fiscal year remain in the program fund to be used for conservation programs.

D. The commission may apply for and receive grants from state, federal and private sources for deposit in the program fund and also may deposit in the program fund any grants or other funds received by or from any entity with which the commission has an agreement or contract pursuant to this section if the commission determines that receipt of those funds would be consistent with the purposes of this

describes the account in which assessed money is to be kept, and provides other details about the account. Subsection 5 is silent on how the Commission should determine the amount of an assessment.

Subsection 4 authorizes the Commission to assess T&D utilities “to collect funds for programs and administrative costs...” Subsection 4 provides for a floor and cap amount for assessments, but does not mention the unspent funds that were collected by utilities before the Conservation Act. We also do not read subsection 4’s silence about pre-Act funds to be a clear and unambiguous statement that the Commission is not permitted to assess pre-Act funds for inclusion into our program fund. Likewise, it is not a clear and unambiguous statement that pre-Act funds must be assessed.

We conclude that the Act itself is ambiguous as to the Legislature’s intent concerning the disposition of collected-but-not-spent conservation funds. This ambiguity, however, is clarified in the emergency preamble of the Act. The relevant paragraph of the preamble reads:

Whereas, funds for conservation programs have been allocated pursuant to existing law, and there is an immediate need to put in place changes to the law in order to ensure efficient and effective use of these funds[.]

We do not believe it plausible that the Legislature could intend “efficient and effective use” to mean that such funds should be refunded to customers without any consideration by the Commission whether the money could be used to fund conservation programs that meet the statutory criteria for interim or “permanent” programs. The words “efficient and effective use” are words typically used in conjunction with conservation and not rate refunds. CMP disagrees and asserts that “efficient and effective use” could mean used for rate refunds, especially in the instance of CMP, whose ratepayers have spent more for conservation than other Maine T&D utilities.⁷

We are assisted in defining the words “efficient and effective” in the preamble because the words are used in the Conservation Act. In section 3211-A(3)(C)(1), the Commission may select a service provider without using

section. If the commission receives any funds pursuant to this paragraph, it shall establish a separate account within the program fund to receive the funds and shall keep those funds and any interest earned on those funds segregated from other funds in the program fund.

⁷We disagree with CMP’s underlying logic that having more, rather than less, cost effective conservation available to its ratepayers is somewhat unfair to them. By passing the Act, the Legislature obviously has decided cost effective conservation is beneficial to ratepayers.

competitive bidding when selection by another means will “promote the efficient and effective delivery of conservation programs...” Thus, within the Act, the phrase “efficient and effective” is used to describe conservation programs. We believe that this use of the phrase adds support to the conclusion that the Legislature intended unspent, pre-Conservation Act funds to be available to pay for Commission-sponsored conservation programs.

We also decide that we should require the T&D utilities to transfer their unspent conservation funds to the Commission’s Conservation Program Fund. In a companion order on interim programs issued today in this docket, we decide to implement cost effective programs that in all reasonable likelihood will require all of the unspent funds to pay for the programs. By requiring the utilities to forward their unspent conservation funds and using those funds to pay for the interim programs, we will fulfill the Legislature’s intent that such funds be put to an efficient and effective use.

CMP also asserts that by assessing to collect the unspent funds now, we reduce our flexibility in the use of that money. We agree that by assessing the unspent funds for inclusion into our program fund, the money must be used to pay for programs or carried forward in the Conservation Fund. This result, however, is acceptable for two reasons. First, we will likely spend the money in the interim period. And as an administrative matter, we do not want to wait to assess the utilities until bills are due to be paid by the Commission. Second, as a practical matter, the loss of flexibility is not significant. Even if we do not spend all of the money in the interim period and carry forward the unspent amounts, future assessments by the Commission can be lowered, effectively returning the money to ratepayers.

B. Program Funds Collected During Interim Period

Before the Conservation Act became law, a conservation program plan was to be developed by the State Planning Office and programs implemented by the T&D utilities. T&D rates were set to include the best estimate of the conservation-related expenses that the T&D utilities would incur carrying out the SPO’s plan. Even now that the Conservation Act has repealed SPO’s authority and removed the implementation responsibility from the utilities, the T&D utilities continue to collect money from ratepayers designed to pay for conservation expenses.

During 2002, as described in Docket No. 2002-162, the Commission will develop its conservation program plan. As part of that plan, the Commission must decide certain funding issues including whether to fund programs at the floor level (0.5% of T&D revenue) or the cap level (1.5 mils per kWh), or somewhere in between. Our funding decisions:

must result in total conservation expenditures by each transmission and distribution utility that:

A. Are based on the relevant characteristics of the transmission and distribution utility's service territory, including the needs of customers[.]

35-A M.R.S.A. § 3211-A(4).

In addition, while we examine the characteristics of each T&D utility, our funding decisions must result in conservation spending that is "proportionally equivalent" to the spending by other T&D utilities, "unless the Commission finds that a different amount is justified[.]" 35-A M.R.S.A. § 3211-A(4)(D). Thus, the Commission must set conservation spending that is proportionally equivalent⁸ among all T&D utilities, unless our examination of each T&D service territory causes us to decide that different spending is reasonable. The Legislature has further prohibited us from achieving proportional equivalency by simply raising the assessments of some T&D utilities to the higher level of other T&D assessments for the sole purpose of achieving proportional equivalency. As mentioned above, BHE's and MPS's rates reflect the floor amount of expenses, while CMP's reflect the cap. The Commission cannot achieve proportional equivalency simply by raising BHE and MPS to the cap amount. To raise BHE and MPS to the cap (and thereby achieve proportional equivalency with CMP the Commission must find that assessment and spending at the cap is reasonable and proper based upon the relevant characteristics of the MPS and BHE service territories.

The funding decisions that the Commission must make are varied and complex. These decisions will not be made, and programs will not be implemented based upon these funding decisions, until 2003. In the meantime, we must implement interim programs during 2002. The Advisors recommended that we postpone deciding the "proportionally equivalent" issues and, for the interim period, assess the T&D utilities in the amount that conservation expenses are currently reflected in the T&D rates, CMP at the cap and the other T&Ds at the floor.

In its exceptions, CMP argues that the Commission should not, even in the interim period, authorize this disparate treatment. Because the Commission has not conducted the necessary investigation of each T&D utility service territory to determine that different funding levels between CMP and the other T&D utilities is justified, CMP urges the Commission to follow the presumption created by 3211-A(4)(D), and reject the disparate treatment recommended by the Advisors.

⁸ "Proportionally equivalent" is not defined. The Commission will define the term, for example, by total kWh, total customers, or some other means.

We do not accept CMP's argument. We are authorized, even encouraged, to implement interim programs. So that we "avoid a significant delay," we are "not required to satisfy the requirements of Title 35-A, section 3211-A before implementing [interim] programs." P.L. 2001, ch. 624, § 7. Clearly, we are not prohibited from assessing CMP a different amount during the interim period, even without a "justification" investigation.

Neither are we persuaded that we should follow the requirements of subsection (4)(D) in the interim period. We recognize that, in the context of long-term programs, we must address these important funding issues raised by CMP. For the interim period, however, we have been presented with information on a wide variety of programs, which appear to satisfy at least some formulations of the cost effectiveness test that we have been directed to apply. Collecting at "current rate" levels allows the greatest degree of flexibility in ensuring that funds are available for interim programs.⁹ Similar to the unspent pre-Conservation Act funds, if the Commission ultimately spends less than its interim period assessments on interim programs, the money in the program fund can be used to smooth the transition to implementing the long-term program funding decisions or to compensate for future expenses associated with existing Power Partners contracts. Accordingly, our assessments during this interim period will reflect the amounts expected to be collected in T&D rates over the remainder of 2002.

Accordingly, the Administrative Director will issue assessments to all T&D utilities consistent with this Order. The ongoing assessment shall be issued quarterly. If the accounting questions discussed in footnote 2 can be resolved before June 21, 2002, assessments will be based upon the actual financial data. If the questions cannot be answered by June 21, 2002, the Administrative Director shall assess before June 24, 2002 the lowest amount that is not in question as to computation, and assess any additional amount after any accounting or computational issues are resolved.

Dated at Augusta, Maine, this 13th day of June, 2002.

BY ORDER OF THE COMMISSION

Dennis L. Keschl
Administrative Director

⁹We will assume that Consumer-Owned Utilities whose initial T&D rate cases did not explicitly address conservation expenses have been collecting at the statutory floor.

COMMISSIONERS VOTING FOR: Welch
 Nugent
 Diamond

THIS DOCUMENT HAS BEEN DESIGNATED FOR PUBLICATION

NOTICE OF RIGHTS TO REVIEW OR APPEAL

5 M.R.S.A. § 9061 requires the Public Utilities Commission to give each party to an adjudicatory proceeding written notice of the party's rights to review or appeal of its decision made at the conclusion of the adjudicatory proceeding. The methods of review or appeal of PUC decisions at the conclusion of an adjudicatory proceeding are as follows:

1. Reconsideration of the Commission's Order may be requested under Section 1004 of the Commission's Rules of Practice and Procedure (65-407 C.M.R.110) within 20 days of the date of the Order by filing a petition with the Commission stating the grounds upon which reconsideration is sought.
2. Appeal of a final decision of the Commission may be taken to the Law Court by filing, within **21 days** of the date of the Order, a Notice of Appeal with the Administrative Director of the Commission, pursuant to 35-A M.R.S.A. § 1320(1)-(4) and the Maine Rules of Appellate Procedure.
3. Additional court review of constitutional issues or issues involving the justness or reasonableness of rates may be had by the filing of an appeal with the Law Court, pursuant to 35-A M.R.S.A. § 1320(5).

Note: The attachment of this Notice to a document does not indicate the Commission's view that the particular document may be subject to review or appeal. Similarly, the failure of the Commission to attach a copy of this Notice to a document does not indicate the Commission's view that the document is not subject to review or appeal.

Approved Interim Programs

I. Approved Interim Programs

In June 2002, we approved 11 interim programs. In November, we approved a twelfth program. In the following pages, we include a table that summarizes the characteristics of the programs and a more complete description of each program.

- Low-income refrigerator replacement program
- Building Operator Certification (BOC) program
- State building program
- Department of Economic and Community Development (DECD) Small Business Conservation Loan Fund re-capitalization
- Maine Energy Education Program (MEEP) funding
- Maine energy curriculum investigation
- Residential lighting incentive
- New school construction program
- Small business incentive program
- Low-income no-charge lighting program
- Large commercial/industrial (C/I) program
- Traffic signal replacement program

We also became a sponsor of the Northeast Energy Efficiency Partnership (NEEP).

II. Interim Program Characteristics

Program	Description	Customer Group	Delivery	Status	Estimated Cost Effectiveness *	2002-2003 Budget
Refrigerator Replacement	Replace inefficient refrigerators	Low-income	MSHA CAPs	MSHA and CAP agencies have installed 15 refrigerators	B/C ratio 1.3	\$300,000
BOC	Efficiency training for facilities mgrs	Public schools	NEEP	Class begun in Portland, Bangor, and Northern Maine. Heavily enrolled.	B/C ratio 5.9 in Northwest	\$168,000
State Buildings	Efficiency measures in State buildings	Public	DAFS	DHS HETL building in Augusta tentatively identified for renovation. Survey of all buildings under consideration.	Projects chosen to ensure cost effectiveness – 1 st project B/C ratio 1.8	Up to \$1,500,000
DECD Loan Re-capitalization	Add to fund for small business loans	Small business	DECD	Funds transferred to DECD. Auditor tools developed.	Projects chosen to ensure cost effectiveness	\$200,000
MEEP Funding	Conservation education through schools	Schools	MEEP	Funds transferred. MEEP able to continue its educational programs when the school year began.	Non-quantifiable	\$50,000
Curriculum Development	Fund ME school curriculum development	Schools	Math Science Alliance	Math Science Alliance currently investigating curriculum options. Report due 1 st quarter 2003.	Non-quantifiable	\$10,000
Residential Lighting Incentive	Increase adoption of compact fluorescents through in-store incentives	Residential	Contractor, Retail Stores	Program design complete. Program implementer chosen through bid process. Program available to consumers Jan. 2003.	B/C ratio 2.5	\$2.5M shared, residential lighting & new school construction
New School Construction	Improve efficiency of public schools at time of construction	Schools	Contractor, State Agencies	Meetings held with school and state entities to determine approach. Consultant sought for technical details. Final program design under way. Program available to schools in mid-2003.	Projects chosen to ensure cost effectiveness	
Small Business Incentive	Improve efficiency of small businesses through local vendors	Small business	Contractor, In-state Vendors	Program design complete. Bid process conducted and bids received. Program available to consumers 1 st quarter 2003.	B/C ratio 1.4	\$3M shared, small business incentive, low-income lighting & large C/I

Low-Income Lighting	Provide compact fluorescents	Low-income	MSHA CAPS	No action taken yet – Benefits and costs to be investigated before implementation	Many cost effective lighting programs nationwide	
Large C/I	Approach not yet determined	Large and medium-sized businesses		No action taken yet – Benefits and costs to be investigated before implementation	Many cost effective programs nationwide	
Traffic Signal Replacement	Replace incandescent traffic lights with LEDs	Public, through municipalities	MDOT	Program design complete. Implementation to begin first quarter 2003	B/C Ratio 2.9	\$200,000

* A program is cost effective if the net present value of its quantifiable benefits exceeds the net present value of its costs. “B/C” is the benefit-to-cost ratio. A program is cost effectiveness if the B/C ratio exceeds 1.

III. Descriptions Of Interim Programs

Low Income Refrigerator Replacement Program

Market Situation

The target market for the interim Low Income Refrigerator Replacement program is the residential low-income market. Refrigerator running costs comprise a significant and unavoidable expense for most low-income households, but the high replacement cost discourages most households from purchasing a more efficient model. The program goal is to replace the most inefficient of low-income households' refrigerators.

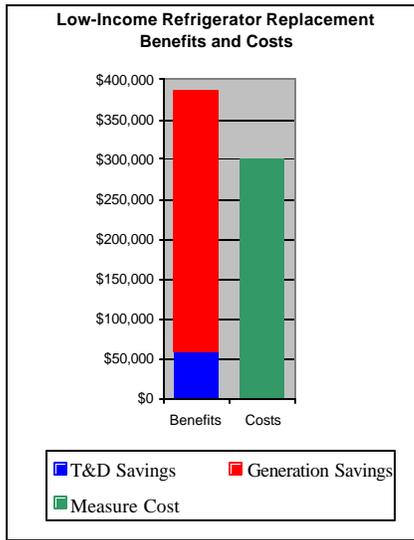
Program Description

The Maine State Housing Authority (MSHA) will deliver the program through the Community Action Program (CAP) Agencies in the same manner used in previous years under programs governed by the Department of Energy (DOE). CAP agencies will examine refrigerators at the same time they audit homes to deliver weatherization, using a combination of metering and estimations to identify inefficient appliances. Under MSHA management, CAP agencies will purchase efficient models from local vendors and will contract locally to perform the replacement and disposal of inefficient models.

Advantages

- *Existing delivery mechanism* – CAP agencies routinely audit low-income households and arrange for weatherization and other aid. CAP agencies also replaced inefficient refrigerators until federal funding was discontinued. CAP agencies retain trained individuals and vendors.
- *Cost effective and easily measured savings* – CAP agencies have established means for determining the energy usage of existing refrigerators and manufacturers publish usage of new refrigerators, so savings will be pre-determined and measurable. We have estimated the benefit-to-cost ratio of the Maine's interim program to be 1.3.
- *Reaches lowincome people* – This program will help fulfill the Act's mandate to target 20% of funding to low-income customers.

Benefits and Costs



Benefit-to-Cost Ratio: 1.3

Building Operator Certification Training

Market Situation

The target market for the interim Building Operator Certification (BOC) program consists of personnel who operate and maintain public school buildings in Maine. Many plant operators receive little formal training in the complex operation of their buildings' electrical systems. The program goal is to enable these individuals to improve the efficiency of these systems through their daily decisions.

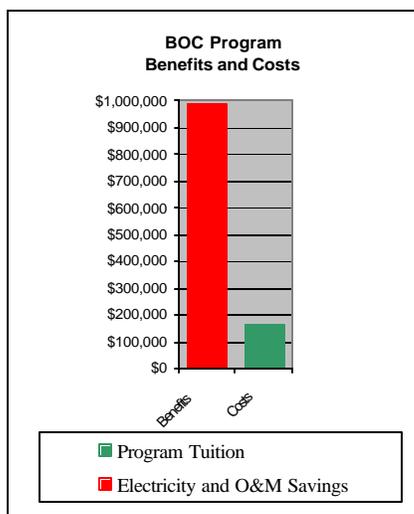
Program Description

The BOC program is an established 8-day course being offered throughout New England, the Northwest and mid-Atlantic states. In New England, BOC is offered by the Northeast Energy Efficiency Partnership (NEEP). NEEP uses experts in areas such as lighting, HVAC and indoor air quality, and requires hands-on projects to reinforce efficiency concepts. The program is being offered in Portland, Bangor, and Northern Maine. To ensure adequate enrollment in Northern Maine, the course has been extended to larger hospitals and publicly funded colleges and universities.

Advantages

- *Existing delivery mechanism* – NEEP teaches this course throughout New England.
- *Cost effective* – The cost effectiveness of education programs has traditionally been difficult to quantify. However, the BOC program was evaluated in the Pacific Northwest and found to have a benefit-to-cost ratio of 5.9.
- *Benefits many citizens* – Cost savings will extend to all taxpayers who support Maine's public schools.
- *Promotes sustainable improvements* – Education is permanent. Plant managers will continue to make improved efficiency decisions for many years.

Benefits and Costs



Benefit-to-Cost Ratio: 5.9

State Buildings

Market Situation

Many state buildings could lower their electrical use or use electricity more efficiently. However, efficiency improvements require a significant level of upfront capital spending, which may inhibit implementation. The goal of the State Buildings program is to provide funding for electrical efficiency improvements in State buildings that the State would be unable to fund otherwise.

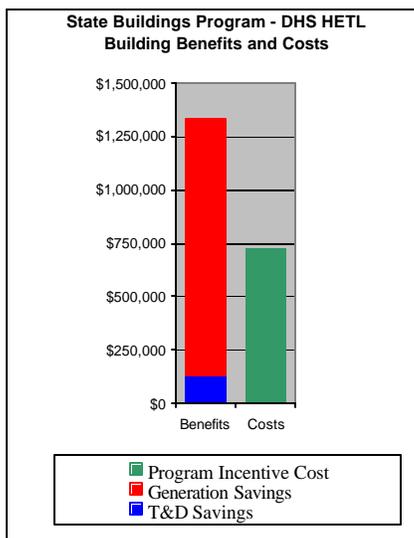
Program Description

The program provides funding to the Department of Financial and Administrative Services to capitalize efficiency improvements in one or more State buildings. The Commission and DAFS will identify measures or renovations to fund based on engineering estimates that ensure the project will be cost effective.

Advantages

- *Existing delivery mechanism* – DAFS routinely identifies and carries out renovation projects.
- *Cost effective using engineering estimates, and easily measured savings* – Each efficiency improvement will be approved based on established engineering estimates of energy savings. Savings generally will be easily measured through bills, engineering estimates, or metering. We have estimated the benefit-to-cost ratio of the first project carried out under this program to be 1.8.
- *Benefits all citizens* – Cost savings will extend to all taxpayers who support Maine’s public buildings.
- *Good pilot* – This program will fund a small number of building renovation projects which will indicate whether the program should be expanded to additional public or private building renovations.

Benefits and Costs – DHS HETL Building



Benefit-to-Cost Ratio: 1.8

DECD Small Business Loan Fund Re-Capitalization

Market Situation

The target market for the interim DECD Small Business Loan Fund Re-capitalization program is the small business market. Many small businesses could reduce their electrical use or improve their business operations through more efficient use of electricity, but are unable to commit the high upfront cost of carrying out efficiency improvements. The program goal is to allow small businesses to implement electric efficiency measures that they would otherwise not make because of high capital costs.

Program Description

The program provides one-time funding to the Department of Economic and Community Development (DECD) to re-capitalize its small business revolving loan fund. DECD currently provides loans from this fund for small business efficiency investment opportunities that DECD identifies through energy audits. DECD will use Commission-approved funds for electric energy efficiency measures that it pre-determines to be cost effective.

Advantages

- *Existing delivery mechanism* – DECD currently identifies, approves, and delivers loans using its revolving loan fund.
- *Cost effective using engineering estimates, and easily measured savings* – Each efficiency improvement is approved based on established engineering estimates of energy savings. Savings are generally easily measured through bills, engineering estimates, or metering.
- *Promotes sustainable economic development* – Efficiency measures financed through loans will be long-term and will improve the economic position of each business, thereby satisfying this goal established in the Act.
- *Reaches small businesses* – This program will help fulfill the Act's mandate to target 20% of funding to small business customers.

Benefits and Costs

- Benefits – Each project will be chosen based on a cost effectiveness estimate.
- Costs – \$200,000
- Cost effectiveness – Will be calculated for each project

Maine Energy Education Program (MEEP) Funding

Market Situation

MEEP is an organization that provides in-school energy education programs to K-12 students across Maine. MEEP is funded entirely through donations and faced a funding crisis in 2002. The goal of the program is to allow MEEP to continue offering programs during this school year.

Program Description

The program provides funding to support the operational expenses of MEEP for one school year. MEEP will continue to offer electric energy education demonstrations, special programs, and building audit assistance to school children throughout Maine.

Advantages

- *Existing delivery mechanism* – MEEP has been operating in Maine for many years. Its programs are established and well-known.
- *Benefits many citizens through their children* – Improved knowledge of electric efficiency will extend to the families of children who participate..
- *Increases consumer awareness* – This program will help fulfill the Act's mandate to increase consumer awareness.

Benefits and Costs

- Benefits – While benefits are unquantifiable, teachers throughout Maine testify to the value of the MEEP programs to their students and their curriculum.
- Costs - \$50,000
- Cost effectiveness – Unquantifiable

Curriculum Development

Market Situation

Schools throughout Maine take varying approaches to electricity education. Nationally, electrical curricula including facts, issues, and efficiency concepts have been developed that could improve the effectiveness and consistency of energy education in Maine's schools. The goal of the program is to allow an education task force to develop a recommendation for an effective approach to statewide energy education in Maine.

Program Description

The program provides funding to allow a group of professional educators to examine curriculum approaches, including ways to measure energy saved as a result of the curriculum. Under the auspices of the Maine Mathematics and Science Alliance, the group will submit its recommendations to the Commission in April 2003. The recommendations will allow us to make the most effective use of future education funding.

Advantages

- *Benefits many citizens through their children* – Improved knowledge will extend to the families of children who participate.
- *Increases consumer awareness* – Program results will help us develop programs that fulfill the Act's mandate to increase consumer awareness.

Benefits and Costs

- Benefits – The recommendations from this study will allow us to fund effective curricula and will improve our ability to determine cost effectiveness.
- Costs - \$10,000
- Cost effectiveness - Unquantifiable

Residential Lighting Incentive

Market Situation

The target market for the interim Residential Lighting Incentive is the entire residential market. Residential consumers typically purchase incandescent light bulbs that are far less efficient than compact fluorescent lights (CFLs) because of the lower upfront cost and lack of familiarity with CFLs. The program goal is to make CFLs a purchase-of-choice for residential consumers and a stock item on retail shelves.

Program Description

The program encourages the public's adoption of the following lighting products:

- Compact fluorescent lights (as opposed to incandescent lights)
- Interior fixtures
- Exterior fixtures
- Torchieres
- Ceiling fans with integral lighting

Promotion and incentives will take place in retail stores where residential customers purchase lighting products and through media that reach residential customers. The program incentive will be available to any person who purchases a light bulb or lighting fixture in a retail store. Some small businesses are also likely to benefit from the program.

The program will be delivered through a network of participating Maine retailers (hardware stores, national retail merchandisers, grocery stores, lighting stores). The retailer will display rebate coupons in the store, and customers will submit the coupon and receive the rebate at the point of purchase. The retailer will also display informational material and will be prepared to discuss the efficient products with shoppers. Newspaper and radio will be done through the program and, ideally, by the retail stores.

The Commission has hired a program administrator who will develop promotional material, prepare the coupons and store displays, recruit and train Maine retailers, process coupons, and track results.

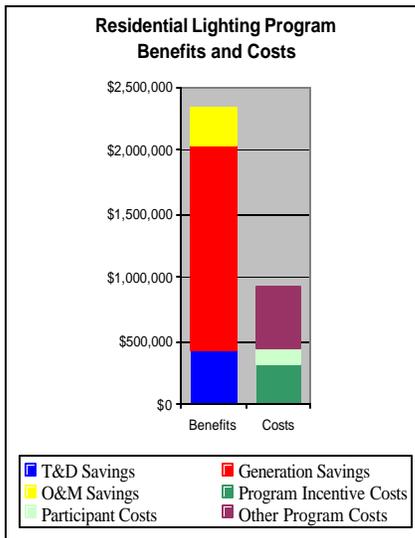
The program administrator and the Commission have not yet decided upon the rebate level for each measure.

Advantages

- *Cost effective* -- Point-of-purchase lighting programs are well established nationally and have been evaluated as cost effective in many states. We have estimated the benefit-to-cost ratio of Maine's interim program to be 2.5.

- *Reaches a large number of people* – All households purchase light bulbs, so every person in the state has an opportunity to participate in the program to the extent made available by program funding.
- *Increases consumer awareness* – Informational material displayed in retail stores and media advertisements will reach a large number of people.
- *Creates favorable market conditions* – The program will increase lighting stock in retail stores and establish customer acceptance of CFLs, thereby transforming the market so that customer incentives are no longer needed.

Benefits and Costs



Benefit-to-Cost Ratio: 2.5

New School Construction Program

Market Situation

Each year, a modest number of towns in Maine receive Maine Board of Education approval for state funding to begin the process of constructing a new public school. The State typically provides a major share of the funding, with the remainder provided through local bonding. The new school construction process typically takes a number of years to complete, and throughout this period, affected towns interact extensively with State agencies regarding funding, siting, architectural design, and construction practices. In an effort to hold initial capital costs down, many towns make design decisions that may not be the most energy efficient option available and thus build facilities that require higher than necessary energy and operating costs over their lifetimes. The program goal is to motivate and encourage school districts to adopt efficient designs and install efficient energy systems that they would otherwise forego because of high capital costs.

Program Description

Detailed design of this program is still in progress as this report is being written. In general, we plan to provide information and education on energy efficient new school designs and technologies to both local school boards and educators, and the architect/engineer community that supports school construction. The program will begin with the following features, and expand as we learn the needs of decision makers and citizens:

- Program funding will support additional technical design services for school boards and their architects/engineers, to evaluate more cost effective school design options.
- Program funding will support an architect/engineering firm that will provide technical expertise in energy efficient school design to the Maine Department of Education and Bureau of General Services.
- Under a DOE grant, Maine School Management Association (MSMA) will provide a "circuit rider" to work with local school authorities and explain the benefits of energy efficient design.
- We will fund (with USDOE and other outside assistance where available) a series of workshops on high performance school design, for local school authorities and the school design community.

The assistance will be offered to the schools that, in recent years, have been approved by the Board of Education for construction funding.

Advantages

- *Benefits many citizens* - Cost savings will extend to all taxpayers who support Maine's public schools.

- *Promotes sustainable improvements* - A superior design will improve the operating costs of a school building for scores of years and will provide an example for all decision makers in the new school community. The program will also demonstrate to MDOE which energy efficient design features and technologies should be incorporated into new school construction standards.
- *Increases consumer awareness* - A wide range of citizens will observe the improved building practices used in a public school
- *Good pilot* - This program will fund a few school projects, but will also serve to demonstrate whether this approach should be expanded to additional public or private building construction and renovations.

Benefits and Costs

- Benefits – Each school project will be chosen based on a cost effectiveness estimate.
- Costs – up to \$2.5M shared with Residential Lighting Incentive
- Cost effectiveness – Will be calculated for each school project

Small Business Incentive

Market Situation

Small business customers are one of two “hard to reach” markets specifically targeted by the Conservation Act. Small business owners face significant barriers to implementing energy efficiency. There is intense competition for their time and attention, small business owners often lack knowledge regarding unfamiliar energy efficient technologies, and they lack significant capital to invest in new technologies. Many efficiency investments require a large upfront investment that, over time, will be more than offset by reduced operating costs. The goals of this program are to improve the efficiency of energy use by business owners, increase the number of Maine suppliers selling efficient products and services to small businesses, and to increase awareness of efficient products and business practices.

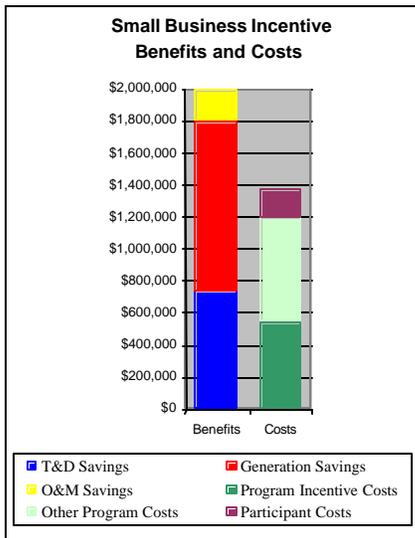
Program Description

The program will offer a financial incentive to small businesses that retrofit their electric equipment with more efficient measures. A single entity will oversee the program, but measures will be introduced, sold, and installed by in-State vendors, stores, and service providers who already deal with small business customers. The program manager will help this network of program allies to integrate energy efficiency into the measures and services they already provide. The program will include an education component meant to improve vendors’ knowledge, thereby allowing that knowledge to be passed along to small business customers.

Advantages

- *Cost effective* – Programs that promote purchase and installation of efficient products are cost effective in other locations. We have estimated the benefit-to-cost ratio of Maine’s interim program to be 1.4.
- *Promotes sustainable economic development* – Improvements in electrical equipment and in business practices are long-term changes that will lower operating costs (or provide business benefits) for many years. Such actions improve the economic position of the companies, thereby encouraging economic growth.
- *Creates favorable market conditions* – By using in-State suppliers and vendors to provide measures and information, the program will improve the infrastructure delivering efficiency measures, thereby transforming the market such that customer incentives will be less necessary in the future.
- *Increases consumer awareness* – Vendors throughout Maine will become more knowledgeable and will offer more efficient products, and will pass that knowledge on to their small business customers in the course of normal business interactions.
- *Reaches Small Businesses* – This program will help fulfill the Act’s mandate to target 20% of funding to small business customers.

Benefits And Costs



Benefit-to-Cost Ratio: 1.4

Low-Income Lighting

Market Situation

As do many residential consumers, low-income consumers typically purchase incandescent light bulbs that are far less efficient than compact fluorescent lights (CFLs) because of the lower upfront cost and lack of familiarity with CFLs. The program goal is to overcome the barrier of higher upfront cost by installing CFLs in low-income consumers' homes at no cost to the consumer, thereby lowering the consumers' electrical use and electric bills.

Program Description

While program details have not been developed, the general approach will be for CAP agencies to dispense energy efficient light bulbs as part of the CAP weatherization programs. CAP agencies will supplement the information they now provide to low-income consumers with information on the energy efficient light bulbs.

Advantages

- *Existing delivery mechanism* – CAP agencies routinely audit low-income households and could easily dispense CFLs.
- *Cost effective* – Residential lighting programs have been found cost effective in many states. The incremental cost of dispensing light bulbs during an audit visit will be small, making cost effectiveness even more likely.
- *Reaches low-income people* – This program will help fulfill the Act's mandate to target 20% of funding to low-income customers.

Benefits and Costs – Unknown until design complete

Large Commercial/Industrial Program

Market Situation

Large commercial and industrial customers often employ industrial processes and building controls that use or influence large quantities of electricity. Some large customers possess sophisticated electrical knowledge but face investment hurdles. Other customers would benefit from improved knowledge of electrical systems. We have not yet determined the goal of the program.

Program Description

This program is not yet designed.

Advantages

- *Cost effective using engineering estimates and easily measured savings* – Many types of large C/I programs result in savings that are easily estimated and measured.
- *Promotes sustainable economic improvements* – Improvements in industrial processes, building controls, and other efficiencies gained from electric-intensive processes are long-term changes that will lower operating costs (or provide business benefits) for many years. Such measures improve the economic position of the companies, thereby encouraging economic growth.
- *Good pilot* – This program is likely to fund a small number of projects that will indicate whether the approach should be expanded to additional, similar projects.

Benefits and Costs – Unknown until design complete

Traffic Signal Replacement

Market Situation

Most of the 662 traffic signals in Maine are owned by the Maine Department of Transportation (MDOT) and maintained by municipalities, which pay for the energy consumed and replace bulbs when needed. Light Emitting Diode (LED) traffic signal bulbs consume one tenth the energy and last seven to 15 times as long as incandescent bulbs. MDOT has identified LED retrofits as a sustainability strategy under Maine's Clean Government Initiative, and the New England Governors and Eastern Canadian Premiers have identified this type of retrofit as providing environmental benefits. MDOT installs LED bulbs in traffic signals under its jurisdiction. However, because of high upfront costs and lack of familiarity with LED options, many municipalities continue to replace existing incandescent bulbs with new incandescent bulbs. The program goals are to reduce energy consumption and greenhouse gasses produced by traffic signals as well as increase municipalities' awareness of the benefits of these LED bulbs.

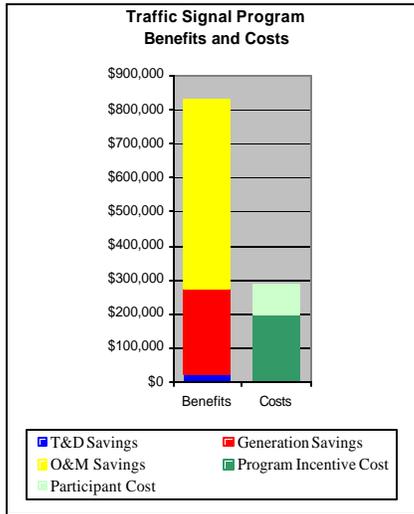
Program Description

This program will fund 2/3 of the cost of LED traffic lights purchased by municipalities during 2003. MDOT will deliver the program by notifying municipalities of the program and determining the locations that will receive funding. MDOT will provide a retrofit kit, arrange for installation, and supervise the installation. In addition, MDOT will continue to provide education to municipalities regarding the advantages of LED bulbs.

Advantages

- *Benefits many citizens* – Most traffic signals are maintained by municipalities. Thus, electricity cost savings and ongoing replacement costs will extend to all taxpayers in participating municipalities.
- *Existing delivery system* – MDOT will manage program delivery to municipalities throughout Maine.
- *Cost effective* – Similar programs have been found to be cost effective elsewhere. We have estimated the benefit-to-cost ratio of Maine's interim program be 2.9.
- *Increases consumer awareness* – The program will increase awareness among all municipalities of the cost savings attainable through LED traffic light replacement.
- *Improves safety* – With longer lives, LED lights will increase the reliability of intersection signals.

Benefits and Costs



Benefit-to-Cost Ratio: 2.9

Northeast Energy Efficiency Partnership (NEEP) Sponsorship

The Conservation Act allows the Commission to coordinate its activities with similar efforts in other states and to enter into agreements with other entities outside of Maine, for joint or cooperative planning or program delivery, when such activity will benefit Maine.

NEEP is an organization that coordinates program design, development, monitoring, evaluation, research, and communication activities among utilities and other state agencies that offer energy efficiency activities. NEEP's mission is to increase energy efficiency in homes, businesses, and industry in the northeast region of the United States. NEEP's activities are determined by the needs of its funding sponsors, who determine how funding will be directed. A small staff provides support to sponsors.

Sponsorship of NEEP allows the Commission to make use of programs, outreach material and research developed through NEEP and allows us to contribute to decisions regarding future regional efficiency activities. With this in mind, we became NEEP sponsors in 2002. The sponsorship funding level is determined by the size of the service territories that the sponsor represents and by the number of programs that the sponsor supports. We are sponsoring support for the residential lighting initiative and the building operation and maintenance initiative. Two of the interim programs implemented in Maine rely heavily on NEEP activities associated with those initiatives. Thus, sponsorship of NEEP accomplishes a goal of the Act and directly supports development of our interim programs.

IV. Emissions Savings by Interim Programs

Annual Emissions Avoided by Interim Conservation				
Program	Annual MWh	Lbs. SO2	Lbs. NOx	Tons CO2
Low-Income Refrigerator Replacement	342	2,464	684	270
Traffic Signal Replacement Program	908	6,538	1,816	716
State Buildings Program	2,427	17,474	4,854	1,915
Residential Lighting Incentive	4,105	29,556	8,210	3,239
Small Business Incentive	1,776	12,787	3,552	1,401
Total Program	9,558	68,819	19,116	7,541
Assumptions: Emission savings from "1999 Nepoch Marginal Emission Rate Analysis" April 2002 Table 2 p.6 SO2 = 7.2 lbs./MWh Nox = 2 lbs./MWh CO2 = 1578 lbs./MWh				

V. Order Establishing Interim Conservation Programs

STATE OF MAINE
PUBLIC UTILITIES COMMISSION

Docket No. 2002-161

June 13, 2002

PUBLIC UTILITIES COMMISSION
Interim Electric Energy Conservation Programs

ORDER ESTABLISHING
INTERIM CONSERVATION
PROGRAMS

WELCH, Chairman; NUGENT and DIAMOND, Commissioners

I. SUMMARY

By this Order, we establish the cost effectiveness tests, objectives and other criteria that we use and will continue to use to choose interim electric energy conservation programs. We decide to immediately implement the following as interim programs:

- Low-income refrigerator replacement program
- Building Operator Certification (BOC) program
- State building program
- Department of Economic and Community Development (DECD) conservation loan capitalization
- Maine Energy Education Program (MEEP) funding
- Maine energy curriculum investigation

We also decide to implement the following programs after developing additional program design details:

- Residential energy efficient lighting program
- New school construction program

Finally, we decide to further investigate the following programs that show potential for meeting our criteria for interim programs:

- Small business prescriptive rebate program
- Low-income no-charge lighting program
- Large commercial/industrial (C/I) program

II. BACKGROUND

P.L. 2001, ch. 624 (the Conservation Act),¹⁰ enacted during the second session of the 120th Legislature, establishes terms that govern an electric energy conservation program in Maine. Section 4 of ch. 624 directs the Maine Public Utilities Commission (Commission) to develop and implement electric energy conservation programs that are consistent with the goals and objectives of an overall energy conservation program strategy that the Commission must establish. The programs must be cost effective, according to a definition that the Commission also must establish. Various other statutory directives require the Commission to promulgate rules and hold public hearings.

Recognizing that the process of implementing electric energy conservation programs will necessarily take many months, the Legislature authorized the Commission to implement interim programs. Section 7 of ch. 624 states:

Interim programs. In order to avoid a significant delay in the implementation of conservation programs pursuant to the Maine Revised Statutes, Title 35-A, Section 3211-A, the Public Utilities Commission may use funds from the conservation program fund established pursuant to Title 35-A, section 3211-A, subsection 5 to implement on a short-term basis conservation programs that the commission finds to be cost effective. The commission is not required to satisfy the requirements of Title 35-A, section 3211-A before implementing such programs. Any programs implemented under this section must terminate no later than December 31, 2003. Funds in the conservation program fund not used for short-term programs under this section must be used in accordance with Title 35-A, section 3211-A.

The Commission intends to implement interim programs during the summer of 2002. We expect to begin implementing longer term programs during 2003.

By Proposed Order on April 26, 2002, we stated our preliminary views on interim program goals, cost effectiveness tests for interim programs, interim program candidates, and the decision making process that the Commission will use when selecting and implementing interim programs. We held a public hearing on May 10, 2002 so that interested persons could comment on the Proposed Order and other matters concerning interim programs. We also invited written comments on the Proposed Order, which were due by May 17, 2002.

In Appendix B attached to this Order, we list the persons who spoke at the public hearing and who filed written comments. Comments at the public hearing were transcribed. Written comments filed with the Commission are available from the

¹⁰ The Conservation Act is contained in Appendix A.

virtual docket at the Commission's web site (www.state.me.us/mpuc). The transcription of the public hearing is also available.¹¹ We discuss these comments throughout the body of this Order. Suggestions for specific interim programs are discussed in the program section of the Order.

III. BASIS FOR APPROVING INTERIM CONSERVATION PROGRAMS

The Conservation Act requires that the Commission only implement interim programs that it finds cost effective.¹² In implementing section 7 of the Act, we seek to answer three broad questions: (1) how will we evaluate the cost effectiveness of specific interim programs, (2) to what extent should we consider the provisions of newly-enacted 35-A M.R.S.A. § 3211-A (section 4 of the Act) when approving interim programs, and 3) are there other criteria to consider?

A. Cost Effectiveness

1. Appropriate tests

Cost effectiveness testing for conservation programs has a long history before this Commission. For example, the Electric Rate Reform Act stated 25 years ago that

The Commission, as it determines appropriate, shall order electric public utilities to submit specific rate design proposals and related programs for implementing energy conservation techniques and innovations ... Such proposals shall, as the Commission determines, be designed to encourage energy conservation, minimize the need for new electrical generating capacity, and minimize the costs of electricity to consumers... (Public Laws, 1977, Chapter 521).

Thus, we have spent the last twenty-five years considering, and periodically reconsidering, how to test whether proposed conservation measures are likely to minimize electricity (and sometimes other) costs. The debate typically is framed in terms of which of various cost effectiveness tests should be applied. That debate is generally reducible to a debate over our goals in adopting conservation programs.

Our last thorough review of this question was in 1988, when we adopted amendments to Chapter 380, Demand Side Energy Management Programs

¹¹ See our web site, under the "Electric Conservation Activity" section.

¹² A program cannot definitively be found cost effective until after it has been in operation for some period of time and an evaluation has been performed. We interpret the Act's requirement to require that we determine that an interim program is highly likely to be cost effective.

by Electric Utilities, (Docket No. 88-178).¹³ When considering the cost effectiveness of interim conservation programs, we propose to use the cost effectiveness framework established in the original Chapter 380 (Ch. 380-O).

Ch. 380-O defined three cost effectiveness tests, but principally relied upon the “All Ratepayers Test.” This test measures whether a proposed conservation program provides the same level of end use amenity (e.g. lighting or hot water) at a lower overall net cost to utilities and ratepayers taken together.

The second cost effectiveness test in Ch. 380-O was the “Rate Impact Test.” This test measures the impact of a conservation program on the overall average rate of the electric utility (in \$ per kWh) rather than the total dollar cost. This is a stricter test than the All Ratepayers Test. A decline in electricity use, from a conservation program or for some other purpose, will tend to reduce the utility’s profit, to the extent the reduction in revenue from lower sales is greater than the utility’s savings from lower sales. At the present time, with utilities limited to the transmission and distribution (T&D) business and continuing to carry substantial stranded costs in their rates, it is unlikely that many conservation programs will pass the Rate Impact Test.¹⁴

The third cost effectiveness test in Ch. 380-O was the Societal Test, which included all elements of the All Ratepayers Test as well as “environmental benefits and any other social benefits external to the transaction between the utilities and its customers.”

Ch. 380-O provided for automatic approval of any programs that passed both the All Ratepayers Test and the Rate Impact Test and for programs that passed the All Ratepayers Test and did not have a significant (defined as one percent) impact on the average rate per kWh. There was no indication in Ch. 380-O of how, if at all, the Societal Test should be employed in analyzing conservation programs.

For purposes of determining the cost effectiveness of interim conservation programs, we will utilize the framework established in Ch. 380-O. We will rely primarily on the All Ratepayers Test to screen for cost effectiveness but will also consider whether conservation programs, or groups of programs, are likely to have a significant impact on rates.¹⁵ In addition, just as Ch. 380-O provided the

¹³ This version of the rule was replaced in 1999 with a new version reflecting the provisions of 35-A MRSA §3211, which assigned many of the responsibilities for conservation programs to the State Planning Office. The Conservation Act repeals §3211 and returns responsibility for conservation programs to the Commission.

¹⁴ The exception here may be conservation programs which are primarily focused on use during on-peak periods.

¹⁵ Under alternative rate plans, some utilities’ rates would not be affected immediately, if at all.

Commission with flexibility to approve programs that did not meet these thresholds, we will not automatically reject programs that fail to meet either or both of these tests if there is sufficient evidence that the programs are likely to prove cost effective by some other reasonable measure. For example, we might approve an interim program that targets specific ratepayer populations or a pilot program that aids in gathering information to develop future conservation programs or lays a foundation that promises to enhance program effectiveness over time.

2. Comments on the Proposed Order

Two parties, CMP and the Residential/Small Commercial Service Providers Coalition (the Coalition), provided comments that were almost diametrically opposed. CMP argued that we should rely upon the Rate Impact Test on the grounds that conservation funding was being recovered through a surcharge on electric rates. The Coalition argued that we should retain the All Ratepayers Test but consider the avoided cost to be the avoided cost to the individual ratepayer (i.e., the electricity rate) rather than avoided (or marginal) costs of generating and consuming less electricity.

We believe that the most appropriate approach to cost benefit determinations is to consider whether the total cost to society would be lower if a particular conservation action is taken. Adopting CMP's suggestion of the Rate Impact Test would result in our rejecting conservation measures which produce a net decrease in total costs. Thus, we will not accept CMP's suggested use of the Rate Impact Test. Similarly, we will reject the Coalition suggestion to use retail rates as avoided costs. The Coalition recommendation could, and probably would, have us approving conservation programs which raise overall costs. This would occur whenever the savings to an individual ratepayer would come only at the expense of imposing additional costs on other ratepayers which exceeded the savings to the participants.

Another, perhaps simpler, way of stating this issue is to compare two hypothetical cases. Each case focuses on a conservation measure which results in lower costs to the participant in the conservation program. In the first, the participant saves \$100 while other ratepayers incur a cost of \$50. CMP would have us reject this program because the \$50 loss would violate the Rate Impact Test. In the second case, the \$100 savings yields a \$150 loss to other ratepayers. The Coalition would have us approve the program because the participant would save \$100. Under the All Ratepayers Test, we would approve the first program, since the gain to the participant is greater than the loss to others, but we would reject the second program since it would result in a net loss. We believe this to be the right outcome and will rely primarily on the All Ratepayers Test.

In addition, Glenn Reed of NEEP offered two recommendations regarding cost effectiveness. First, Mr. Reed suggested that we analyze cost effectiveness on a multi-year basis to reflect the fact that a program may be beneficial over its entire lifetime even if it were not cost effective in one or more individual years.

Here, we agree with Mr. Reed in concept, but note that all of the cost effectiveness tests should take a multiyear perspective while discounting future benefits relative to immediate benefits. This is, and has been, a common practice. Mr. Reed also suggests that we include non-electric benefits (e.g., savings of other operating costs) as well as program impacts which occur outside the program itself (e.g., post program adoption of efficiency measures). Here too, we agree in principle, but with the observation that such effects may be difficult to estimate reliably.

Finally, Competitive Energy Services (CES) is concerned that we should be certain that our cost benefit tests fully capture the effects of conservation measures on our estimates of the likely price of electric energy. Specifically, CES states: "We know that demand-side response has a very powerful effect on the establishment of market clearing prices in NEPOOL which then reduce the cost of electricity to all other ratepayers in the market. This benefit of DSM appears to be missing from the calculation methodology proposed by the Commission".

While the concern raised by CES is theoretically correct, it is unlikely to have any significant effect on the analysis of any individual interim DSM program. In most, if not all, cases, the interim programs we will consider are too small to exert a significant impact on the energy market and a method for estimating such an effect requires development. That said, we would not rule out considering such secondary impacts where there is credible evidence that those impacts are significant and could be reasonably estimated.

3. Calculation of Costs and Savings

Beyond the specific choice of which cost effectiveness tests to use, there are also data issues. While program costs and energy savings can be considered on a case-by-case basis, certain principles apply to all programs.

First, we establish methods for converting energy savings into dollar cost savings. Ch. 380-O relied on estimations of avoided costs. While prior to restructuring the Commission periodically approved avoided costs for each of the large electric utilities, we no longer do so. When considering interim conservation programs, we will determine generation cost savings by looking to the competitive generation market. For residential and small commercial and industrial (C&I) customers, we will use the prices under existing standard offer contracts for the remaining term of those contracts, since most residential and small C&I customers take service under the standard offer. For other customers, we will base estimates of cost savings on current market conditions as reported in the trade press (e.g. the Natsource quotes of electricity prices for futures contracts). Where the futures market is thinly traded, we will rely on the next best available sources¹⁶.

¹⁶ For example, the US Department of Energy routinely publishes forecasted energy prices. See <http://www.eia.doe.gov/oiaf/aeo/index.html>.

L. K. Goldfarb Associates suggested using long-term avoided costs recently developed and approved in Massachusetts. CMP proposed using the T&D utilities' entitlement sales prices as estimates of avoided generation cost. MPS and BHE commented that standard offer prices reflect shorter term, rather than long-term, avoided costs. We will consider these viewpoints when we determine cost effectiveness analysis for long-term programs in Docket No. 2002-162. We believe the simpler approach we have accepted in this Order is adequate for judging interim programs in the short time frame in which we are operating.

We propose to base delivery cost savings (i.e., the costs saved for transmission and distribution) on the marginal T&D costs used to evaluate special rate contracts under utilities' pricing flexibility programs. The Commission routinely approves marginal costs for some utilities. We plan to use reasonable estimates of marginal costs for utilities that have not filed marginal costs in recent years.

CMP commented that its marginal cost calculations are not particularly reliable. However, these values are quite small and will serve to represent that there is some cost, although small, associated with T&D delivery. We also note that CMP has endorsed use of these estimates for other purposes.

Finally, many states currently use cost effectiveness tests that include costs or benefits associated with non-electric resources (e.g., increased use of gas or water), customer O&M expenses (e.g., reduced maintenance on a more efficient product), post-program adoption (e.g., the removal of an efficiency measure), and so-called "spillover effects" (e.g., adoption of additional efficiency measures in response to customers' satisfaction with the original measure). Many commenters supported including such costs and benefits, but only if they can be reliably calculated. We agree. The All Ratepayers Test does not preclude considering such costs and benefits, and we will do so to the extent they can be reasonably well quantified and are reasonably certain to occur.

4. Ability to Calculate Cost Effectiveness

Conservation programs may be divided broadly into two categories, which we will call primary-effect programs and secondary-effect programs. Primary-effect programs are those in which program funding is directly related to kWhs saved. For example, a program that pays a customer a fixed rebate to replace an existing motor with a more efficient motor is a primary-effect program. Program planners can be reasonably certain that some level of savings will occur and can either directly measure the savings or can make a reasonable calculation of savings based on engineering estimates.

Secondary-effect programs are those in which funding is paid to an intermediary, who in turn uses the money for one of a variety of purposes aimed at influencing an energy consumer's behavior. For example, an education or advertising program funds an entity that then influences consumers to use less energy or use it

more efficiently. In this instance, cost effectiveness is more difficult to measure, since there is no direct link allowing program planners to measure behavior that results from the program.

While we recognize that both types of programs have advantages and disadvantages, we will strongly favor primary-effect programs in the interim period.¹⁷ Secondary-effect programs necessarily require more investigation before we can ascertain effectiveness and therefore we are less likely to be able to evaluate their cost effectiveness sufficiently to implement them on an interim basis this summer. Most commenters agreed with our preference, with some commenters asserting that only primary-effect programs should be operated in the interim period. While favoring primary-effect programs, we will not foreclose the possibility of offering secondary-effect programs, because some education and training programs appear to pose clear benefits to consumers.

B. Other Objectives Stated in the Conservation Act

In addition to requiring cost beneficial programs, section 4 of the Act establishes specific objectives that the Commission must consider when developing its statewide plan. Subsection 2 of Section 3211-A states that the Commission shall:

1. target 20% of funds to low income consumers;
2. target 20% of funds to small businesses; and
3. allow all other customers a reasonable opportunity to participate in a program.

In addition, the Commission must consider programs that (summarized):

1. increase consumer awareness;
2. create favorable market conditions for efficient products;
3. promote sustainable economic development; and
4. promote reduced environmental damage.

While the Act relieves the Commission of the obligation to apply the statutory criteria to its interim programs, it clearly indicates the Legislature's preference for accomplishing specific policy goals. Thus, we choose a portfolio of interim programs that meets the statutory criteria to the greatest extent possible. When taken together, the interim programs we authorize through this Order include significant funding for low-income consumers¹⁸. Two programs target small

¹⁷ However, primary-effect and secondary-effect programs exhibit competing advantages. While secondary-effect benefits are more difficult to measure, secondary-effect programs may have the advantage of benefiting a larger number of consumers.

¹⁸ The refrigerator replacement low-income program comprises 13% of the Tier-1 interim budget.

businesses, while existing utility programs continue to offer measures for that customer segment¹⁹. The portfolio includes programs for residential, medium C/I, state-owned electrical users and schools, and provides for consideration of a large C/I program. We have authorized two relatively inexpensive programs whose goal is to increase consumer awareness. Two programs offer clear support for economic development. Simply by reducing energy use, the portfolio reduces environmental damage caused by generating facilities, but we have not attempted to quantify this effect in interim programs. Finally, in the interim, we did not explicitly attempt to “create favorable market conditions for efficient products” because that criterion is inherently a long-term goal. However, many of the programs accomplish this goal incidentally.

C. Other Criteria

The Act requires that interim programs be discontinued no later than December 31, 2003. With this in mind, we used three additional criteria when choosing interim programs.

1. Quick Start-Up

We authorize for immediate implementation programs with an established delivery system that can be activated in two months or less. Programs that best meet this criterion include those that are currently operating in Maine or nearby states, that do not require us to issue RFPs for delivery or evaluation, and that do not require complex contracts.

Commenters suggested a variety of programs that appear to be effective but that require more extensive start-up activity or whose design requires more thorough development. We have authorized Commission Staff to implement some of these programs – after developing the design details. In other instances, we will examine these suggestions as part of the long-term plan.

2. Potential as a Pilot

We consider programs that would provide information useful in choosing permanent statewide programs. However, if such a program cannot be implemented quickly, we reject it as an interim program.

3. Proven Successful Elsewhere

Because we have only a few months to choose interim programs, we rely on information already learned in Maine or in other states. While we

¹⁹ The DECD small business program comprises 9% of the Tier-1 interim budget. We anticipate that the small business program developed in Tier-3 will provide significant funding to small businesses.

recognize that, as one commenter suggested, the costs and benefits realized by a program in Maine might differ from costs and benefits elsewhere, we nonetheless believe that such evaluations are reasonable proxies when judging interim programs. Thus, we choose programs that have proven to be cost effective by other entities, including other State agencies in Maine.

IV. EVALUATION

Many commenters urged us to develop an evaluation procedure for each interim program at the time of program design. We agree. Each interim program design will include a means of evaluating its cost effectiveness. The design will include the means for determining and reporting the data items that will indicate program costs (e.g., Commission administrative costs, capital costs, and delivery costs) and program benefits (e.g., life cycle kWhs saved). In this Order, we summarize the monitoring and reporting procedures that will accompany each authorized program. Commission Staff will develop a more detailed determination of the data to measure before each program begins. The Commission will develop a written description of the monitoring and reporting requirements and will enter into a written agreement with each delivering entity that is appropriate for that delivery approach. For example, a contract is appropriate with a vendor or Energy Service Company (ESCO) but a memorandum of understanding is a common means of agreeing on procedures and obligations with another state agency.

The Commission will obtain the data necessary to evaluate the cost effectiveness of each program at regular intervals throughout the year, and will consider this cost effectiveness analysis to determine whether to continue, revise, or discontinue each program after December 2003.

Some commenters believe that direct metering of the equipment or the building before and after the installation of an efficiency measure is important in an evaluation. Other commenters believe that a table of engineered assumptions regarding prescriptive measure savings is appropriate. Both types of savings monitoring are used in existing conservation programs (e.g., comments indicate that Maine State Housing Authority (MSHA) and the Department of Administrative and Financial Services (DAFS) meter before and after implementation, and some ESCOs use whole-house electric bills to measure savings, while Department of Economic and Community Development (DECD) and most prescriptive motor and lighting programs use estimates linked to particular measures). We are persuaded that metering is important if a measure is non-standard or complex, but is not necessary for commonly used appliances or equipment. We direct Commission Staff to use a combination of these two savings monitoring techniques as it determines is appropriate.

Some commenters recommended obtaining baseline usage data from other states. It is likely that the short time frame required for interim programs will preclude extensive baseline data development. However, we will investigate sources of such data and use the information when it is relevant and we will consider baseline data more extensively when we develop our long-term conservation plan.

During past decades, utilities have performed extremely comprehensive evaluations on conservation programs. Such evaluations include (among other things) an estimate of free riders and of longevity of measures. They are costly to perform and require considerable statistical expertise. Some commenters urged us to consider these factors. L. K. Goldfarb Associates suggested that “business-decision level” assessment is adequate and can be done at far lower cost. We agree and will not perform overly complex evaluations on interim programs. To the extent that we learn of significant free riders or removal of measures, we will consider them in determining future program activity. We will consider whether more comprehensive evaluations are warranted for long-term programs in our Docket No. 2002-162 proceedings.

V. INTERIM PROGRAM APPROACH

A. Three Tiers of Authorized Programs

We will implement interim programs under a tiered approach. First, in this Order we authorize five programs (and recommend one task force) that will be implemented within the next two months. We also authorize two programs for implementation after Commission Staff has determined additional program design details. Finally, we list three programs that may have merit as interim programs but that we are not prepared to authorize without further study.

B. Possible Future Interim Program Authorizations

While at this time we do not authorize study of any additional interim programs, we do not foreclose the possibility of authorizing additional programs in the future if they meet our interim criteria, if funds are available, and if staffing is adequate to carry out the necessary investigations. Interested persons should provide us with proposals or other information regarding potential interim programs.

C. Interim Budget

In this Order, we specify the funding level for the Tier-1 programs. We also state our expectations about the total costs of Tier-2 programs. The funding levels for the Tier-3 programs are less certain, but we discuss the Tier-3 budget. Issues involving overall interim program funding levels, and the utility assessments necessary to achieve that funding, are decided in our Order on Interim Funding issued concurrently with this Order.

D. Utility Programs

In our April 8th Order Extending Utility Energy Efficiency Programs, we directed T&D utilities to continue to operate their existing energy conservation programs in a manner consistent with recent program operations. After we have implemented the Tier-1, Tier-2 and Tier-3 interim programs, we will consider which of the utility programs to continue funding through the Conservation Program Fund. We expect that some utility programs accomplish useful goals but should not continue as interim energy efficient programs.²⁰ A utility will be able to continue offering such a program through its own funds. We also anticipate that some utility programs will be replaced by new interim programs.

E. Appendix C

In Appendix C, we provide a table that lists the interim programs that are chosen for implementation or further investigation, describes the targeted customer groups and delivery mechanism for each program, and provides the budget for programs or program groups, as well as administration.

VI. **TIER-1 INTERIM PROGRAMS – FOR IMMEDIATE IMPLEMENTATION**

A. Low-Income Refrigerator Replacement Program

We authorize the implementation of a refrigerator replacement program, to be delivered by the Maine State Housing Authority (MSHA) through the Community Action Program (CAP) Agencies in the manner used to carry out the recent Residential Energy Assistance Challenge (REACH) program. The program shall include steps to ensure that inefficient refrigerators are not recycled into the State's appliance stock. We will fund this program for one year and consider further funding based on its first-year results. The year-one cost of this program will be \$200,000.

1. Cost Effectiveness

A recent study supporting the cost effectiveness of low-income appliance replacement programs in Maine indicates that a refrigerator replacement program may be marginally cost effective under the All Ratepayers Test established through this Order. MSHA, through an independent party, carried out an evaluation of the costs and savings of nine separate measures offered as part of the REACH program. Refrigerator replacement was one of the measures and was found to be cost effective from the customer perspective. The financial benefits in the REACH

²⁰ For example, a program that improves customer satisfaction but does not reduce net energy use would fall in this category.

evaluation were based on the bundled rate, and the costs were based on the total appliance cost. These cost effectiveness findings can be used to carry out the All Ratepayers Test established in this Order. The standard offer energy rate should be used to calculate the financial benefit, and the full cost of the more efficient appliance should be used to evaluate cost effectiveness. Using the recent standard offer rate in CMP's territory of \$.0495, the 1189 annual kWh savings determined by MSHA monitoring, an appliance life of 18 years, a societal discount rate of 5 per cent, and the full cost of the replacement refrigerator would yield a benefit to cost ratio of 1.02.

2. Statutory Criteria Satisfied

a. At least 20% of program funds should be devoted to delivering efficiency measures to low income customers (Subsection 2.B(1) of Section 3211-A).

b. To the extent possible, the commission shall coordinate its efforts with other agencies of the State with energy-related responsibilities (Subsection 2.G).

c. To the extent practicable, the commission shall encourage the development of resources, infrastructure, and skills within the State by giving preference to in-state service providers (Subsection 3.B).

d. For the delivery of conservation programs to low income residential customers, the commission, without employing a competitive bidding process, may utilize the delivery system for the Weatherization Assistance for Low Income Persons Program administered through the US DOE (Subsection 3.C).

3. Delivery System

The low-income appliance program will take advantage of the existing delivery system used for the REACH program, in which MSHA acts as program manager and the CAP agencies serve as the delivery mechanism. Thus, all aspects of the program are in place – CAP employees are trained to recognize and replace inefficient refrigerators, MSHA has ready contacts with vendors who can supply and replace refrigerators, a method for identifying the most needy customers has been established, and a tracking mechanism is in place. Clients have already been screened and audits have identified more than 500 households that would be eligible for appliance replacement given sufficient funds. MSHA and the CAP agencies will deliver the program to these pre-screened low-income households and to households screened through ongoing audits. The incremental administrative costs for offering this program are near zero.

4. Measurement and Evaluation

As one of its responsibilities under the federal program, MSHA must provide program progress reports. MSHA will distinguish measures that were funded by the Conservation Program Fund and will provide that portion of the report to the Commission. The Commission and MSHA will determine other relevant cost or benefits calculations (e.g., MSHA and CAP administrative costs) before the program begins.

5. Comments of the Parties

a. A number of commenters supported the appliance replacement program described in the Proposed Order.

b. CMP commented that its “Home Energy Efficiency Program,” operated in 2000 – 2001, would meet all of the criteria in the Proposed Order and would be effective as a low-income conservation program. Under this program, CMP contracted with an ESCO to deliver weatherization and lighting measures and to determine kWh savings caused by those measures. An independent company verified that the ESCO delivered the measures it reported. The Coalition of Residential and Small Service Providers (the Coalition) supported delivery of weatherization and energy efficiency light bulbs to low-income customers, using a method similar to CMP’s current program, asserting that this program was guaranteed to be cost effective because measures would be pre-screened for cost effectiveness.

c. Commenters warned that refrigerators must be removed from circulation to ensure that energy savings from the program persist.

d. The Industrial Energy Consumer Group (IECG) urged against the refrigerator replacement program, expressing a concern for public misinterpretation and criticism, and urged alternative means for funding low-income initiatives. IECG cited a California program that appeared to operate more cost effectively than does Maine’s program.

6. Discussion of Parties’ Comments

We have considered the advantages of ESCO delivery as opposed to CAP delivery of low-income conservation measures. We recognize that ESCO delivery has proven effective in Maine and elsewhere. However, hiring an ESCO(s) requires that the Commission issue an RFP and develop a contract for both the ESCO and for an independent evaluator. These steps take time and resources and are counter to our criteria of fast start-up. The CAP delivery mechanism has

been recognized as a reasonable delivery mechanism by the Legislature in the Act, and is in place and therefore more effective for an interim program. We will consider ESCO delivery for long-term low-income programs.

We also considered the benefits of a weatherization program as opposed to an appliance replacement program. While weatherization is likely to be more cost effective, it is already being delivered through federally-funded CAP programs. Appliance replacement, however, is likely to be cost effective but is not currently funded. Thus, funding an appliance replacement program will complement rather than duplicate existing program activity.

Finally, we considered comments asserting that, for the program to be cost effective, inefficient refrigerators must not be recycled into the State's appliance stock. We understand that MSHA disposes of the inefficient models, and we will require that this practice continue. In addition, we direct Commission Staff and MSHA to examine the California program and incorporate cost-saving measures in Maine's program if it is possible to do so.

B. Building Operator Certification (BOC) Program

We authorize fully funding the tuition to the BOC certification program for personnel who operate and maintain school buildings in Maine. Initially, we will fund two program sessions, with maximum attendance of 30 persons per session, on a first-come, first-served basis. The cost will be about \$84,000. After the completion of these sessions, we will consider funding one or more sessions for personnel who operate and maintain public buildings. For interim budget purposes, we assume that two additional program sessions will be held, so that the total cost will be \$168,000.

1. Cost effectiveness

BOC is an education program and the cost effectiveness of education programs has traditionally been difficult to quantify. However, the program that we authorize has been evaluated in the Northwest and is currently undergoing an evaluation in the Northeast. It is conducted jointly by the partners in the Northeast Energy Efficiency Partnership (NEEP), and is identical to the course developed and offered in the Pacific Northwest by the Northwest Energy Efficiency Alliance (NWEAA). The evaluation conducted by the NWEAA found the benefit cost ratio was 5.89 when using an avoided energy cost of 4 cents. Based on this evaluation, it is reasonably likely that this program would be cost effective in Maine. The BOC program requires that attendees carry out on-sight efficiency investigations in order to receive the CEU credits and certification offered by the program, which increases the likelihood that attendees will act as a direct result of the training.

2. Statutory Criteria

a. To the greatest extent practicable the commission should apportion remaining available funds among customer groups and geographic areas in a manner that allows all other customers to have a reasonable opportunity to participate (Subsection 2.B(3)). This program will be offered to all school districts within the State.

b. The commission may coordinate its efforts under this section with similar efforts in other states in the northeast region and enter into agreements with public agencies or other entities in or outside the State for joint or cooperative conservation planning or conservation program delivery, if the commission finds that such coordination or agreements would provide demonstrable benefits to citizens of the State and be consistent with this section, the conservation programs and the objectives and overall strategy for the conservation programs (Subsection 2.I.).

c. To the extent practicable, the commission shall encourage the development of resources, infrastructure, and skills within the State by giving preference to in-state service providers (Subsection 3.B). The contractor for this program does not reside within the State, but the training provided will result in the development of resources, infrastructure, and skills within the State.

d. The commission may select a program service provider for one or more conservation programs without employing a competitive bidding process if the commission finds that the selection of the service provider will promote the efficient and effective delivery of conservation programs and is consistent with the objective and overall strategy of the conservation programs (Subsection 3.C.(1)).

3. Measurement and Evaluation

NEEP is conducting a comprehensive evaluation of this program as it is being offered elsewhere in New England. When offering the program in Maine, we will follow the evaluation protocols that NEEP is using elsewhere and use the resulting information in a manner consistent with its use in the NEEP evaluation.

4. Delivery System

The NWEAA developed the curriculum for this program over an extended period of time. It has trademarked the course and has licensed NEEP to

deliver the program through its partners in the Northeast. NEEP currently offers the program through its partners at a variety of locations in New England, and has already established tentative dates for a session in Maine. NEEP does not typically contract for this program. Thus, delivery can occur immediately, at a low incremental cost and with minimal contractual effort.

5. Comments of the Parties

a. The Educational Plant Maintenance Association of Maine supports the need to better educate its members about efficient plant operation, but notes that school budgets would rarely fund tuition of such a comprehensive course.

b. Some commenters indicated general approval for offering this program, but felt it should be offered to municipalities, state facilities, and small companies. The Coalition and others suggested that small business owners seldom attend such a program, while others asserted that education of building operators did not produce as effective results as would a primary-effect program.

c. BHE and other parties commented that BHE's "CEM" facilities operations program serves a different audience (i.e., administrators) than does the BOC program. Thus, the BOC program complements, rather than duplicates, existing activity.

6. Discussion of Parties' Comments

The education provided by the BOC Program will enable operating personnel to make more informed assessments of how energy is used within their own facilities and to better evaluate services offered by vendors of energy consuming equipment. Some commenters asserted that small businesses were unlikely to expend the time or money to attend the training. Others asserted that prior training initiatives had reached those people who would take advantage of them. However, discussions with the Educational Plant Maintenance Association of Maine (EPMAM) convince us that there is a pool of personnel whose decisions economically impact their school districts, who have received minimal training in some important issues, and who have a trade organization that is willing to facilitate organization of the training. While we prefer direct benefits programs during the interim period, the efforts to evaluate the BOC program reassure us that there are likely to be benefits from this admittedly secondary-effect program. Gaining direct insight into the program, while assisting our State's schools, is a wise investment of a relatively small portion of the Conservation Program Fund. If we judge these initiatives to be cost beneficial, we will investigate whether a means exists to deliver the program to public building operators and ultimately to small businesses.

C. State Buildings Program

We authorize funding for energy efficiency renovations of State buildings. We direct Commission Staff to work cooperatively with the Maine Department of Administrative and Financial Services (DAFS) to identify projects that are cost effective using the All Ratepayers Test established in this Order and that most effectively reduce operating costs supported by Maine taxpayers and improve the working environment and productivity of the State workforce. An individual project or multiple projects can be funded, up to \$1.5 million.

1. Cost Effectiveness

Projects that are approved for funding under this program will be pre-screened against the All Ratepayers Test. Energy savings will be verified whenever possible through the use of pre- and post-measure metering and measurement. When this is not possible, savings will be estimated through engineering methods.

2. Statutory Criteria

a. To the greatest extent practicable the commission should apportion remaining available funds among customer groups and geographic areas in a manner that allows all other customers to have a reasonable opportunity to participate (Subsection 2.B(3)). This program will provide direct benefits to all taxpayers in Maine.

b. The commission, to the extent possible, shall coordinate its efforts with other agencies of the State with energy related responsibilities (Subsection 2.G.). DAFS is responsible for the energy consumption of all State facilities.

c. The commission may select a service provider without a competitive bidding process if it finds that the selection of the service provider will promote the effective and efficient delivery of the programs (Subsection 3.C(1)). DAFS can serve as project manager for this program. It will use a competitive bidding process to select the construction contractor.

3. Measurement and Evaluation

Projects funded through this program will first be examined for energy savings through an engineering investigation, and energy savings will be estimated for each measure. In some instances, the projects will also have metered data on pre-project energy consumption. The meters will remain in place, and DAFS will generate pre- and post-project consumption data and report that data to the Commission at regular intervals.

4. Delivery System

DAFS examines and carries out program renovation regularly. DAFS will carry out all administrative functions including contracting and metering.

5. Comments of the Parties

Many commenters supported this program, while some asserted that retrofitting existing buildings is not an efficient use of funds. NEEP recommended using the ENERGY STAR building program to efficiently identify the best opportunities.

6. Discussion of Parties' Comments

We believe that targeting State buildings is a way to benefit a wider number of citizens than just those who directly participate in a program. We direct Commission Staff to consider the ENERGY STAR guidelines when it determines the criteria by which incremental energy savings will be determined.

D. Department of Economic and Community Development (DECD) Energy Conservation Loan Program

We authorize a one-time disbursement of \$200,000 to DECD to recapitalize the DECD-managed small business loan fund. DECD loans made with Conservation Program funds must be used for electric energy efficiency and must target energy efficiency measures that DECD pre-determines to pass the All Ratepayers Test established through this Order.

Currently, DECD operates a commercial loan program for small Maine businesses (businesses with 50 or fewer employees and/or \$5M or less in annual sales). The program is funded by the US Department of Energy (US DOE) and could serve more small businesses if its revolving loan fund were recapitalized. DECD staff already conducts energy audits for small businesses throughout the State, through

which they identify cost effective opportunities that would be eligible for a loan. DECD currently has a list of businesses who qualify for a loan but for whom no funds exist.

1. Cost Effectiveness

Commission Staff will train DECD auditors to apply the All Ratepayers Test established in the Order, and DECD will use a portion of its loans equal to the amount of Conservation Program funding for projects that pre-screen to be cost effective. Because the majority of DECD delivery and administration costs are funded by the federal government, the cost effectiveness to Maine ratepayers is improved.

2. Statutory Criteria

- a. Target at least 20% of available funds to programs for small business consumers, as defined by the commission by rule (Subsection 2.B.(2)). This program is available only to small businesses.

- b. The commission to the extent possible, shall coordinate its efforts with other agencies of the State with energy-related responsibilities (Subsection 2.G). DECD will carry out all administrative functions, including contracting and post-implementation inspection.

- c. The commission may select a service provider without a competitive bidding process if it finds that the selection of the service provider will promote the effective and efficient delivery of the programs (Subsection 3.C(1)).

3. Measurement and Evaluation

As one of its responsibilities to US DOE, DECD must regularly provide data on each loan. In addition, DECD and US DOE conduct post-installation visits to each site to ascertain that the efficiency measure was installed. DECD determines kWh savings through a standardized table of measure savings and interviews with the business. Thus, DECD now gathers the data necessary to determine whether the program is cost effective. It will distinguish measures that were funded by the Conservation Program Fund and will provide all data to the Commission. The Commission and DECD will determine other necessary cost or benefits calculations (e.g., DECD administrative costs and interest payments) before the program begins.

4. Delivery

DECD currently manages and delivers the loan program and is capable of identifying a reasonable number of additional candidates with current staff. While we cannot judge how many additional loans DECD staff could handle, the number would be limited by the small staff size. The budget for this program will reflect this limiting factor. DECD currently has identified businesses that would be eligible for a loan if funds were available. The additional training and reporting will place a minimal burden on DECD and Commission staff.

5. Comments of the Parties

This proposal was made after we issued our initial order. Therefore no one has had an opportunity to comment on this program concept.

6. Discussion

Our Proposed Order offered minimal support for small businesses. This program offers additional funding for that segment, as directed by the Conservation Act. The program also increases the level of funding that supports economic development, because the loans are used for capital improvements that lower costs for local businesses. Finally, it is easily delivered and tracked. For these reasons, we approve this expenditure without pursuing further stakeholder comment. We direct Commission Staff to explore with DECD whether the DECD loan fund can be more effectively enhanced by some other means such as developing a loan guarantee approach.

E. Maine Energy Education Program (MEEP)

We authorize an allocation of \$50,000 to MEEP to operate the program for the upcoming school year. After one year, we will consider whether to allocate additional funds to MEEP. When we consider future funding of MEEP (or any other curriculum-based program), we will rely on information that is presented to us by the task force we describe in paragraph F of this Section.

1. Cost Effectiveness

While MEEP and its supporters have described the educational benefits of the MEEP curriculum, they have not calculated an economic cost

effectiveness analysis. However, the program costs are relatively low and the benefits, even if substantial, would be difficult and expensive to estimate.

2. Statutory Requirements Satisfied

a. The commission shall increase consumer awareness of cost effective options for conserving energy (Subsection 2.A(1)).

b. The commission shall, to the greatest extent practicable, apportion remaining available funds among customer groups and geographic areas (Subsection 2.B(3)). MEEP serves schools throughout the State.

3. Measurement and Evaluation

We know of no measurement or data that MEEP can provide at the end of a year that will allow us to determine cost effectiveness using the All Ratepayers Test method established through this Order. Thus, we suggest that MEEP participate in the task force we describe in paragraph F of this subsection.

4. Delivery System

MEEP is a well-established delivery mechanism that requires no intervention by the Commission. In this aspect, it is suitable for interim program implementation.

5. Comments of the Parties

Many conservation stakeholders view school-based education as an important component of state conservation efforts because these programs appear to help produce an energy literate citizenry. These programs appear to influence current and future conservation actions and efficiency purchases as children, teachers and school facilities managers who participate in these programs, and perhaps also their families, make energy-related decisions and purchases.

We received an unusually large number of comments regarding educational programs generally and the MEEP project in particular. In addition to extensive discussion at the public hearing, we received more than 25 written comments in support of the MEEP program from a wide array of individuals, including officials of DEP, the Maine Conservation Corps, a member of the Legislature, the Greater Portland Council of Governments, a national group which focuses on energy

and conservation education, numerous teachers and principals, and a parent who home-schools and has relied on resources from MEEP. In addition, MPS commented in favor of its own education program. Finally, the Coalition objects, stating that “one of the major benefits of ... education programs is that even if they show no results for twenty years, consultants can still claim that it is too early to determine its effectiveness.”

6. Discussion of Parties' Comments:

Because the law requires that programs be cost beneficial, our ability to fund MEEP with the Conservation Program Fund is somewhat problematic. While we are persuaded that the program is extremely valuable to many people, we must be mindful of the legal authority conferred by the Conservation Act. We have chosen to fund MEEP on a one-time basis because the amount of money we have authorized is a small portion of the total fund, because the program appears to be desirable to many people, and because MEEP apparently would be unable to support its program absent additional funding. However, if MEEP intends to seek additional funding, we strongly urge it to develop a means to conform with the requirements of the Conservation Act, so that we may evaluate its benefits pursuant to the law.

F. Maine Energy Curriculum Investigation

We authorize Staff to develop, within 30 days, a detailed proposal, with funding of \$10,000, to support a statewide education task force that will consider the most effective means of delivering energy education to Maine school children. The task force will consider means for measuring energy saved as a result of in-school education.²¹

Many in-school curriculum programs exist nationally. In addition, a variety of in-state efforts exist to develop curricula to improve knowledge of energy production and uses. The College of Education and Human Development of the University of Maine submitted a proposal to develop a curricula aid in the areas of energy, conservation, consumption and production. We are inclined to think that this initiative would be a useful addition to Maine's educational tools. MEEP offers another curriculum approach. MPS offers yet another in-school program for grades K - 12. We applaud these initiatives, and we generally support any effort to create an energy-literate public that can make informed decisions about the economic, social, and environmental impacts of its energy choices. We do not possess the expertise to judge educational programs. Thus, we conclude that we can best serve the needs of

²¹ We note that staff has already had preliminary discussions with a non-profit institution, the Maine Mathematics and Science Alliance, regarding assembling a task force, composed primarily of education professionals.

this community by offering some seed money to help experts in the subject determine the most effective approach to take.

The task force will report its findings to the Commission within ten months of this Order, and the Commission will consider its findings when authorizing further funding of in-school education programs through the Conservation Program Fund.²² We direct that the task force consider a proposal submitted by the College of Education and Human Development at the University of Maine in this proceeding, the existing MEEP curriculum, and the MPS in-school education program. However, the task force should also feel free to consider any other approaches which it considers promising.

VII. TIER-2 INTERIM PROGRAMS – TO IMPLEMENT AFTER FURTHER PROGRAM DESIGN

A. Residential Energy Efficient Lighting Program

We authorize the implementation of a rebate-based residential lighting program, to be implemented after an operator and a monitoring agency are chosen through a competitive bid process. Commission Staff, through further investigation and the RFP process, shall determine the level of rebates and the method of their delivery.

An efficient lighting program provides the broadest opportunity for residential consumers to take advantage of efficiency programs funded with Conservation Program funds. Customers in all areas of the State and at all income levels purchase and use lights. The program can operate as both a traditional resource acquisition program while, at the same time, influencing market change. Lighting programs in a variety of forms have been found to be cost effective in many states.

As an interim program, we prefer a rebate approach over direct installation by an ESCO. We believe rebates offer greater flexibility and faster start-up. A NEEP Residential Lighting initiative is offered throughout the Northeast, and many utilities participate. Many of the participating utilities run the program themselves according to a set of common strategies that has been agreed to through the NEEP collaborative process. It is highly likely that some of these utilities and other in-state service companies would respond to an RFP that solicits a program administrator to operate the program in Maine.

1. Cost Effectiveness

²² We recognize that educational programs benefit a large number of citizens, and we do not suggest that we will fund only programs whose benefits the task force can directly quantify.

The NEEP residential lighting program has been found cost effective according to the Total Resource Cost (TRC)²³ tests used in other New England utility service territories. Connecticut Light and Power reports a TRC benefit-cost ratio of 2.6, United Illuminating reports a TRC benefit-cost ratio of 1.2, and Massachusetts Electric Company reports a TRC benefit-cost ratio of 1.98. Applying CMP's residential standard offer energy rate to the TRC test, and making assumptions²⁴ that are consistent with findings from other programs yields a TRC (and All Ratepayers Test) benefit-cost ratio of 2.08 for Maine.

2. Statutory Criteria

a. The commission shall consider programs that create more favorable market conditions for the increased use of efficient products and services (Subsection 2.A.(2)).

b. The commission shall increase consumer awareness of cost effective options for conserving energy (Subsection 2.A(1)). A lighting program raises consumer awareness through increased visibility in retail stores and the advertising media.

c. The commission shall apportion funds in a manner that allows all customer groups to have a reasonable opportunity to participate (Subsection 2.b.(3)). Lighting is purchased and used by virtually every household in the State.

d. The commission may coordinate its efforts under this section with similar efforts in other states in the northeast region and enter into agreements with public agencies or other entities in or outside the state for joint or cooperative conservation planning or conservation program delivery, if the commission finds that such coordination or agreements would provide demonstrable benefits to citizens of the State and be consistent with this section, the conservation programs and the objectives and overall strategy for the conservation programs (Subsection 2.1.). The existence of a well-established regional lighting initiative makes this approach reasonable in the interim period.

²³ The All Ratepayers Test and the Total Resource Cost Test are unlikely to differ for these programs.

²⁴ The assumptions are as follows: a 15 watt CFL costs \$10 and has a life of 8000 hours; a 75 watt incandescent costs \$.5 and has a life of 750 hours; they are on 3.44 hours per day; and the discount rate is 5%.

e. The commission shall select service providers through a competitive bidding process (Subsection 3.A).

3. Measurement and Evaluation

There are a variety of commonly-used means of evaluating a lighting program. Evaluators can count the number of people who take advantage of the program and the equipment they buy, and use the energy savings per bulb from existing evaluations from other jurisdictions to estimate the program's energy savings. At a modest cost, we can also join in the NEEP effort to evaluate the extent of the market transformation accomplished by the program. We direct Commission Staff to determine the best method of evaluation and to rely on measurements of installations in Maine to the greatest extent possible.

4. Delivery

The program will be delivered by an operator chosen through a competitive bid process.

5. Comments of the Parties

a. The Coalition asserts that evaluations of prior residential lighting rebate programs have shown a high level of free riders, inappropriate use, and consumer dissatisfaction. They claim that a direct install program is more effective.

b. NEEP asserts that their program has been screened elsewhere and found cost effective, that there is a regional contractor and marketing infrastructure that would allow Maine to begin almost immediately, and that the program allows broad customer participation. Benefits of greater sales of the more profitable compact fluorescent lights (CFLs) would accrue to retail stores participating in the program.

c. CMP asserts that there is no indication that the program would be cost effective and that the lighting market has already been transformed.

d. BHE and MPS prefer a Maine based approach.

6. Discussion of Parties' Comments

We disagree with CMP's comment that the lighting market has been transformed and that cost effectiveness is unlikely. Virtually every state that carries out conservation activity offers residential lighting initiatives from time to time. Cost effectiveness appears to be universal. We have considered the advantages of a

rebate program compared with an ESCO delivered program. Both incentive mechanisms are well-established and show likelihood of success. In the interim, a rebate program using an established regional program offers faster start-up and easy tracking. We thus prefer this approach.

B. New School Construction Program

In our Proposed Order, we recommended that an energy efficient lighting program be targeted to schools within the State. While many commenters supported assistance to schools, their opinions on competing approaches varied significantly. Comments offered at the public hearing and through written submissions suggested that efficient lighting has already been installed at most schools. Other comments refuted this assertion. Three Rivers Engineering advocated a “lighting quality” approach performed by a professional engineer or architect, and supported NEEP’s DesignLight Consortium. Testimony by Combined Energy and others suggested that if lighting measures are installed without considering all school efficiency needs, an opportunity is lost and other efficiency improvements may never be addressed. The Public Advocate, NEEP and many others suggested that the Commission should focus on new construction rather than retrofit because measures installed at construction are more cost effective and capture an opportunity that would otherwise be lost. The Maine School Management Association (MSMA) supported focusing on new school construction, commenting that such a program would complement consulting assistance that MSMA is attempting to obtain through a grant. Combined Energies suggested complementing any program with training on procurement mechanisms.

We continue to support a lighting efficiency program for school facilities. We believe that targeting schools is a way to benefit a wider number of citizens than just those who directly participate in a program. However, these comments persuade us that we must consider a wide variety of related issues associated with school lighting, as well as the organizations and procedures that are involved with school decisions. We are also persuaded that it is advantageous to focus on new school buildings rather than existing structures. A significant level of construction is currently planned, and we agree that installing an efficient measure during construction is more cost effective than retrofitting later. Nevertheless, we are concerned that a program targeted to new construction cannot be implemented in the short time frame appropriate for interim programs. In addition, we are mindful that any activity we initiate must be closely coordinated with the procedures followed by DAFS, the Maine Department of Education, and school administrators themselves during the school construction cycle. Thus, we authorize the Commission Staff to develop the details for a program that would target lighting efficiency in new school construction that complements existing State procedures. If Staff’s investigation reveals that such a program cannot be implemented within the next three months, we will reconsider our decision.

C. Tier-2 Budget

At this point, many details concerning the Tier-2 interim programs remain to be decided. It is not possible to set a funding level for either program. Based upon the cost of similar programs and conservation measures, we anticipate that we will spend a total of \$2.5 million for the tier-2 programs.

VIII. TIER-3 INTERIM PROGRAMS – TO IMPLEMENT IF FURTHER INVESTIGATION INDICATES EFFECTIVENESS

A. Small Business Prescriptive Rebate Program

Commenters suggested that a direct-install rebate program would be effective for small business customers. The program could be run by a single (or small number of) ESCOs chosen through an RFP, or the Commission could pre-qualify vendors throughout the State to deliver the measures. Such a program would acknowledge that small business owners often do not have the time or the expertise to investigate or install efficiency measures. Other utilities offer such programs, and there are ESCOs, vendors, and other utilities that can offer a program in Maine with minimal start-up effort or cost. This program approach cannot reasonably be implemented within our 2-month time frame because it requires issuing and evaluating RFPs and/or RFQs for delivery and for monitoring. Furthermore, all these suggestions require further investigation before we can conclude that any one is a reasonable interim program. Finally, such programs would duplicate aspects of CMP's Energy Efficiency Incentive Program (the so-called Nickel Program), which offers prescriptive rebates to small and medium sized businesses.²⁵ Because two interim programs – the DECD loan program and CMP's Nickel Program – are available for small businesses, we will defer a direct-install program until we develop further details and we determine whether and how to phase out CMP's program. We direct Commission Staff to investigate this program approach further. We direct the Staff to consider a program delivery mechanism that uses in-state delivery companies to the greatest extent possible.

B. Low-income No-charge Lighting Program

Some commenters suggested that an ESCO install energy efficient light bulbs or fixtures in low-income households as part of a broader weatherization program, or that CAP agencies dispense energy efficient light bulbs as part of their weatherization program. We are inclined to agree that an efficiency lighting program would be a cost effective means of further targeting funds to the low-income community. In the interim, complementing the refrigerator replacement program would be the most consistent, cost effective approach. Thus, we will defer consideration of ESCO installation and of installation of fixtures until we consider long-

²⁵ Some commenters also suggested increasing the customer incentive from 5 cents to 10 cents, to better overcome the hurdle associated with capital investment.

term programs. We authorize Commission Staff to develop program design details for delivery of bulbs as part of the CAP weatherization program.

C. Large C/I

Suggestions for large C/I interim programs generally fell into two categories. First, Envinta offered a systematic senior management awareness program that encompasses building assessment benchmarking and training. This program could be effective for medium to large businesses. At this time, we are not certain whether businesses' senior management would be receptive to such a program. In addition, benefits would likely be long-term, rather than immediate. However, the program merits further investigation. Competitive Energy Services and S&S Technologies suggested a customized analysis of individual large customers in which an ESCO screens for cost effective improvements and receives payment based on savings achieved. Customized process analysis, using a performance contract of some sort, is a common means of delivering energy efficiency programs to the largest business customers, and bears further investigation.

Large C/I programs exhibit conflicting characteristics. On the one hand, some of the State's largest customers – those that receive transmission-level service and those that receive reduced electric delivery rates – make little or no contribution to the Conservation Program Fund. Furthermore, existing spending on CMP's large C/I Power Partners programs exceeds our interim program budget. On the other hand, it is likely that opportunities exist that are highly cost effective and that contribute to economic development in the State. We will consider a large C/I program during our Tier-3 investigation, while remaining mindful of the outstanding funding questions. We will consider how current rate design comports with the Conservation Act and whether we should reconcile the apparent inequity that would occur if this group receives benefits from the fund in Docket No. 2002-162 or further conservation-related dockets.

D. Tier-3 Program Budget

The Tier-3 programs are not certain enough to reasonably establish funding levels for the individual programs. Our decision in the Interim Funding Order, also issued today, after subtracting for Tier-1, Tier-2, existing utility programs and administrative costs, leaves about \$3 million for Tier-3 programs. That amount will allow us to implement Tier-3 programs at a reasonable level given the experience of similar utility and other state programs. Even if further investigation results in the rejection of the Tier-3 programs described above, we are confident that sufficient cost effective conservation exists that the Tier-3 budget amount will likely be necessary to implement interim or "permanent" programs during 2003.

IX. PROGRAMS NOT CURRENTLY SELECTED FOR INTERIM PLAN

There are additional programs that were mentioned in our Proposed Order as possible interim programs or that were suggested by commenters as interim programs. We will discuss some of these, and explain why we do not include them in our Interim Program Plan.

A. NEEP Motor-Up Program

In our Proposed Order, we suggested NEEP's Motor-Up program as an interim program. We commented that it could be implemented quickly, it supported small businesses, and it created favorable market conditions for efficient products.

Some commenters asserted that the Motor-Up program is not suitably effective to be included as an interim program. They commented that small business customers do not benefit significantly from the program and that no thorough evaluation has been performed. Our study of the program leads us to believe that efficient motors may be generally available in the region, although based on the XENERGY study cited in our Proposed Order, the extent to which this is true of Maine is unclear. However, the program is a secondary-effect program, and thus cost benefit analysis would be difficult to perform. We have stated our preference for primary-effect programs unless strong evidence convinces us of the value of a program. We have not been convinced that the need and effectiveness of the Motor-Up program is great enough to outweigh our intent to offer direct-effect programs that are clearly cost beneficial.

B. Programs to Replace Coin-Operated Washing Machines with Efficient Units for Laundromats and Multi Family Units

Two commenters suggested this program. They stated that a new program in Wisconsin addressed coin-operated washers, with significant penetration in a very short time. The new machines use less electricity and reduce the amount of water needed, which indirectly saves electricity if the water is heated by an electric water heater. This program cannot meet our quick-start criteria but can be considered in our long-term plan.

C. The Expansion of the LED Exit Sign Conservation Program

Energy Solution Partners, one of the providers of an existing program in CMP's and MPS's service territories, suggested we expand the program. The program provides free exit sign retrofit kits with light emitting diode (LED) lights which use significantly less electricity than exit signs using incandescent or compact fluorescent bulbs. The existing program targets state, municipal and public school buildings. We recognize that existing vendors are capable of quickly implementing this program. Nonetheless, we would be required to issue an RFP for services. When compared with the other interim programs we have selected, we are not persuaded that the benefits justify the start-up time.

D. Program to Activate Power Management Functions on Computer Monitors

Cadmus Group suggested a joint Maine-EPA effort to activate power management functions that would allow more efficient use of computer monitors as an alternative interim program. It suggested we could leverage an existing EnergyStar program managed by the commenter. As a secondary-effect program, we choose to defer consideration of this program to the long-term plan.

E. Pilot Program to Assess Conservation and Demand-Side Management in Maine's Small Grocery Stores

Competitive Energy Services (CES) proposed to thoroughly analyze electricity usage in small grocery stores and similar facilities as a first step in the subsequent development of various conservation measures that can be implemented by these facilities to reduce electricity usage. CES stated that this group of commercial customers has been ignored by utility-sponsored programs. It also stated that these customers' electricity usage is inefficient based upon the technology now available. By performing audits, CES will develop energy retrofit packages that can be installed in or applied to small grocery stores. Because the program is not yet developed, and the funds would be used for development rather than implementation, we believe that this proposed pilot is better suited for long-term plan consideration.

F. Codes Enforcement

During the public hearing, Dan Thayer of Thayer Engineering suggested that funding be used to improve the State's effectiveness in enforcing Maine's construction building codes. DECD advised us that, although Maine's codes are among the most stringent in the nation, it is difficult if not impossible for DECD (who is charged with enforcement responsibility) to effectively enforce those codes.

This suggestion has considerable merit and we would support efforts to improve enforcement activity. However, this task undoubtedly requires the cooperation of a wide variety of State and private organizations, and we do not see a means to accomplish it as an interim activity.

X. FUTURE ACTIONS

The Staff is directed to implement the Tier-1 programs as described in this Order. We delegate to the Director of Technical Analysis, or her designee on the Conservation Staff Team, the authority to enter into contracts, memoranda of understanding, or similar agreements, as is necessary to implement programs consistent with this Order. Staff is also authorized to spend up to 10% more than the amounts described in this Order to implement the Tier-1 programs. Spending decisions beyond the 10% contingency must be made by the Commission.

Implementation decisions for Tier-2 and Tier-3 programs will be made after Staff carries out the tasks described in this Order and reports back to the Commission.

Dated at Augusta, Maine, this 13th day of June, 2002.

BY ORDER OF THE COMMISSION

Dennis L. Keschl
Administrative Director

COMMISSIONERS VOTING FOR: Welch
 Nugent
 Diamond (with concurring opinion)

THIS ORDER HAS BEEN DESIGNATED FOR PUBLICATION

NOTICE OF RIGHTS TO REVIEW OR APPEAL

5 M.R.S.A. § 9061 requires the Public Utilities Commission to give each party to an adjudicatory proceeding written notice of the party's rights to review or appeal of its decision made at the conclusion of the adjudicatory proceeding. The methods of review or appeal of PUC decisions at the conclusion of an adjudicatory proceeding are as follows:

1. Reconsideration of the Commission's Order may be requested under Section 1004 of the Commission's Rules of Practice and Procedure (65-407 C.M.R.110) within 20 days of the date of the Order by filing a petition with the Commission stating the grounds upon which reconsideration is sought.
2. Appeal of a final decision of the Commission may be taken to the Law Court by filing, within **21 days** of the date of the Order, a Notice of Appeal with the Administrative Director of the Commission, pursuant to 35-A M.R.S.A. § 1320(1)-(4) and the Maine Rules of Appellate Procedure.
3. Additional court review of constitutional issues or issues involving the justness or reasonableness of rates may be had by the filing of an appeal with the Law Court, pursuant to 35-A M.R.S.A. § 1320(5).

Note: The attachment of this Notice to a document does not indicate the Commission's view that the particular document may be subject to review or appeal. Similarly, the failure of the Commission to attach a copy of this Notice to a document does not indicate the Commission's view that the document is not subject to review or appeal.

APPENDIX A

Readers receiving an electronic version of this Order should access the “Electric Conservation Activities” section of the Commission’s web site (www.state.me.us/mpuc) to obtain a copy of the Conservation Act.

APPENDIX B**PERSONS WHO FILED WRITTEN COMMENTS**

1. Stephen G. Ward, Public Advocate
2. Richard P. Hevey, on behalf of Central Maine Power Company
3. Anthony W. Buxton and Richard M. Esteves, on behalf of Residential/Small Commercial Service Providers Coalition. The Coalition consists of Quality Conservation Services, Inc., SESCO, Inc., and George Reeves Associates, Inc.
4. Lynn K. Goldfarb, President of L.K. Goldfarb Associates
5. Brian K. Dancause, Manager, Small Business Assistance, State of Maine Department of Economic and Community Development
6. Susan Coakley, Jon Linn, Glenn Reed and Elizabeth Titus, on behalf of Northeast Energy Efficiency Partnerships, Inc. (NEEP)
7. Richard A. Lewia, on behalf of Educational Plant Maintenance Association of Maine
8. Richard V. Rusnica, on behalf of Bangor Hydro-Electric Company
9. Steve Szotkowski and Susan Liebling, on behalf of S&S Technologies, Inc.
10. Laurie L. Flagg, on behalf of Maine Public Service Company
11. Joseph A. Disanza, President of Sebago Energy Conservation
12. Duncan Morrison, on behalf of Combined Energies, a division of Union Water Power Company
13. Dale A. Douglass, on behalf of Maine School Management Association
14. Roger A. Knowlton and Nancy L. Pratt-Knowlton, on behalf of Energy Solutions Partners
15. Richard S. Davies, on behalf of Maine Community Action Association
16. Virginia L. Mott

17. Devon L. Carter, on behalf of Three Rivers Engineering, Inc.
18. Robert Huang, on behalf of The Cadmus Group, Inc.
19. Richard Silkman, on behalf of Competitive Energy Services, LLC (two filings)
20. Jim Verrill, on behalf of College of Education and Human Development
University of Maine at Orono
21. Skip Dumais, on behalf of Van Buren Light & Power District
22. Peter Merrill, on behalf of Maine State Housing Authority
23. Jonathan Jutsen, CEO of EnVinta Corporation
24. Anthony W. Buxton, on behalf of the Industrial Energy Consumer Group
(IECG)
25. In support of Maine Energy Education Program (MEEP), representatives of:
 - Stevens Brook Elementary School
 - Central Elementary School
 - Maine Department of Economic and Community Development
 - Kids and Transportation
 - The NEED Project
 - Maine Conservation Corps
 - John W. Chandler
 - Heather Healey
 - Maine Department of Environmental Protection (multiple filings)
 - Maine Bureau of Air Quality Control
 - Augusta Public Schools
 - Peace Fleece
 - Mt. Vernon Elementary School
 - Wiscasset Primary School
 - Stefanie von Kannerwurff-McLeith (homeschool)
 - Crooked River Elementary School
 - St. Albans Consolidated School (multiple filings)
 - Mabel Desmond, State Representative
 - Gardiner Area High School
 - M.S.A.D. 75
 - Marshwood Middle School
 - MEEP

PEOPLE WHO COMMENTED AT THE PUBLIC HEARING

Richard Davies	Maine Community Action
Peter Merrill	MSHA
Jon Linn	NEEP
Glenn Reed	NEEP
Elizabeth Titus	NEEP
Joel Downs	Kennebunk Light & Power District
Chris Carroll	MEEP
Deb Avalone-King	MEEP
Peter Zack	MEEP
Wayne Clark	MEEP
Mary Ellen Miner	MEEP
Victor Grob	MEEP
Skip Dumais	Van Buren Light & Power District
Joe Disanza	Sebago Energy
Steve Ward	OPA
Michael L. Wacker	EMC
Dan Thayer, P.E.	Ashrae & Thayer Corp.
Duncan Morrison	Combined Energies
Brian Dancause	DECD
Joyce Dytmmmer	AARP
Rich Hevey	CMP
Sue Jones	NRCM
Geoff Clark	Nyle Special Products
Norman Anderson	American Lung Association

Separate Opinion of Commissioner Diamond

I concur with the decision of the Commission on the cost effectiveness test for interim conservation programs and on the specific programs to be adopted. In doing so, I am motivated in part by the need to implement at least some programs without further delay and by the Commission's past reliance on the All Ratepayers Test. I have sufficient doubts about that test, however, that I believe it warrants further scrutiny when we consider permanent conservation programs, a process for which we will fortunately have more time.²⁶ Thus, the purpose of this separate opinion is to raise certain cost effectiveness issues that I hope will be more completely addressed in the context of the permanent programs.

Before discussing the All Ratepayers Test, let me offer some brief observations about the two alternatives - the Rate Impact Test and the Societal Test. Both have perfectly reasonable goals, but as discussed in the Commission's Order, have defects in serving as measurement tools, especially for specific programs.

Projects that pass the Rate Impact Test are easy to justify in theory. If the savings of the non-participant for the same amount of electric consumption are greater than the amount of the conservation assessment, everybody wins, with the possible exception of the shareholders of utilities under long-term incentive rate plans. Unfortunately, with a competitive wholesale electricity market that operates on a regional basis, we may never be able to conclude with any confidence that a particular conservation program or portfolio of programs reduces the price of power by a material amount, thereby calling into question the future relevance of this test.²⁷ In addition, use of this test would militate in favor of concentrating on peak shaving programs, as that is where there would be the greatest potential to reduce energy prices.

I also support the theoretical underpinnings of the Societal Test, since benefits such as a cleaner environment and a stronger economy inure to all. Again, my problem is whether anyone can demonstrate a sufficient nexus between traditional conservation programs and these benefits to satisfy a cost effectiveness test. For example, there may well be more direct ways to improve the environment than through programs that do not differentiate between electricity generated by wind and by coal. If environmental protection is indeed one's goal, would we not get more bang for the buck by spending to promote green power than by spending to curtail usage regardless of the generation source? In short, the broader goals envisioned by the

²⁶ While the Order observes that the Commission has been struggling for 25 years with the question of how to measure the cost effectiveness of conservation programs, this is the first time it has received in-depth consideration during my tenure.

²⁷ How to measure the impact of conservation programs on the price paid for electricity by non-participants may warrant further consideration when we address permanent programs.

Societal Test require a far more expansive consideration of the alternatives, including those that do not involve conserving electricity.

Given the great difficulty, if not the impossibility, of measuring benefits under the tests described above, the decision to rely on the All Ratepayers Test is not surprising. Under that approach, we treat all consumers as if they are a single consumer by measuring whether, as a group, their savings in electricity costs under a particular program are greater than the cost to them of that program.

As I understand it, the benefit from satisfying the All Ratepayers Test is that as a society we spend less for electricity, through greater efficiency rather than through diminished output, and thus have more to spend on other goods and services. By itself, that certainly is a laudable goal. The problem arises, however, from the fact that especially in limited participant programs,²⁸ the costs are borne by the many and the benefits go to the few, and it falls to government to effect this transfer in wealth. And if the object is to maximize the amount of electricity saved, the argument can be made that the winners should be those who use the most electricity in the most inefficient manner, as they have the potential to achieve the greatest savings.

My doubts about the wisdom of using this collective approach to measuring costs and benefits to justify having government transfer wealth stem in part from the following question: if this is such a good idea, why do we not do it in other areas? Why do we not impose an assessment on heating oil purchases and operate heating oil conservation programs whenever we can demonstrate that the collectively measured gains will be greater than the collectively measured costs? Why do we not impose an assessment on car purchases and give stipends to some customers to purchase hybrid cars if the aggregate savings in gasoline will be greater than the total amount of the assessments? These programs arguably have the added advantage of promoting national security.

Indeed, we could have this type of program for any commodity for which bulk purchases are available. As a group, we might be able to buy oranges more cheaply with a modest assessment on all given to some to buy in bulk. By spending less as a society on Vitamin C, we could spend more on Vitamin A.

My uneasiness is only enhanced by the fact that the transfer of wealth accompanying this collectivization of costs and benefits is carried out not by the market but by government. It was hardly surprising that we received an unusually large number

²⁸ My doubts about the All Ratepayers Test are strongest in the context of limited participant programs, as the savings are enjoyed by only a few consumers while the majority pays more. Unfortunately, these are often the primary effect programs, in which the savings are easiest to measure. As a result, achieving certainty of savings and a broad distribution of benefits may at times be conflicting goals.

of comment letters in this Docket and that the vast majority support conservation. As with any endeavor where the benefits to a few may be substantial²⁹ and the cost to the many modest, those whose only involvement may be to pay the assessment are too busy making a living and raising a family to intervene in Commission proceedings.

In fairness, certain conservation programs involve a minimal or no transfer of wealth and are thus easy to justify. For example, improving the efficiency of government buildings potentially benefits all taxpayers, and thus, the same people pay for and benefit from the project.³⁰ In programs designed for low-income electric consumers, the transfer of wealth may itself be a valid objective, and in light of Maine's statewide assistance program, reducing consumption by this group may actually result in savings for all ratepayers.

One way of addressing the distributional equity issue is by requiring, as the Conservation Act endeavors to do, that the benefits be spread among the different classes of ratepayers. While this may limit the problem, it does not eliminate the question of whether and under what circumstances this transfer of wealth is justified, especially if one is unable to demonstrate that the programs are really the best way to achieve other social goals. Before we spend other people's money, we have an obligation to fully answer that question, and I look forward to doing so when we consider the permanent conservation programs.³¹

²⁹ The possibility that some of these programs might someday be seen as boondoggles is enhanced by the fact that the All Ratepayers Test only allows projects with savings greater than costs. Thus, we are transferring wealth to subsidize measures which, even without the subsidy, would benefit the participants.

³⁰ To the extent that a conservation assessment is a more regressive way to raise money than the income tax, there is the question of why we should use the former to achieve savings in the latter. This arises because at the State level, the assessment would be used for the conservation measure while the electricity bill is paid with tax dollars.

³¹ It may be argued that by passing the Conservation Act, the Legislature answered this question. The Act, however, gives the Commission extremely broad discretion in deciding cost effectiveness and determining the amount to spend on conservation, and I believe the issues raised in this opinion should be addressed if we are to carry out those tasks in a thoughtful manner. Alternatively, we might decide to raise these issues with the Legislature if we conclude we need clearer guidance on how it would like us to proceed.

VI. Building Operator Certification Course Description

Building Operator Certification

Northeast Energy Efficiency Partnerships (NEEP) is offering a Building Operator Certification training series in various regional locations. The training series will prepare building operations and maintenance staff for certification in energy and resource efficient building systems. Individuals who successfully complete the training series will be eligible for Building Operator Certification (BOC).

WHO SHOULD ATTEND

BOC training is designed for staff responsible for the maintenance and operation of equipment and systems in commercial and public buildings. Past participants have included school districts, municipalities, federal and state institutions, hospitals, and mechanical and maintenance contractors. Certified building operators have demonstrated competence in evaluating building energy consumption, HVAC energy inspection, lighting surveys, indoor air pollutant sources and pathway locations, and facility electrical distribution.

COURSE SCHEDULE

To become certified, participants must attend 8 full-day core classes, complete open book tests, and assigned projects. The classes will be held from 8am to 3:30pm.

The course is already running in Portland and Bangor. An additional course will begin in November in Northern Maine (four days in Presque Isle, four days in Houlton). The schedule is as follows:

BOC 101 – Overview:	Portland:	July 25	Bangor: September 4
	Northern Me:	November 5	
BOC 107 – Electrical Systems:	Portland:	September 5	Bangor: October 9
	Northern Me:	December 10	
BOC 102 – Energy Conservation:	Portland:	October 10	Bangor: November 6
	Northern Me:	January 7	
BOC 103 – HVAC:	Portland:	November 7	Bangor: December 11
	Northern Me:	January 28	
BOC 103 – HVAC Controls:	Portland:	December 12	Bangor: January 8, 2003
	Northern Me:	February 18	
BOC 104 – Efficient Lighting:	Portland:	January 9	Bangor: January 29
	Northern Me:	March 18	
BOC 105 – Codes:	Portland:	January 30	Bangor: February 19
	Northern Me:	April 15	
BOC 106 – Indoor Air Quality:	Portland:	February 20	Bangor: March 19
	Northern Me:	May 6	

Sponsored by State of Maine Public Utilities Commission

Commitment to Action

The Maine Public Utilities Commission (MPUC) will fund full tuition for a limited number of educational institution plant operators. Funding is provided from an electric conservation fund that is funded by Maine's electric consumers. To be eligible for tuition funding, a participant must have reasonable certainty that his or her school system will take action to improve the efficiency of electric energy consumption, using lessons learned in BOC training. The MPUC will require the participant to provide information about school energy use and will follow up with the participant in future years, to discover whether BOC training results in direct action.

Registration Information

The series includes 56 hours of classroom instruction, seven course handbooks, 20 hours of facility project assignments, and the certification recognition materials. Participants who qualify for certification will receive a BOC certificate, and a recognition letter to their employer.

BOC Level I Topics

To receive Level I certification, participants must attend these seven classes (six one-day and 1 two-day), complete open book exams and job related application projects.

BOC 101 - BUILDING SYSTEMS OVERVIEW

An overview of preventive maintenance, energy efficiency principles, and the fundamentals of building systems, equipment and operations. Reviews heating, cooling, ventilation and control systems, water, lighting and indoor air quality. Covers system interaction and relationship to overall building performance.

BOC 102 ENERGY CONSERVATION TECHNIQUES

Helps operators gain a better understanding of how energy is used in commercial buildings and how to identify and prioritize conservation opportunities. Includes basics of energy accounting, evaluation of fuel options, operation and maintenance strategies to improve efficiency, and energy management planning techniques.

BOC 103 - HVAC SYSTEMS AND CONTROLS (2 days)

Focuses on operation and maintenance of equipment and components typically found in commercial buildings, including central heating, cooling air and ventilation systems. Provides introduction to automatic control systems and equipment, particularly for central air systems. Emphasis placed on group problem solving and exercises with respect to preventive maintenance.

BOC 104 - EFFICIENT LIGHTING FUNDAMENTALS

Covers lighting fundamentals and types of lighting for economical and energy efficient lighting systems. Participants learn principles of efficient lighting including evaluation of lighting levels, quality and maintenance. Other topics include lighting fixture and control technologies, common upgrades, retrofit and redesign options.

BOC 105 -MAINTENANCE AND RELATED CODES

Provides an overview of health, safety, energy and environmental codes that impact facility operation. Stresses how to comply with the requirements of the most important health and safety codes and how to use the energy and maintenance related codes to improve energy efficiency.

BOC 106 - INDOOR AIR QUALITY

Introduces the basic causes of indoor air quality problems and begins to develop a method of diagnosis and solution. Participants will gain an understanding of the dynamic components of indoor air quality in relation to source control, occupant sensitivity and ventilation. Emphasis is placed on communications with building occupants for reliable investigations without aggravating existing issues.

BOC 107 - FACILITY ELECTRICAL SYSTEMS

Covers how electricity is distributed in a facility and common electrical distribution problems. This course emphasizes the fundamentals of electricity and its application to the workplace.

VII. Order Establishing Interim Conservation Program – Small Business Program

STATE OF MAINE
PUBLIC UTILITIES COMMISSION

Docket No. 2002-161

September 24, 2002

PUBLIC UTILITIES COMMISSION
Interim Electric Energy Conservation Programs

ORDER ESTABLISHING
INTERIM CONSERVATION
PROGRAM – SMALL BUSINESS
PROGRAM

WELCH, Chairman; NUGENT and DIAMOND, Commissioners

I. SUMMARY

By this Order, we approve implementation of a Small Business Program, as an interim conservation program pursuant to P.L. 2001, ch. 624, § 7. The Commission intends to establish an energy efficiency program for small businesses throughout Maine, based on a combination of energy efficiency information and education activities and direct incentives for small business owners, to encourage them to purchase and install energy efficient products and implement energy efficient business practices. Through this Order, we approve funding a Small Business Program, at a level of up to \$1.2 million.

II. BACKGROUND

P.L. 2001, ch. 624 (the Conservation Act),³² enacted during the second session of the 120th Legislature, establishes terms that govern an electric energy conservation program in Maine. Section 4 of ch. 624 directs the Commission to develop and implement electric energy conservation programs that are consistent with the goals and objectives of an overall energy conservation program strategy that the Commission must establish. Various other statutory directives require the Commission to promulgate rules and hold public hearings.

Recognizing that the process of implementing electric energy conservation programs will necessarily take many months, the Legislature authorized the Commission to implement interim programs. Section 7 of ch. 624 states:

³²The Conservation Act may be found on the Commission's web page: www.state.me.us/mpuc (and access the Electric Conservation Activities site).

Interim programs. In order to avoid a significant delay in the implementation of conservation programs pursuant to the Maine Revised Statutes, Title 35-A, Section 3211-A, the Public Utilities Commission may use funds from the conservation program fund established pursuant to Title 35-A, section 3211-A, subsection 5 to implement on a short-term basis conservation programs that the commission finds to be cost effective. The commission is not required to satisfy the requirements of Title 35-A, section 3211-A before implementing such programs. Any programs implemented under this section must terminate no later than December 31, 2003. Funds in the conservation program fund not used for short-term programs under this section must be used in accordance with Title 35-A, section 3211-A.

On June 13, 2002, we issued our Order Establishing Interim Conservation Programs, wherein we implemented specific interim programs that were described in the Order. We also ordered the Staff to further investigate other programs that showed potential for meeting our criteria for interim programs. One of the programs assigned to further study was a small business prescriptive rebate program.

In the June 13th Order, we noted that:

Commenters suggested that a direct-install rebate program would be effective for small business customers. The program could be run by a single (or small number of) ESCOs chosen through an RFP, or the Commission could pre-qualify vendors throughout the State to deliver the measures. Such a program would acknowledge that small business owners often do not have the time or the expertise to investigate or install efficiency measures. Other utilities offer such programs, and there are ESCOs, vendors, and other utilities that can offer a program in Maine with minimal start-up effort or cost. This program approach cannot reasonably be implemented within our 2-month time frame because it requires issuing and evaluating RFPs and/or RFQs for delivery and for monitoring. Furthermore, all these suggestions require further investigation before we can conclude that any one is a reasonable interim program. Finally, such programs would duplicate aspects of CMP's Energy Efficiency Incentive Program (the so-called Nickel Program), which offers prescriptive rebates to small and medium sized

businesses.³³ Because two interim programs – the DECD loan program and CMP’s Nickel Program – are available for small businesses, we will defer a direct-install program until we develop further details and we determine whether and how to phase out CMP’s program. We direct Commission Staff to investigate this program approach further. We direct the Staff to consider a program delivery mechanism that uses in-state delivery companies to the greatest extent possible.

Order at 26.

The Staff has completed its investigation on a possible interim, direct-install rebate program directed at small business customers and reported that such a program should be implemented.

III. INTERIM SMALL BUSINESS PROGRAM

Small business customers are one of two “hard to reach” markets specifically targeted by the Conservation Act³⁴. Small business owners face significant barriers to implementing energy efficiency. There is intense competition for their time and attention, and energy costs do not represent a large enough share of these firms’ budgets to command the business owners’ attention to energy efficiency. Small business owners often lack knowledge regarding the value of energy efficiency and the existence of energy efficiency technologies. They may also lack capital for investment or perceive a risk associated with new or unfamiliar technology. Efficiency opportunities at any one small business location may be small, so many energy service companies (ESCOs) do not focus their efforts on small business.

We have implemented one interim program directed at small business customers, the \$200,000 addition to the DECD Energy Conservation Loan Program. As we are far from the “at least 20%” target set for “permanent” programs, we decide that our interim program portfolio should include a larger scale program directed at small business customers. We also decide that a program that combines customer incentives with an education and information effort as described below is best suited to overcome the barriers faced by this group of customers. The incentive component will help overcome the barriers of first cost, lack of capital, and perceived risk. Incentives should also help get the attention of small business owners. The education and information activities will address the issues of lack of knowledge, perceived value, and perceived risk. The program is designed to involve a network of cooperating program allies, recruited from Maine contractors and suppliers. The

³³ Some commenters also suggested increasing the customer incentive from 5 cents to 10 cents, to better overcome the hurdle associated with capital investment. (Footnote 16 in original).

³⁴Ch. 624, Section 2, codified as 35-A MSRA SS 3211-A (2) (B) (2).

program will help them to integrate energy efficiency into the services they already provide to Maine's small business community.

The goal of the program is to improve the efficiency of energy use in small business applications. The specific program objectives are to:

- Reduce inefficient electricity consumption by small business customers.
- Increase the number of Maine suppliers and contractors selling energy efficient products and services to small business customers.
- Increase small business customer awareness of the benefits of energy efficiency and their use of energy efficient products.

Programs to promote the purchase and installation of energy efficient products by small businesses are currently operating in several states, including other New England states. As noted in our June 13th Order, CMP offers its Energy Efficiency Incentive Program (the so-called Nickel Program) to small and medium sized businesses in its service territory, and the Maine Department of Economic and Community Development (DECD), with support from the Conservation Program Fund, offers a loan program to small businesses for energy efficiency improvements.

The program we approve in this Order will be delivered by an implementation contractor, chosen by the Commission, through a network of cooperating program allies, recruited from Maine contractors and suppliers (lighting, HVAC, and electrical contractors, electrical and lighting supply stores, HVAC suppliers, etc.). The program will be supported by a marketing and education effort, delivered directly and/or through cooperating Maine business associations.

1. The Program is Cost Effective

A preliminary cost effectiveness analysis of this program, completed by the Staff, yields a benefit to cost ratio (BCR) of 1.6. This analysis was completed using Maine-specific budget and energy savings estimates. Since the set of measures to be offered, along with their estimated cost, energy savings, incentive level, and other characteristics will be determined during final program design, data from similar cost-effective programs being offered elsewhere was used as an estimate for the measure characteristics of the proposed Maine program.

2. Statutory Criteria Satisfied

a. At least 20% of available funds to programs should be targeted at small business consumers, as defined by the Commission by rule (35-A M.R.S.A. §3211-B Subsection 2.B(2)). This program is available only to small businesses.

b. The commission shall select service providers through a competitive bidding process (Subsection 3.A). The Commission directs the Staff to issue a competitive solicitation for an implementation contractor.

c. To the extent practical, the Commission shall encourage the development of resources, infrastructure, and skills within the State, by giving preference to in-state service providers. (Subsection 3 B). The design of the program calls for delivery of services through a network of allies, comprised of participating Maine contractors and suppliers (HVAC contractors, electrical contractors, electrical and lighting supply stores, HVAC suppliers, etc.).

3. Measurement and Evaluation

There are a variety of commonly-used means of evaluating an incentive-based program. Evaluators can count the number of people who take advantage of the program and the equipment they buy, and use the energy savings per measure from existing evaluations from other jurisdictions to estimate the program's energy savings. We direct Commission Staff to determine the best method of evaluation and to rely on measurements of installations in Maine to the greatest extent possible.

4. Coordination

We direct the Staff to coordinate detailed program design and delivery with the activities of DECD's Energy Conservation Loan Fund and CMP's Nickel Program, in order to maximize customer benefits and avoid duplication of resources. We will determine whether and how to phase out CMP's Nickel Program as part of our planning process in Docket 2002-162.

5. Funding

The estimated cost of this program through 2003 is \$1.2 million, based on the cost of similar programs operating in other states, adjusted for the size of the Maine small business market. We authorize the Staff to spend up to this amount from the Conservation Program Fund.

IV. FUTURE ACTIONS

The Staff is directed to implement the Small Business Program as described in this Order. We delegate to the Director, Energy Efficiency Programs, or his designee on the Energy Conservation Team, the authority to conduct a bidding process, to enter into contracts, memoranda of understanding, or similar agreements, as is necessary to implement the program consistent with this Order. Staff is also authorized to spend up to 10% more than the amount described in this Order to

implement the program. Spending decisions beyond the 10% contingency must be made by the Commission.

Dated at Augusta, Maine, this 24th day of September, 2002.

BY ORDER OF THE COMMISSION

Dennis L. Keschl
Administrative Director

COMMISSIONERS VOTING FOR: Welch
 Nugent
 Diamond

THIS ORDER HAS BEEN DESIGNATED FOR PUBLICATION

NOTICE OF RIGHTS TO REVIEW OR APPEAL

5 M.R.S.A. § 9061 requires the Public Utilities Commission to give each party to an adjudicatory proceeding written notice of the party's rights to review or appeal of its decision made at the conclusion of the adjudicatory proceeding. The methods of review or appeal of PUC decisions at the conclusion of an adjudicatory proceeding are as follows:

1. Reconsideration of the Commission's Order may be requested under Section 1004 of the Commission's Rules of Practice and Procedure (65-407 C.M.R.110) within 20 days of the date of the Order by filing a petition with the Commission stating the grounds upon which reconsideration is sought.
2. Appeal of a final decision of the Commission may be taken to the Law Court by filing, within **21 days** of the date of the Order, a Notice of Appeal with the Administrative Director of the Commission, pursuant to 35-A M.R.S.A. § 1320(1)-(4) and the Maine Rules of Appellate Procedure.
3. Additional court review of constitutional issues or issues involving the justness or reasonableness of rates may be had by the filing of an appeal with the Law Court, pursuant to 35-A M.R.S.A. § 1320(5).

Note: The attachment of this Notice to a document does not indicate the Commission's view that the particular document may be subject to review or appeal. Similarly, the failure of the Commission to attach a copy of this Notice to a document does not indicate the Commission's view that the document is not subject to review or appeal.

VIII. Order Establishing Interim Conservation Program – Traffic Signal Replacement Program

STATE OF MAINE
PUBLIC UTILITIES COMMISSION

Docket No. 2002-161

November 8, 2002

PUBLIC UTILITIES COMMISSION
Interim Electric Energy Conservation Programs

ORDER ESTABLISHING
INTERIM CONSERVATION
PROGRAM –TRAFFIC SIGNAL
REPLACEMENT PROGRAM

WELCH, Chairman; NUGENT and DIAMOND, Commissioners

I. SUMMARY

By this Order, we approve implementation of a Traffic Light Replacement Program as an interim conservation program pursuant to P.L. 2001, ch. 624, § 7. The program will provide financial incentives for the replacement of inefficient incandescent traffic signals with more efficient signals. We will develop this program jointly, and offer it in cooperation with, the Department of Transportation, which will serve as the program administrator. We approve funding of this program at a level not to exceed \$200,000.

II. BACKGROUND

P.L. 2001, ch. 624 (the Conservation Act),³⁵ enacted during the second session of the 120th Legislature, establishes the terms that govern an electric energy conservation program in Maine. Section 4 of ch. 624 directs the Commission to develop and implement electric energy conservation programs that are consistent with the goals and objectives of an overall energy conservation program strategy that the Commission must establish. Various other statutory directives require the Commission to promulgate rules and hold public hearings.

Recognizing that the process of implementing electric energy conservation programs will necessarily take many months, the Legislature authorized the Commission to implement interim programs. Section 7 of ch. 624 states:

³⁵The Conservation Act may be found on the Commission's web page: www.state.me.us/mpuc (and access the Electric Conservation Activities site).

Interim programs. In order to avoid a significant delay in the implementation of conservation programs pursuant to the Maine Revised Statutes, Title 35-A, Section 3211-A, the Public Utilities Commission may use funds from the conservation program fund established pursuant to Title 35-A, section 3211-A, subsection 5 to implement on a short-term basis conservation programs that the commission finds to be cost effective. The commission is not required to satisfy the requirements of Title 35-A, section 3211-A before implementing such programs. Any programs implemented under this section must terminate no later than December 31, 2003. Funds in the conservation program fund not used for short-term programs under this section must be used in accordance with Title 35-A, section 3211-A.

On June 13, 2002, we issued our Order Establishing Interim Conservation Programs, wherein we implemented specific interim programs that were described in the Order. We also ordered the Staff to further investigate other programs that showed potential for meeting our criteria for interim programs.

Although a traffic signal replacement program was not among the programs we considered as part of the process resulting in our June 13 Order, Maine Department of Transportation (MDOT) officials contacted the Commission Staff about such an interim program. Upon investigation, the Staff concluded that the proposed traffic signal replacement program would meet the criteria for interim programs as well as satisfying many of the requirements for on-going programs listed in Title 35-A, section 3211-A

III. INTERIM TRAFFIC SIGNAL REPLACEMENT PROGRAM

Most of the 662 traffic signals at signalized intersections in Maine are owned by the Maine Department of Transportation (MDOT) and maintained by municipalities, which pay for the energy the signals consume and replace bulbs when needed. All new traffic signals being installed by MDOT use Light Emitting Diode (LED) bulbs rather than incandescent bulbs because LED bulbs consume only about one tenth the energy and they last seven to 15 times as long as incandescent bulbs. As part of its routine maintenance practice, MDOT has been upgrading the traffic lights it maintains to LED technology. Most municipalities, however, continue to replace incandescent bulbs with new incandescent bulbs.

MDOT has identified LED retrofits as a sustainability strategy in its June 2002 biennial plan under Maine's Clean Government Initiative, but has identified no funding source for it. In addition, the New England Governors and Eastern Canadian Premiers have identified this type of retrofit as providing environmental benefits. Resolve 27-7 from the August 2002 meeting states in part, "BE IT FURTHER

RESOLVED That the Conference of New England Governors and Eastern Canadian Premiers direct its Committee on the Environment and NICE to encourage and promote climate change proposals centered on LED Traffic Lights”

Due to the clear cost effectiveness of a traffic signal replacement program, the fact that the participant benefits will flow to local taxpayers in Maine, and the policy directive urged by the New England Governors to promote the use of LED bulbs in traffic signals, we decide to implement a traffic signal replacement program.

The goal of the program is to improve the efficiency of energy use in municipalities. The specific program objectives are to:

- Reduce inefficient electricity consumption by incandescent traffic signals.
- Reduce greenhouse gas emissions and other emissions produced by inefficient electricity usage.
- Increase the availability of LED traffic light retrofit kits.
- Increase awareness among municipalities of the benefits of energy efficiency and their use of energy efficient products.

The program we approve in this Order will be delivered through the Maine Department of Transportation MDOT, which will support the program with an education effort, targeted at municipalities, and cooperating electrical contractors.

1. The Program is Cost Effective

A preliminary cost effectiveness analysis of this program, completed by the Staff, yields a benefit to cost ratio (BCR) of about 10 to one. This analysis was completed using MDOT- specific budget and energy savings estimates. Since the set of measures to be offered, along with their estimated cost, energy savings, incentive level, and other characteristics will be determined during final program design, data from similar cost-effective programs being offered elsewhere was used to estimate the characteristics of the proposed Maine program.

2. Statutory Criteria Satisfied

Although it is not required, this interim program meets the statutory requirements for on-going programs. The program will increase consumer (i.e. municipality) awareness of the long-term savings available through LED lighting (35-A M.R.S.A. § 2.A.(1)); it will create more favorable market conditions for the increased use of efficient products and services by demonstrating the low operating and maintenance costs of the technology and thus increasing the likelihood that municipalities will continue to purchase LED signal lights after the conclusion of the

program (35-A M.R.S.A. § 2.A.(2)); and like all programs, it will reduce environmental damage by emissions caused by inefficient electricity usage (35-A M.R.S.A. § A(3)).

Moreover, the program is consistent with 35-A M.R.S.A. § 2.B(3), which requires that the Commission shall apportion remaining available funds among customer groups and geographic areas in a manner that allows all other customers to have a reasonable opportunity to participate in one or more conservation programs select service providers through a competitive bidding process. This program will save energy and reduce bills for municipalities throughout the state. The operating cost savings will be passed on to taxpayers in each community that takes advantage of this program.

By relying on an existing administrative structure within the MDOT, the program satisfies Subsection 2.G, which requires that the Commission coordinate its efforts with other agencies of the State with energy related responsibilities.

Finally, the statute permits the Commission to coordinate its efforts with similar efforts in other states in the northeast region and enter into agreements with public agencies or other entities in or outside the State for program delivery, where the Commission finds that such coordination or agreements would provide demonstrable benefits to citizens of the State. (Subsection 2. (I)) This program fulfills Resolve 27-7 of the Conference of New England Governors and Eastern Canadian Premiers and, as we find above, should bring substantial benefits to Maine's citizens.

3. Measurement and Evaluation

Evaluations of similar traffic light replacement programs have been conducted in other states. We direct Commission Staff to work with the Maine Department of Transportation to develop the best method of evaluation for this jointly offered program and to rely on measurements of actual installations to the greatest extent possible.

4. Coordination

We direct the Staff to coordinate detailed program design and delivery through a Memorandum of Understanding with the Maine Department of Transportation.

5. Funding

The estimated cost of this program through 2003 is \$200,000. We authorize the Staff to spend up to this amount from the Conservation Program Fund.

IV. FUTURE ACTIONS

The Staff is directed to implement the Traffic Signal Replacement Program as described in this Order. We delegate to the Director, Energy Efficiency Programs, or his designee, the authority to conduct a bidding process, to enter into contracts, memoranda of understanding, or similar agreements, as is necessary to implement the program consistent with this Order. Staff is also authorized to spend up to 10% more than the amount described in this Order to implement the program. Spending decisions beyond the 10% contingency must be made by the Commission.

Dated at Augusta, Maine, this 8th day of November, 2002.

BY ORDER OF THE COMMISSION

Dennis L. Keschl
Administrative Director

COMMISSIONERS VOTING FOR: Welch
 Nugent
 Diamond

THIS ORDER HAS BEEN DESIGNATED FOR PUBLICATION

NOTICE OF RIGHTS TO REVIEW OR APPEAL

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BACKGROUND - ONGOING PROGRAMS

- Because the Conservation Act requires interim programs to be discontinued by the end of 2003, the Commission must develop its final statewide Energy Efficiency Plan of ongoing programs no later than 2003.
- As discussed earlier in this report, we have expended considerable effort to inform the public of all our activities and to obtain public input on all topics. We have received written comments on a variety of topics and have conducted nine public hearings. We have established a web page containing all documents, opportunities for input, and solicitations, we publish a monthly status report, and we maintain a broad e-mail distribution list for material of general interest.
- We are developing the statewide Plan through proceedings on a series of topics. We have reached decisions on the following issues, and describe them in subsequent sections of this report:
 - Goals, objectives and strategies for ongoing programs – decision issued in September 2002
 - Cost effectiveness tests for ongoing programs – order approving rule issued in November 2002
 - Definitions of low-income consumer and small business consumer – order approving rule issued in November 2002
 - Branding – we have chosen a “brand name.” Legal and graphic activities necessary for adoption are underway.
- The significant remaining decisions are: what ongoing programs will be implemented and how much funding will be collected from each utility? We will make these two related decisions at the same time, before the legislative session ends in 2003. We have undergone the following activities related to these issues:
 - We issued our order establishing procedures in July 2002.
 - The Office of the Public Advocate conducted studies of the technical and economic potential of efficiency programs in Maine. The studies were completed in October 2002. Extensive public examination of the results occurred in October and November.
 - The public submitted written comments and oral presentations on potential ongoing programs in October and November 2002.
 - Interested persons submitted legal briefs on appropriate utility assessment levels in November 2002.

GOALS, OBJECTIVES, AND STRATEGIES FOR ONGOING PROGRAMS

I. Background

- The Conservation Act contains a number of goals and directives that we must achieve through the statewide energy efficiency program:

- Increase consumer awareness of cost effective options for conserving energy
- Create more favorable market conditions for the increased use of efficient products and services
- Promote sustainable economic development
- Promote reduced environmental damage
- Target at least 20% of available funds to programs for low-income residential consumers
- Target at least 20% of available funds to programs for small business consumers
- To the greatest extent practicable, apportion the remaining available funds among customer groups and geographic areas in a manner that allows all other customers to have a reasonable opportunity to participate in one or more conservation programs
- Implement programs that are cost effective

- The Act requires the Commission to balance these goals as we develop a portfolio of programs.

II. Basic Portfolio Principles

- The Commission determined that cost effectiveness (discussed later in this report) would be a threshold requirement for all programs.
- We also established the basic principle that the portfolio should create sustainable improvements in energy efficiency.

III. Program Goals

The Commission determined that the goals of Maine's energy efficiency programs shall be to:

- Improve the efficiency of electric energy use by Maine residential consumers, businesses and other organizations
- Increase consumer awareness of cost effective options for conserving energy
- Create more favorable, sustainable market conditions for the increased use of efficient products and services
- Promote sustainable economic development
- Reduce environmental damage associated with energy use

IV. Program Objectives

The Commission established the following observable or measurable program objectives:

- Implement a portfolio of conservation programs pursuant to a Maine energy conservation plan
- Implement an organizational model for administration and management of energy conservation programs
- Review existing utility programs and implement a transition plan by the end of 2003
- Create an awareness of the conservation programs and the value of energy efficiency among the general public
- Increase the availability of energy efficient products and services through Maine businesses
- Save a pre-defined number of kWhs through program implementation by December 2003

V. Program Strategies

The Commission established the following strategic activities to ensure that the portfolio of programs meets our goals and objectives.

- Market assessment
 - Conduct market assessment studies as needed to expand our knowledge and understanding of the markets for energy efficient products and services in Maine. Coordinate our market assessment efforts with others in the region where possible.
 - Develop market baseline measurements for efficient products and services as needed to support program design and evaluation.

- Program design and implementation
 - Implement a portfolio of programs that allows all major customer groups a reasonable opportunity to participate in one or more programs.
 - Implement programs targeted at traditionally “hard-to-reach” markets. Target 20% of funds to programs for low-income customers, and 20% of funds to programs for small business customers.
 - Design programs that balance immediate primary results (cost effective kW and kWh savings) with longer-term secondary results (self-sustaining markets, economic development, environmental benefits).
 - Encourage the development of an energy efficiency infrastructure, resources, and skills in Maine. Use existing market channels for program delivery, where possible.
 - Assess current utility programs and their fit with our program plan, phase out those no longer needed, and re-design those to be carried forward.
 - Integrate customer educational efforts into all programs to promote changes in buying habits and energy usage behaviors.
 - Implement an overall marketing effort that develops a clear brand image for our programs, supports program implementation, and increases public awareness of the benefits of energy efficiency.
 - Adopt or adapt regional or national programs or programs from other states, if they will provide benefits to Maine’s citizens and are consistent with these goals, objectives, and strategies.

- Monitoring and evaluation
 - Develop tracking and evaluation criteria and procedures for each program. Coordinate our tracking and evaluation efforts with others in the region where possible.
 - Evaluate programs to a level sufficient for business decision-making.

- Funding
 - Implement an accounting and reporting system to track revenues by source and expenditures by program and category, in sufficient detail to support evaluation and reporting needs.
 - Leverage ratepayer funds with funds from other sources where possible. Seek additional sources of funding from state, federal, and private sources, where such funding would enhance and support this plan.
 - Set incentive levels at the minimum needed to accomplish program objectives.

- Communication, coordination, and reporting
 - Implement a process for ongoing public stakeholder communication.

- Coordinate our efforts with other state agencies with energy-related responsibilities.
- Monitor national and regional activities and participate in such activities when beneficial.
- Report to the Legislature by December 1, 2003, describing the Commission's activities, programs implemented or planned, the likely cost effectiveness of programs, the financial condition of the conservation funds, and any recommended changes to the Conservation Act.

VI. Commission Order Establishing Goals, Objectives, And Strategies

STATE OF MAINE
PUBLIC UTILITIES COMMISSION

Docket No. 2002-162

September 24, 2002

PUBLIC UTILITIES COMMISSION
Procedures for Conservation Program Planning

ORDER ESTABLISHING GOALS,
OBJECTIVES AND STRATEGIES FOR
CONSERVATION PROGRAMS IMPLEMENTED
PURSUANT TO P.L. 2001, CH. 624

WELCH, Chairman; NUGENT and DIAMOND, Commissioners

I. SUMMARY

By this Order, we establish the goals, objectives, and strategies that will govern the selection of energy efficiency programs to be implemented pursuant to PL 2001, ch. 624.

II. BACKGROUND

PL 2001, ch. 624 (The Conservation Act or the Act),³⁶ enacted during the second session of the 120th Legislature, establishes the terms that govern an electric energy conservation program in Maine. Section 4 of ch. 624, which enacts 35-A M.R.S.A. § 3211-A, directs the Maine Public Utilities Commission (Commission) to "...develop and, to the extent of available funds, implement conservation programs...." Section 4 also states: "The commission shall establish and, on a schedule determined by the commission, revise objectives and an overall energy strategy for conservation programs. Conservation programs implemented by the commission must be consistent with the objectives and an overall energy strategy developed by the commission...."

The Conservation Act contains a number of other directives that we must achieve through the statewide program. Title 35-A M.R.S.A., §3211-A(4) states:

Conservation programs implemented by the commission must be... cost effective, as defined by the commission by rule or order.

Subsection 2(A) states:

³⁶The Conservation Act may be found on the Electric Conservation Activities section of the Commission's web page (<http://www.state.me.us/mpuc>).

The commission shall consider, without limitation, conservation programs that

1. Increase consumer awareness of cost effective options for conserving energy;
2. Create more favorable market conditions for the increased use of efficient products and services; and
3. Promote sustainable economic development and reduced environmental damage.

Finally, subsection 2(B) states:

The commission shall:

1. Target at least 20% of available funds to programs for low-income residential consumers, as defined by the commission by rule;
2. Target at least 20% of available funds to programs for small business consumers, as defined by the commission by rule; and
3. To the greatest extent practicable, apportion the remaining available funds among customer groups and geographic areas in a manner that allows all other customers to have a reasonable opportunity to participate in one or more conservation programs.

By Proposed Order on August 6, 2002, we stated our preliminary views on goals, objectives, and strategies that we would use when selecting permanent energy efficiency programs. We held a public hearing on August 27, 2002, and invited written comments, which were due no later than September 3.

In Appendix A to this Order, we list the persons who spoke at the public hearing and who filed written comments. Written comments filed with the Commission are available from the Virtual Docket at the Commission's web site (www.state.me.us/mpuc). Comments at the public hearing were transcribed, and the transcription is available.³⁷ We discuss these comments throughout the body of this Order.

III. OVERVIEW

Through this Order, we first establish appropriate overall goals that energy conservation programs will be designed to accomplish. Next, we establish measurable or observable objectives that support the goals. Finally, we establish strategies or activities that will, in the aggregate, meet the goals and objectives.³⁸ We adopt each of the Act's directives as a goal, objective, or strategy, depending on the focus of the directive.

³⁷See our web site, under the Electric Conservation Activity section.

³⁸The Act directs the Commission to develop an "overall energy strategy." It is not appropriate or reasonable for the Commission to develop a statewide energy

The Act sets out cost effectiveness as a threshold requirement for conservation programs, but not the sole requirement. In developing goals, objectives, and strategies, we follow three broad principles. First, the portfolio of programs shall be cost effective.³⁹ Second, the portfolio of programs shall create sustainable improvements in energy efficiency. Finally, the portfolio shall meet the Act's requirements on targeting programs to customer groups and geographic areas. We discuss these principles in further detail below.

Cost effectiveness would be the only relevant criterion if we were attempting to purchase (i.e., realize an absolute reduction in consumption of) the most kilowatt-hours at the lowest price. Purchasing least-cost kWhs is the overall goal of many utility and state conservation programs (including Maine's in earlier years). In those programs, prospects would likely be prioritized and chosen based on their level of cost effectiveness, from the utility or state perspective. However, the Act contains a variety of goals. In many instances, accomplishing one of these goals in the most effective manner will conflict with maximizing overall cost effectiveness. For example, a program that targets low-income customers or that emphasizes consumer awareness may be less cost effective than other programs. To ensure that none of the Act's goals are sacrificed, we establish cost effectiveness as a hurdle that programs must meet before we will consider their effectiveness in meeting other goals. If a program passes the hurdle – i.e., is cost effective – we will then consider cost-effectiveness and other goals in choosing the portfolio of programs that comprise the statewide program. If the other goals are satisfied equally, we will choose the more cost effective program.

We will use this approach to select energy efficiency activities for primary-effect programs,⁴⁰ for secondary-effect programs where appropriate, and for the portfolio of programs as a whole. However, we recognize that, for some secondary-effect programs (such as education, public awareness, R&D, or codes and standards programs), cost effectiveness may be difficult to quantify. We will not automatically

policy that encompasses all fuels, nor is it necessary for successful implementation of the Act. We have interpreted this directive to require that we develop a group of objectives and strategies that will govern the conservation program portfolio in a comprehensive manner.

³⁹In our June 13, 2002, Order Establishing Interim Conservation Programs in Docket No. 2002-161, we established the All-Ratepayers Test as the cost effectiveness criterion for interim programs. We will determine the cost effectiveness test for permanent programs in our rulemaking to revise the Commission's Chapter 380.

⁴⁰Primary-effect programs are those in which program funding is directly related to kWhs saved. Secondary-effect programs are those in which funding is paid to an intermediary, who in turn uses the money for one of a variety of purposes aimed at influencing an energy consumer's behavior.

reject a secondary-effect program because it cannot be demonstrated to be cost effective. Rather, we will ensure that, while individual programs may be selected even though the size of the “benefit” side of the cost effectiveness test is uncertain, the portfolio as a whole produces quantifiable benefits substantially in excess of overall costs.

This approach will enable us to meet the Act’s long-term goals:

The commission shall consider, without limitation, conservation programs that:

1. Increase consumer awareness of cost effective options for conserving energy;
2. Create more favorable market conditions for the increased use of efficient products and services; and
3. Promote sustainable economic development and reduced environmental damage.⁴¹

In addition, we recognize that a program that creates permanent changes in consumer behavior may be more cost effective and sustainable in the long-term than a program that causes immediate, but temporary, kWh savings. When evaluating a program’s cost effectiveness, we will take a long-term view and will consider potential long-term savings through estimations or other reasonable approaches. In our rulemaking to establish cost effectiveness test(s), we will address the means by which we may quantify long-term, sustainable, but less-easily-measured program benefits.

Long-term benefits are achieved if the programs cause self-sustaining changes in the marketplace. During conversations among stakeholders and policy makers, there have been discussion and occasional confusion about the term “market transformation.” We will consider market transformation to mean the creation of conditions that cause an increased proportional share of energy efficient products, services or practices to be manufactured, sold, and/or implemented without programmatic market stimuli or subsidies. When this state is attained, it will likely be possible to terminate ratepayer funding. We propose to consider the longer-term goal of sustainable improvement in the use of energy efficiency – i.e., market transformation – as a strategic principle in our program design.

A number of persons commented on the role of cost effectiveness in choosing permanent programs. The Maine Energy Coalition (the Coalition) stated that the Commission should maximize the net benefits achieved from efficiency programs. In a follow-up explanation, the Office of the Public Advocate (OPA) expanded on this statement and recommended that we consider the long-term benefits of programs that might not appear cost-effective in the short-term. The OPA cited energy education and market transformation efforts as examples of programs that might be cost-

⁴¹Section 4, codified as 35-A M.R.S.A. §3211-A(2).

effective, but only if the Commission takes a long-term view. Norman Anderson, representing the American Lung Association, made a related comment that energy education should be viewed as an initiative that “draw[s] forth the desire and ability to think critically and creatively,” potentially transforming a society from “passive recipients of energy choices and consequences to active participants in the solutions.” This view would argue to consider a long-term view of cost effectiveness and to consider secondary-effect programs in our portfolio. Jonathon Jutsen of EnVinta Corporation advocated criteria that would allow implementation of programs with long-term, sustainable benefits that result from improved operating and maintenance procedures, the use of benchmarking, best practices, and continuous improvement, and similar improved management practices, rather than criteria that rely upon short-term metrics. At the public hearing, the Department of Economic and Community Development (DECD) supported a balance between energy savings, market transformation, and consumer awareness. All these comments reinforce our proposal to consider cost effectiveness over a long period of time, to consider cost effectiveness as a hurdle but not as the ultimate selection criterion and to consider programs despite the difficulty of quantifying benefits. Our statement of principles, above, reflects these principles.⁴²

IV. GOALS

A. Proposed Program Goals

The Commission determines that the goals of Maine’s energy conservation programs shall be to:

- Improve the efficiency of electric energy use by Maine residential consumers, businesses and other organizations;
- Increase consumer awareness of cost effective options for conserving energy;
- Create more favorable, sustainable market conditions for the increased use of efficient products and services;
- Promote sustainable economic development; and,
- Reduce environmental damage associated with energy use.

B. Discussion

The first goal establishes that each program need not necessarily cause an absolute reduction in electrical use. Rather, programs should improve end use

⁴²At the Public Hearing and through its written comments, representatives of EnVinta offered extensive comments on principles and methodologies for judging cost effectiveness of programs whose benefits were sustainable but potentially difficult to measure. We will transfer the relevant documents to Docket No. 2002-473, our rulemaking proceeding that will establish cost effectiveness tests and procedures for permanent programs.

efficiency - i.e., programs should eliminate wasteful use of energy and improve efficiency for the same level of end use work or comfort, rather than simply reduce kilowatt-hours regardless of the impacts on life-style or the economy. The distinction is important when evaluating the effectiveness of a program in reaching the variety of goals established by the Act. For example, sustainable economic development is supported when a customer's electric bill is permanently reduced through lower electrical use, but it is also supported when a customer's business processes are revised in a manner that increases output – an action that might require increased electrical use. Indeed, enhancing the energy efficiency of Maine businesses should increase these businesses' prospects for success and the likelihood that they will continue to support the electrical grid over the long term, thus benefiting all ratepayers. Similarly, improving the indoor air quality or the environmental comfort of an office building or school might require a net increase in electrical use, but if that increase is accomplished in the most energy efficient manner, it should be considered a successful action. For example, programs that influence schools create a variety of benefits, and could create a variety of harmful outcomes that extend well beyond electricity use. We will consider all these outcomes when choosing a program.

The second and third goals are contained in the Act. When taken together, these goals cause energy efficiency to become a permanent part of residential and business operations – i.e., they aid in permanent market transformation.

The fourth and fifth goals are contained in the Act. The goals are societal needs, established by Maine's Legislature, that will be supported if electricity is used more efficiently.

We will consider whether some efficiency measures (e.g., peak shaving) will reduce environmental damage caused by emissions from generating plants more effectively than other measures. We will balance superior environmental impacts with other goals and objectives when choosing a portfolio of programs.⁴³

Many commenters discussed the first goal's implication that a program need not necessarily cause an absolute reduction in electrical use, but could improve end use efficiency by eliminating wasteful use of energy and improving efficiency for the same level of end use work or comfort. Norman Anderson cited schools and state buildings as examples of markets where this view is important. Mr. Anderson recommended that the Commission consider air quality (as well as other benefits) as an important benefit of a program that impacts electric efficiency. Mr. Anderson also recommended that the Commission avoid degrading indoor air quality through

⁴³We will consider the extent to which environmental impact can be quantified and valued for the purpose of cost effectiveness analysis in the rulemaking to revise Chapter 380. This will include consideration of the benefits of peak shaving and peak shifting, including the extent to which peak shaving offers benefits to both non-participating and participating customers.

programs that otherwise increases electric efficiency. Our statements above, describing the first goal, indicate our agreement with Mr. Anderson. We also agree that programs (such as those that affect schools) should be considered as an inter-related package that includes not only our efficiency programs but other efforts within Maine such as Maine Lung Association's *Safe and Healthy Schools Project*.

The Coalition and Maine Public Service Company (MPS) also recommended that programs should improve efficiency, rather than simply reduce kWhs. The Coalition recommended considering non-electric benefits and costs, commenting that the "ultimate energy-efficiency goal is to improve Maine's economic efficiency."

Finally, the Coalition recommended that we consider the reduction in emissions that might result in peak-shaving initiatives. Our discussion above reflects our intent to do so.

V. OBJECTIVES

A. Proposed Program Objectives

The following objectives are observable or measurable:

- Implement a portfolio of conservation programs pursuant to a Maine energy conservation plan.
- Implement an organizational model for administration and management of energy conservation programs.
- Review existing utility programs and implement a transition plan by the end of 2003.
- Create an awareness of the conservation programs and the value of energy efficiency among the general public.
- Increase the availability of energy efficient products and services through Maine businesses.
- Save a pre-defined number of kWhs through program implementation by December 2003.

B. Discussion

While perhaps obvious, the first observable objective of the statewide plan is to *implement a portfolio of programs that conforms to the plan* that we are developing through Docket No. 2002-162. This plan represents our blueprint for transition from a set of utility programs and interim state programs to an on-going state effort. Each program will be designed to meet goals and objectives of the statewide plan, and the portfolio as a whole will result in the goals being met. The plan will include means for determining that goals and cost effectiveness criteria have been met and that results are reportable to the public and to policy makers.

A variety of organizational structures exist nationwide to develop and deliver conservation programs. Most notably, Oregon and Vermont have funded independent organizations to carry out most of the planning and delivery process. New York and Wisconsin have tasked state agencies to oversee energy conservation efforts. Other states have vested electric utilities with planning and delivery authority. The Maine Legislature has given the Commission the responsibility of ensuring that planning and delivery occur, while leaving us considerable flexibility in setting up an organizational structure. We will develop the initial statewide permanent plan with Commission staff and, through the early years of the program, we will continue to operate the State's efficiency programs with the staffing level authorized by the Act. We are inclined to believe that close Commission oversight will be prudent until programs become more mature. However, after we and other participants in the programs have gained experience in their operation in Maine, we will *consider the most effective long-term organizational structure* and develop a recommendation for its implementation.

In its comments, the Coalition recommended that the Commission retain an open-minded attitude regarding the appropriate organizational structure for program implementation. We emphasize that we have reached no conclusion as to the best organizational structure to implement on a permanent basis.

Current utility programs continue to operate during the interim period. While the Act does not prohibit utility-run programs, it requires the Commission to determine whether utilities are the most appropriate delivery mechanism. We will examine each utility program and allow it to continue, modify its design and delivery, or phase it out altogether.

MPS expressed interest in continuing its energy audit and school education programs, as well as in operating other programs. Kennebec Light and Power Company has also commented elsewhere that it performs effective programs and wishes to continue doing so. MPS recommended that transmission and distribution (T&D) utilities be allowed to respond to the Commission's RFPs for program implementers because T&D utilities are known and trusted by customers and have an infrastructure in place to deliver efficiency programs. At the public hearing, the OPA disagreed with this recommendation, stating that T&D utilities have a disincentive to perform effectively. We have reached no conclusion regarding the continuation of existing T&D utility programs. In determining whether Maine utilities can respond to Commission RFPs for programs, the Commission and utility will need to consider whether the nature and scope of the activities contemplated by the RFP would constitute non-core activities. In general, we expect that, by their very nature, activities for which bids will be sought will be non-core activities to the T&D utility. By Commission Rules, specifically Chapter 820, non-core activities must be performed by affiliates rather than utilities. In such circumstances, Maine utilities will not be able to respond to the RFP, though, affiliates of Maine utilities will be able to respond. Affiliates, of course, are responsible for compliance with our rules and with Title 35-A of the Maine Revised Statutes and anti-trust laws.

The fourth and fifth objectives are more concrete expressions of the second and third goals, discussed earlier in this Order. Together, they contribute significantly to creating an environment for sustained market transformation. The fourth objective – *creating public awareness of conservation programs and the value of efficiency* – may be measured through surveys. The fifth objective – *increasing the availability of products and services* – may be measured through baseline and follow-up surveys with retail providers.

Finally, the sixth objective – *to save a targeted number of kWhs by programs implemented in 2002 and 2003* – is a measure of the most direct and easily understood short-term result of the statewide program. It will be measured primarily through metering and engineering estimates associated with each program. When coupled with sustainable market transformation and evaluations that indicate cost effectiveness, this objective completes a measurement of statewide program success. We propose to set savings targets as our program designs are developed later in our planning process.

The Coalition supported setting kWh targets during program design. The Northeast Energy Efficiency Partnership (NEEP) commented that savings targets should not be limited to kWh savings, which is an appropriate approach for short-term savings. Rather, NEEP asserts that targets for programs that cause sustainable market transformation would more appropriately include market share goals, with progress toward those goals tracked over time. We will emphasize kWh targets in our program evaluations, particularly for the interim programs implemented in 2002 and 2003, but we agree that establishing additional measures of success is appropriate for permanent programs.

VI. STRATEGIES

A. Proposed Program Strategies

We have discussed two strategic principles – cost effectiveness and self-sustaining markets – above. In addition, the Commission proposes to employ the following strategic activities to ensure that the portfolio of energy conservation programs meets the goals and objectives of the energy conservation plan.

- Market assessment
 - Conduct market assessment studies as needed to expand our knowledge and understanding of the markets for energy efficient products and services in Maine. Coordinate our market assessment efforts with others in the region where possible.
 - Develop market baseline measurements for efficient products and services as needed to support program design and evaluation.
- Program design and implementation

- Implement a portfolio of programs that allows all major customer groups a reasonable opportunity to participate in one or more programs.
 - Implement programs targeted at traditionally “hard-to-reach” markets. Target 20% of funds to programs for low-income customers, and 20% of funds to programs for small business customers.
 - Design programs that balance immediate primary results (cost effective kW and kWh savings) with longer-term secondary results (self-sustaining markets, economic development, environmental benefits).
 - Encourage the development of an energy efficiency infrastructure, resources, and skills in Maine. Use existing market channels for program delivery, where possible.
 - Assess current utility programs and their fit with our program plan, phase out those no longer needed, and re-design those to be carried forward.
 - Integrate customer educational efforts into all programs to promote changes in buying habits and energy usage behaviors.
 - Implement an overall marketing effort that develops a clear brand image for our programs, supports program implementation, and increases public awareness of the benefits of energy efficiency.
 - Adopt or adapt regional or national programs or programs from other states, if they will provide benefits to Maine’s citizens and are consistent with these goals, objectives, and strategies.
- Monitoring and evaluation
- Develop tracking and evaluation criteria and procedures for each program. Coordinate our tracking and evaluation efforts with others in the region where possible.
 - Evaluate programs to a level sufficient for business decision-making.
- Funding
- Implement an accounting and reporting system to track revenues by source and expenditures by program and category, in sufficient detail to support evaluation and reporting needs.
 - Leverage ratepayer funds with funds from other sources where possible. Seek additional sources of funding from state, federal, and private sources, where such funding would enhance and support this plan.
 - Set incentive levels at the minimum needed to accomplish program objectives.
- Communication, coordination, and reporting
- Implement a process for ongoing public stakeholder communication.
 - Coordinate our efforts with other state agencies with energy-related responsibilities.

- Monitor national and regional activities and participate in such activities when beneficial.
- Report to the Legislature by December 1, 2003, describing the Commission's activities, programs implemented or planned, the likely cost effectiveness of programs, the financial condition of the conservation funds, and any recommended changes to the Conservation Act.

B. Discussion – Market Assessment Strategies

A *market assessment* estimates the potential for energy savings in a particular market (e.g., the potential for replacement of particular motors). The assessment may facilitate broad budgeting decisions – is there sufficient potential to justify spending a particular budget on programs? An assessment may also facilitate targeted program design – where is the greatest potential for savings and therefore where should we target our efforts? As we stated in our Order Establishing Procedure and Schedule for Conservation Programs Implemented Pursuant to P.L. 2001, ch. 624 in Docket No. 2002-162, we will not perform an overall market assessment at this time, since others are currently undertaking that task. However, we will consider an overall market assessment as we continue program development, and we will conduct targeted market assessments when insufficient data or experience lead us to believe that information on a market must be gathered.

A *baseline study* determines the current market status of a technology or end use. Knowing this information before offering a program is sometimes necessary to evaluate the success of the program, over time.

The Coalition, NEEP, and MPS supported the importance of studies for these two purposes. The Coalition urged us to carry out studies in a “fluid and fungible” manner, so that the results will be useable as conditions change. While we are uncertain what means to use to accomplish this recommendation, we will keep the advice in mind as a practical way to maximize the usefulness of each study.

C. Discussion – Program Design and Implementation Strategies

The first program design and implementation strategy – to implement a portfolio of programs that *allows all major customer groups a reasonable opportunity to participate* in one or more programs – is an important strategy to address the concern that all customers contribute to the Conservation Fund, but only program participants directly benefit from the Fund (even though all Maine citizens should benefit indirectly through environmental, market, economic development and other indirect benefits). If only small numbers of customers receive direct benefits from the programs, the public may consider the statewide conservation program to be an unfair and unnecessary expense. Indeed, we would share this concern. One way to avoid this concern is to implement a wide enough variety of programs that all customers will

have a reasonable opportunity to participate.⁴⁴ This approach is followed in many other states, and the Legislature directed us to adopt it in Maine. See 35-A M.R.S.A. §3211-A(2)(B)(3).

The Coalition and MPS submitted comments in support of this concept. In addition, in our rulemaking to determine a cost effectiveness test, we are considering the extent to which we should formalize or quantify the portfolio's (or a particular program's) success in reaching a wide number of customers.

The second program design and implementation strategy – to *target hard-to-reach customers* – reinforces the first strategy. In all states, certain customer groups, such as the smallest business customers, have typically not received the benefits of energy efficiency. An effective statewide program therefore must explicitly address the reasons for those groups' lack of participation. The strategy highlights the two hard-to-reach groups that are targeted by the Conservation Act (low-income residential customers and small business customers).⁴⁵ However, we will also consider and address other hard-to-reach groups as we identify them.

The third program design strategy – to *balance immediate primary results with longer-term secondary results* – explicitly recognizes the conflict that may occur between the two strategic principles discussed earlier in this Proposed Order. As discussed in Section III, we will balance direct, measurable, short-term savings with the longer-term, less quantifiable benefits attained through sustainable market transformation in every program we design. As we further discussed in Section III, we will consider cost effectiveness to be a hurdle requirement that programs must have a reasonable likelihood of meeting. We will then turn to the other goals and objectives required of the portfolio, including components of the program that will encourage the development of markets for energy efficient products and services that are self-sustaining, without the assistance of our programs. Interested persons commented on the value of sustainable, long-term benefits, and we discussed those comments in Section III.

The fourth program design strategy – *encourage the development of an energy efficiency infrastructure in Maine* – is necessary to meet the broad principle of transforming the market, so that efficient products are sold and used in Maine without programmatic stimuli or subsidies. Only with a healthy local infrastructure of knowledge, resources, and skills can efficient organizations be available to sell and service those products. Relying on local entities to deliver sales and service also provides a form of economic development that is supported by the Act.⁴⁶ In the interim period, using the expertise of entities that deliver programs elsewhere may be

⁴⁴An outstanding question is whether customers who do not contribute to the Conservation Fund through their rates should be eligible to participate in programs. We do not resolve that question in this order.

⁴⁵Section 4, codified as 35-A M.R.S.A. §3211-A (2)(B)(1) and (2).

⁴⁶Section 4, codified as 35-A M.R.S.A. §3211-A(2)(a)(3).

a useful way to develop experience while a local infrastructure develops, and we will judge the likely effectiveness of in-state and out-of-state bidders based on the merits of each bidder. However, our longer-term goal will be to rely upon a reliable base of in-state providers while using regional providers when it benefits Maine to do so.

MPS recommended that we use Maine-based approaches and contractors unless Maine would clearly benefit from a regional approach.

As discussed earlier in this Order, *current utility programs* will continue to operate during the interim period, during which we will determine whether each program is using the most appropriate delivery mechanism and revise its design and delivery or phase it out altogether.

Educating customers about the existence and operation of energy efficient products and the potential costs and savings of their electrical processes is a fundamental requirement of a program that aims to create a sustainable market transformation. In general, a program that offers only education is considerably less effective than a program that links education with direct action, and we will limit the level of funding allocated to purely educational programs. Instead, we propose that *all programs include an education component that complements the program activity* that is undertaken to reduce (or otherwise improve the efficiency of) kWh use. NEEP supported this approach and commented that existing brands such as Energy Star[®] are already recognized by consumers.

One of the necessary preconditions to influencing customers' energy-related buying and usage habits is to increase their awareness of energy efficient products and services, and of opportunities to save energy in daily activities. An *overall consumer-awareness approach*, through a clear "brand image" and consistent message, will increase participation in individual programs and will increase the knowledge and awareness of energy efficiency by individual citizens.

Coordination of conservation efforts with other states is encouraged by the Act.⁴⁷ Maine is a small state, and its conservation budget is not as large and its programs not as mature as in some other New England states. By participating in regional activities, we can use approaches and materials that have already been developed and work elsewhere, and we can benefit from relationships that regional program participants have developed with retail chains that do business in Maine. Some costly activities, such as developing advertising material, evaluating programs, and assessing markets, may be accomplished at less cost to Maine if many entities share in the expense. We propose to do so when we consider it in the best interests of Maine consumers. Simultaneously, we will remain mindful of the Act's directive to "encourage the development of resources, infrastructure and skills within the State by giving preference to in-state service providers⁴⁸" when practicable.

⁴⁷Section 4, codified as 35-A M.R.S.A. §3211-A(2)(I).

⁴⁸Section 4, codified as 35-A M.R.S.A. §3211-A(3)(B).

D. Discussion – Monitoring and Evaluation Strategies

Tracking and evaluation criteria include information necessary to determine whether a program is cost effective and meets the other objectives specified in its program design. For each program, we will develop indicators to measure a program's performance against its stated objectives. These indicators will necessarily vary among programs and could include kWh usage before and after implementation, capital costs (e.g., the cost of a new appliance), administrative costs, costs and savings of other resources and customers' operational savings.⁴⁹ If the program is intended to meet additional objectives (e.g., raising customer awareness), we will put in place a mechanism to measure the effect. We will implement means for gathering this data during the program design phase, so data necessary to evaluate each program will be gathered as soon as the program is implemented.

Many costs and benefits are difficult to determine precisely, either because historic data are not available, because measurement is prohibitively expensive, or because the data being measured are not easily quantifiable. Historically, considerable time has been spent gathering data, and the results have been subject to ongoing controversy. We wish to avoid expending the limited funds available on unnecessary precision. Thus, we propose to gather *data at a level needed to make reasonable business decisions*. We will often estimate energy use before or after program implementation through reasonable engineering assumptions, and will require special metering only when estimation is impossible or when the electrical use is extremely large. When data is gathered through interviews with program participants, we may sample only a portion of participants. Finally, precise estimates of free riders and spillover effects⁵⁰ can be difficult to determine. We will develop such estimates to the level needed to assess program performance or improve program design and will avoid, where possible, the costly statistical studies often done in the past. The Coalition supported performing evaluations at reasonable business decision levels.

E. Discussion – Funding

Accounting for revenues and expenditures is necessary to ensure that ratepayers' money is accounted for in a fiscally responsible manner, that utility rates appropriately reflect Conservation Fund activity, and that there are funds available to meet contractual agreements. We are currently concluding discussions of procedures

⁴⁹These non-electric benefits and costs may be considered in the cost effectiveness test we adopt in an amended Chapter 380. If they are not, it may nonetheless be useful to determine their value.

⁵⁰Free riders are customers who receive a program incentive, but who would have implemented energy efficient measures without that incentive. A spillover effect occurs when a customer installs an energy efficiency measure without needing the program incentive.

for monthly tracking of the conservation program assessment and the amount of revenue customers contribute through their rates. Reconciliation of the assessments paid (which will be based on estimated sales) and actual assessments, as well as reconciliation of the assessments and the amounts collected in rates, will occur at regular (although not necessarily identical) intervals. Additional accounting procedures will be implemented to track and predict cash flow and to track expenditures on each program as well as on costs not attributable to individual programs. We will maintain the ability to report this information comprehensively for public or legislative review.

Many governmental and non-profit agencies have access to matching funds or can use our funds to better utilize funding from other sources. We will consider the value of such leveraging. In addition, organizations offer *grants for energy conservation activities*. To extend the effectiveness of the Energy Conservation Fund, we propose to supplement ratepayer provided funds with such grants when we identify them.

Program incentives typically include rebates, funded assistance, or some other financial incentive offered to customers to encourage participation in the program. The most efficient financial incentive is large enough to cause the customer to participate, but no larger. Initially, we propose to consider experience in Maine and other states, the cost differential between efficient and mainstream measures, and payback periods to determine appropriate incentives. As each program proceeds, we will continually re-evaluate and revise its incentive. An important part of this re-evaluation is the determination of an exit strategy, whereby we end incentives altogether as the market matures and is able to operate without intervention.

F. Discussion – Communication, Coordination and Reporting

Ongoing public stakeholder communication will ensure that all the State's expertise is used to advantage and will improve public acceptance of the statewide program. As discussed in our July 23 Order Establishing Procedure and Schedule for Conservation Programs Implemented Pursuant to P.L. 2001, ch. 624 in Docket No. 2002-162, we will use the non-adjudicatory procedures we are currently employing to obtain stakeholder input on plan development and program design decisions. Under these procedures, we obtain written and oral comments through public hearings, informal meetings, and responses to proposed orders. However, as these procedures end, we intend to establish a systematic means for obtaining continuing input. The OPA, representing a variety of interested persons, has urged us to convene an Advisory Council. We will consider this proposal and will establish an ongoing procedure for input to program review and revision as part of our plan development.

Many *other state agencies* carry out activities that supplement or complement our conservation activities. In many cases, coordination will attain benefits that exceed the sum of the individual activities. We are taking advantage of

the benefits of coordination among agencies as we develop our interim programs,⁵¹ and we are members of the Energy Resources Council established by P.L. 2001, ch. 630. We will take further advantage of coordinated approaches as we better understand existing State activities.

Monitoring and participating in regional activities are allowed by the Act⁵² and, as discussed earlier in this Proposed Order, allow less costly development of program designs and materials, allow Maine to benefit from the experience of other states, and leverage activities targeted to regional retail chains. We will monitor regional activities to allow us to use their benefits to Maine's advantage.

As required by the Act,⁵³ we will submit a *report to the Legislature* by December 1, 2002, describing our activities. We intend to include comprehensive discussions of the reasons for our choices and actions, outcomes or potential problems associated with our choices and with the Act, and suggestions for issues that the Legislature might consider.

Dated at Augusta, Maine this 24th day of September, 2002.

BY ORDER OF THE COMMISSION

Dennis L. Keschl
Administrative Director

COMMISSIONERS VOTING FOR: Welch
 Nugent
 Diamond

THIS ORDER HAS BEEN DESIGNATED FOR PUBLICATION

⁵¹We are funding programs that are already run by the Department of Economic and Community Development (DECD), Maine State Housing Authority (MSHA), and Maine Energy Education Program (MEEP). In addition, we are working cooperatively with the Department of Administration and Financial Services (DAFS) and the Bureau of General Services (BGS) to improve the energy efficiency of state buildings.

⁵²Section 4, codified as 35-A M.R.S.A. §3211-A(2)(D).

⁵³Section 4, codified as 35-A M.R.S.A. §3211-A(11).

NOTICE OF RIGHTS TO REVIEW OR APPEAL

5 M.R.S.A. § 9061 requires the Public Utilities Commission to give each party to an adjudicatory proceeding written notice of the party's rights to review or appeal of its decision made at the conclusion of the adjudicatory proceeding. The methods of review or appeal of PUC decisions at the conclusion of an adjudicatory proceeding are as follows:

1. Reconsideration of the Commission's Order may be requested under Section 1004 of the Commission's Rules of Practice and Procedure (65-407 C.M.R.110) within 20 days of the date of the Order by filing a petition with the Commission stating the grounds upon which reconsideration is sought.
2. Appeal of a final decision of the Commission may be taken to the Law Court by filing, within **21 days** of the date of the Order, a Notice of Appeal with the Administrative Director of the Commission, pursuant to 35-A M.R.S.A. § 1320(1)-(4) and the Maine Rules of Appellate Procedure.
3. Additional court review of constitutional issues or issues involving the justness or reasonableness of rates may be had by the filing of an appeal with the Law Court, pursuant to 35-A M.R.S.A. § 1320(5).

Note: The attachment of this Notice to a document does not indicate the Commission's view that the particular document may be subject to review or appeal. Similarly, the failure of the Commission to attach a copy of this Notice to a document does not indicate the Commission's view that the document is not subject to review or appeal.

**Appendix A – Interested Persons who Submitted Comments in this Proceeding
or Participated in the Public Hearing**

American Lung Association (written)

Central Maine Power Company (public hearing)

Dirigo Consortium (public hearing)

EnVinta Corp. (written and public hearing)

Maine Community Action Association (written)

Maine Department of Economic and Community Development (public hearing)

Maine Energy Education Program (MEEP) (public hearing)

Maine Energy Efficiency Coalition (Natural Resources Council of Maine, Maine Council of Churches, Maine Public Advocate Office, Maine Community Action Association, Maine Global Climate Change, Inc., Chewonki Foundation, Industrial Energy Consumer Group, Maine Center for Economic Policy, Coastal Enterprises, Inc., Maine Council of Senior Citizens, S&S Technologies, AARP) (written)

Maine Public Service Company (written and public hearing)

Northeast Energy Efficiency Partnerships, Inc. (NEEP) (written)

Office of the Public Advocate (public hearing)

COST EFFECTIVENESS FOR ONGOING PROGRAMS

I. Background

- The Conservation Act requires that the Commission implement programs that are cost effective, but directs the Commission to determine the definition of cost effectiveness.
- Since the mid-1970s, cost effectiveness tests have been used to screen efficiency programs. The established test in Maine has been the All Ratepayers Test, which generally compares the cost of the program to the savings caused by avoiding generation and delivery of the electricity saved by the program.
- In November 2002, we completed a rulemaking that revised the Commission's Chapter 380, which (among other things) establishes the cost effectiveness tests to be used for ongoing efficiency programs.

II. Cost Effectiveness Criteria for Ongoing Programs

- Modified Societal Test (MST) – The MST will be the primary screen for cost effectiveness of ongoing programs. The MST considers costs and benefits from a wider perspective than does the All Ratepayers Test, to reflect the broader goals of the Act. A program is cost effective if the net present value of its benefits exceeds the net present value of its costs.

Program benefits include:

- Avoided electric generation costs
- Avoided transmission and distribution costs
- Avoided fossil fuel costs such as lower oil or gas use
- Other resource benefits such as reduced water and sewer costs
- Non-resource benefits such as reduced O&M costs, productivity improvements, and environmental benefits

Program costs include:

- Direct program costs such as administration, marketing and evaluation
 - Measure costs such as the incremental cost of a high efficiency appliance
 - Ongoing customer costs such as increased O&M costs
- Non-quantifiable Cost Effectiveness Test – Some of the Act's goals – e.g., increasing consumer awareness and reducing environmental damage -- may require actions whose benefits are difficult to quantify. To ensure that all goals

are met, we concluded that a program that cannot be quantifiably evaluated using the MST may be implemented if:

- Benefits exist but cannot be quantified; and
- The program meets a statutory or Commission goal; and
- The entire portfolio is cost effective.

III. Comparison Of Commonly Used Cost Effectiveness Tests

Test	Participants	Utility Cost	All Ratepayer	Total Resource	Societal	Modified Societal(4)
Measures						
Participants	y	y	y	y	y	y
Spillover (a)			y	y	y	y
Free Riders (b)		y	y	y	y	y
Post Program Adopters (c)				y	y	y
Benefits						
Avoided electricity						
Energy	(1)	y	y	y	y	y
Capacity		y	y	y	y	y
T&D		y	y	y	y	y
Avoided resources						
Gas & oil	(1)			y	y	y
Water & other	(1)			y	y	y
Customer benefits	y		y	y	y	y
Other benefits						
quantified					y	y
non-quant. Adder (d)				(2)	(2)	n
Costs						
Program costs		y	y	y	y	y
Customer Costs	y		y	y	y	y
Performance incentives (e)				(3)	(3)	n

Notes

- 1 At retail rates
- 2 Adders included in some states
- 3 Incentives included in some states
- 4 In all categories, only quantifiable costs and benefits are included

Definitions

- a Those measures installed as a result of, but outside a program
- b Those measures that receive an incentive, but would have been installed even without the program
- c Those measures that are installed, outside of a program, after the program has ended
- d A percentage added to benefits, to account for environmental benefits that have not been measured or quantified
- e Some states allow utilities to earn an incentive, based on their performance relative to a set of energy efficiency program metrics

IV. Chapter 380, Electric Energy Conservation Programs

65 - INDEPENDENT AGENCIES - REGULATORY

407 - PUBLIC UTILITIES COMMISSION

CHAPTER 380 – ELECTRIC ENERGY CONSERVATION PROGRAMS

SUMMARY: This Chapter implements portions of the requirements of the State’s electric energy conservation program.

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§ 1 PURPOSE

The purpose of this Chapter is to implement portions of the requirements of the State's electric energy conservation program. The Chapter establishes the definition of low-income customer, the definition of small business customer, and the definition of cost effectiveness.

§ 2 DEFINITIONS

A. Administrative costs. "Administrative costs" means costs of the Commission that are funded pursuant to and associated with the implementation of 35-A M.R.S.A. § 3211-A, including, but not limited to, costs of program planning and evaluation, costs of securing necessary expertise, costs associated with contract formation and administration and costs of monitoring and enforcing contractual obligations.

B. Administrative fund. "Administration fund" means the conservation administration fund established by the Commission pursuant to 35-A M.R.S.A. § 3211-A(6).

C. Conservation programs. "Conservation programs" means programs developed by the Commission pursuant to 35-A M.R.S.A. § 3211-A and this Chapter designed to reduce inefficient electricity use.

D. Low-income residential consumer. "Low-income residential consumer" means a customer of a transmission and distribution utility living in a household that would qualify to receive assistance through the Low Income Home Energy Assistance Program (LIHEAP), as those qualifications are established in Rule by Maine State Housing Authority from time to time. If a customer has not applied for authorization to receive LIHEAP benefits but conforms to the criteria established by Maine State Housing Authority, he or she shall be considered a low-income consumer for the purpose of this Chapter.

E. Measure. "Measure" means a device or an application that is installed or implemented and that improves energy efficiency.

F. Participant. "Participant" means a customer who directly takes part in a Conservation Program.

G. Program fund. "Program fund" means the conservation program fund established by the Commission pursuant to 35-A M.R.S.A. § 3211-A(5).

H. Small business consumer. "Small business consumer" means a business customer of a transmission and distribution utility that employs 50 or fewer full-time equivalent employees. A company with multiple locations shall be considered

one company, and employees at all its locations shall be counted when determining whether the company is a small business. If the number of employees of a company varies over a calendar year, the number of employees at the time when the company participates in a program shall apply. When determining whether a customer is a "small business consumer," the Commission may consider the average number of employees that the business employs annually.

§ 3 CONSERVATION PROGRAMS

A. Criteria for Conservation Programs

1. The Commission shall consider, without limitation, conservation programs that:

(a) Increase consumer awareness of cost-effective options for conserving energy;

(b) Create more favorable market conditions for the increased use of efficient products and services; and

(c) Promote sustainable economic development and reduced environmental damage.

2. The Commission shall:

(a) Target at least 20% of available funds to programs for low-income residential consumers, as defined by the Commission by rule;

(b) Target at least 20% of available funds to programs for small business consumers, as defined by the Commission by rule; and

(c) To the greatest extent practicable, apportion remaining available funds among customer groups and geographic areas in a manner that allows all other customers to have a reasonable opportunity to participate in one or more conservation programs.

3. Programs shall be cost effective. Cost effectiveness tests are established in Section 4.

B. Goals, Objectives, and Strategies

1. The Commission shall establish goals, objectives, and strategies by order before the Commission adopts its first conservation programs pursuant to this subsection.

2. The Commission shall open a docket and issue a Proposed Order establishing goals, objectives, and strategies. All interested persons will be invited to file written comments and suggestions pertaining to the Commission's Proposed Order. The Commission also will hold a public hearing for the purpose of receiving comments and suggestions. After reviewing the written and oral comments and suggestions, the Commission will adopt goals, objectives and strategies for conservation programs.

3. No less frequently than every three years, the Commission will review and, if necessary, revise the goals, objectives, and strategies. For each review and revision, the Commission will follow the process described in section 3(B)(2).

C. Conservation Program Portfolio Requirements. The Commission shall develop and implement a portfolio of conservation programs that is consistent with the goals, objectives and strategies described in subsection 3(B), meets the cost effectiveness requirements established in section 4, and is deliverable within the funding level established pursuant to section 5. When developing its portfolio of conservation programs, the Commission shall consider the likely impact of the programs on utilities' rates.

§ 4 COST EFFECTIVENESS TESTS

The following tests will be used to determine whether a program is cost effective.

A. Modified Societal Test. Programs that are reasonably likely to satisfy the Modified Societal Test are cost effective. The Modified Societal Test is satisfied when the program benefits exceed the program costs. Costs and benefits shall be considered in the Modified Societal Test regardless of whether they are paid or experienced by the participant, the Conservation Program Fund, or any other individual, business, or government agency.

1. Program benefits. Program benefits will include the following:

a) Avoided electric generation costs including energy and capacity costs, using estimates of market prices and adjusting for line losses. These estimates may be differentiated by time periods that influence market prices, including but not limited to peak and off-peak periods and summer and winter periods;

b) Avoided transmission and distribution costs, using estimates of transmission and distribution utility marginal transmission and distribution costs. These estimates may be differentiated by time periods that influence costs;

c) Avoided fossil fuel costs, using estimated savings in oil, gas or other fossil fuel use, at estimated fossil fuel prices;

d) Other resource benefits, such as reduced water and sewer costs;

e) Non-resource benefits, including customer benefits such as reduced operation and maintenance costs, deferred replacement costs, productivity improvements, economic development benefits and environmental benefits, to the extent such benefits can be reasonably quantified and valued.

2. Program costs. Program costs will include the following:

a) Direct program costs, including program design, administration, implementation, marketing, evaluation and other reasonably identifiable costs directly associated with the program.

b) Measure costs. For new construction or replacement programs, measure costs are the incremental costs of the energy efficiency measure, including installation, over an equivalent baseline measure. For retrofit programs, measure costs are the full cost of the energy efficiency measure, including installation, less any salvage for the replaced measure.

c) Ongoing customer costs, including costs such as increased operation and maintenance costs, reduced productivity, and lost economic development opportunities, to the extent such costs can be reasonably quantified and valued.

3. Discount rate assumption. The discount rate used for present value calculations shall be the current yield of long-term (10 years or longer) U.S. Treasury securities, adjusted for inflation. The Commission may consider an alternative discount rate when characteristics of a program are inconsistent with use of long-term U.S. Treasury securities.

4. Net present value. Cost effectiveness of an energy efficiency measure will be calculated based on the net present value of the costs and benefits over the expected life of the measure.

5. Post-program effects. For those programs that are expected to influence the development of self-sustaining markets, program cost effectiveness will be calculated for a reasonable additional period after the program is terminated in order to capture post-program market effects.

6. Incentive Level Limitation. When developing a program that satisfies the Modified Societal Test, the Commission shall, when setting incentive levels, consider the value of the program savings associated with electrical production and delivery.

B. Non-Quantifiable Cost Effectiveness Test. The Commission may implement a program without satisfying the Modified Societal Test if:

1. Program benefits are known to exist but cannot be quantified with sufficient accuracy to conclude that the program benefits exceed the program costs;
2. The program satisfies some other statutory criterion or a goal or objective established by the Commission in implementing the Conservation Act; and
3. The entire portfolio of conservation programs produces quantifiable benefits that substantially exceed total portfolio program costs.

§ 5 FUNDING LEVEL

The Commission shall assess transmission and distribution utilities to collect funds necessary to pay for the Commission's portfolio of conservation programs and administrative costs associated with implementing the conservation programs.

A. Assessment Amount. The amount of all assessments for conservation programs and administrative costs must result in total conservation expenditures by each transmission and distribution utility that:

1. are based on the relevant characteristics of the transmission and distribution utility's service territory, including the needs of customers;
2. do not exceed 0.15 cents per kilowatt hour;
3. are no less than 0.5% of the total transmission and distribution revenue of the transmission and distribution utility; and

4. are proportionally equivalent to the total conservation expenditures of other transmission and distribution utilities, unless the Commission finds that a different amount is justified; however, any increase in the assessment of a transmission and distribution utility must be based on reasons other than to achieve proportional equivalence.

B. Assessment Procedures. The Commission shall periodically assess transmission and distribution utilities based on forecasted sales or revenues, forecasted utility expenditures on conservation programs approved by the Commission, and forecasted prior conservation efforts. The Commission shall periodically adjust the assessment to account for any differences between actual and forecasted sales or revenues, utility expenditures, and prior conservation efforts.

C. Conservation Program Fund. The Commission shall establish a conservation program fund to be used solely for conservation programs.

1. The Commission shall deposit all assessments collected pursuant to this Chapter, other than funds deposited in the administration fund, into the program fund.

2. Any interest earned on funds in the program fund must be credited to the program fund.

3. Funds not spent in any fiscal year remain in the program fund to be used for conservation programs.

4. The Commission may apply for and receive grants from state, federal and private sources for deposit in the program fund and also may deposit in the program fund any grants or other funds received by or from any entity with which the Commission has an agreement or contract pursuant to this section if the Commission determines that receipt of those funds would be consistent with the purposes of this section. If the Commission receives any funds pursuant to this paragraph, it shall establish a separate account within the program fund to receive the funds and shall keep those funds and any interest earned on those funds segregated from other funds in the program fund.

D. Conservation Administration Fund. The Commission shall establish a conservation administration fund to be used solely to defray administrative costs. The Commission annually may deposit funds collected pursuant to this section into the administration fund up to a maximum in any fiscal year of \$1,300,000. Any interest on funds in the administration fund must be credited to the administration fund and any funds unspent in any fiscal year must either remain in the administration fund to be used to defray administrative costs or be transferred to the program fund.

§ 6 WAIVER OR EXEMPTION

Upon the request of any person subject to the provisions of this Chapter or upon its own motion, the Commission may waive any of the requirements of this Chapter that are not required by statute. Where good cause exists, the Commission or its designee may grant the requested waiver, provided that the granting of the waiver would not be inconsistent with the purposes of this Chapter of Title 35-A.

BASIS STATEMENT: The factual and policy basis for this Chapter is set forth in the Commission's Order Adopting Rule and Statement of Factual and Policy Basis, Docket No. 2002-473, issued on November 5, 2002. Copies of this Statement and Order have been filed with this Rule at the Office of the Secretary of State. Copies may also be obtained from the Administrative Director, Public Utilities Commission, 242 State Street, 18 State House Station, Augusta, Maine 04333-0018.

AUTHORITY: 35-A M.R.S.A. §§ 3511-A and 111

EFFECTIVE DATE: This Chapter was approved as to form and legality by the Attorney General on _____. It was filed with the Secretary of State on _____ and will be effective on _____.

V. Commission Order Adopting Rule

STATE OF MAINE
PUBLIC UTILITIES COMMISSION

Docket No. 2002-473

November 6, 2002

PUBLIC UTILITIES COMMISSION
Electric Energy Conservation Programs
(Chapter 380)

ORDER ADOPTING RULE
AND STATEMENT OF
FACTUAL AND POLICY BASIS

WELCH, Chairman; DIAMOND and NUGENT, Commissioners

I. SUMMARY

In this Order we approve revisions to Chapter 380 of the Maine Public Utilities Commission's (Commission's) Rules. The revisions implement portions of the requirements of the Conservation Act, enacted by the Maine Legislature as P.L. 2002, ch. 624. Through the revisions, we define "low-income residential consumers" and "small business consumers" and establish the test for cost effectiveness, as directed in the Conservation Act. In addition, we include certain terms of the Act that will allow Chapter 380 to be a comprehensive compendium of the most significant requirements of the statewide electric conservation program

II. BACKGROUND

Current Chapter 380 (Chapter 380-O) of the Commission's Rules was promulgated in response to An Act to Secure Environmental and Economic Benefits, enacted as P.L. 1999, ch. 336. This Act amended 35-A M.R.S.A. § 3211 and authorized the State Planning Office (SPO) to coordinate the development of a state energy policy and to guide the development of statewide conservation programs to be implemented by transmission and distribution (T&D) utilities. The SPO's duties included creating overall objectives and strategies, reviewing and approving utility implementation plans, and monitoring and evaluating T&D utility programs. The amended section 3211 required the Commission to establish total conservation program expenditures for each T&D utility and to assess T&D utilities to fund the efforts of the SPO. We adopted existing Chapter 380 to implement the provisions of section 3211.

During the second session of the 120th Legislature, the Legislature passed An Act to Strengthen Energy Conservation (the Conservation Act, or the Act)⁵⁴ that became P.L. 2001, ch. 624, when the Governor signed the Act on April 5, 2002. The Conservation Act repeals section 3211 and replaces it with section 3211-A, which

⁵⁴ The Conservation Act may be found on the Commission's web page, www.state.me.us/mpuc, by accessing the "Electric Conservation Activity" site.

establishes new terms that govern an electric energy conservation program in Maine. The Act directs the Commission to develop and implement electric energy conservation programs that are consistent with the goals and objectives of an overall energy conservation program strategy that the Commission must establish. The programs must be cost effective, according to a definition that the Commission also must establish by order or rule. Finally, the Act requires the Commission to define “low-income residential consumers” and “small business consumers” by rule.

In anticipation of the rulemaking to revise Chapter 380 to reflect the Conservation Act, we opened an Inquiry, Docket No. 2002-272, to receive comments and suggestions on the definitions of “low income residential consumers” and “small business consumers.”⁵⁵ In addition, in Docket No. 2002-161, we implemented interim conservation programs. As part of that process, we established a cost effectiveness test for interim programs, after proposing a test and receiving comments from interested persons. We used comments we received in the inquiry and in the development of the interim programs to develop a draft rule, which we issued through a Notice of Rulemaking (NOR) on August 20, 2002.

Consistent with the Notice of Rulemaking, we held a public hearing on the proposed rule on September 19, 2002. Office of the Public Advocate (OPA), Maine Community Action Association (MCAA), Bangor Hydro-Electric Company (BHE), Central Maine Power Company (CMP), and Maine Public Service Company (MPS) testified at the public hearing.

The Notice of Rulemaking set September 30, 2002, as the deadline for written comments on the proposed rule. Maine Energy Efficiency Coalition⁵⁶ (MEEC), OPA, MCAA, BHE, and CMP submitted written comments.

We discuss the comments we received during this rulemaking throughout the remainder of this Order.

III. DISCUSSION OF INDIVIDUAL SECTIONS

A. Section 1: Purpose

⁵⁵ The following entities submitted written comments or testified at the technical conference: Maine State Housing Authority, Maine Community Action Association, Finance Authority of Maine, Department of Economic and Community Development, Office of the Public Advocate, Maine Small Business Development Centers, Combined Energies, Residential/Small Commercial Service Providers, Central Maine Power Company, Bangor Hydro-Electric Company, and Maine Public Service Company.

⁵⁶ The MEEC includes the Natural Resources Council of Maine, Maine Council of Churches, Maine Public Advocate Office, Maine Community Action Association, Maine Global Climate Change, Inc., Chewonki Foundation, Industrial Energy Consumer Group, Maine Center for Economic Policy, Coastal Enterprises, Inc., Maine Council of Senior Citizens, S&S Technologies, and AARP.

Section 1 establishes that the purpose of Chapter 380 is to implement portions of the Conservation Act. No commenter proposed a revision to this section of the proposed rule, and the change we made in the final rule is non-substantive.

B. Section 2: Definitions

1. Definition Section. Section 2 contains the definitions of terms used in the final rule. Many of the definitions are derived directly from 35-A M.R.S.A. § 3211-A. The only terms over which the Commission may exercise any degree of discretion are “low-income residential consumers” and “small business consumers.” Each of these groups must be the target of at least 20% of the conservation program funding developed and implemented by the Commission.

2. Subsection D - Definition of Low-income Residential Consumer. In our inquiry, every commenter but one suggested that we adopt the criteria for receiving benefits under the Low Income Home Energy Assistance Program (LIHEAP) as the definition for low-income consumers within this Chapter. Generally, these commenters asserted that adoption of the LIHEAP criteria will ease the administrative burden associated with low-income programs because community action agencies (CAPs) already take applications and certify eligibility based upon consistent statewide criteria. The criteria are established annually through a planning and rulemaking procedure carried out by the Maine State Housing Authority (MSHA), which receives input from a wide range of low-income stakeholders. In addition, the criteria – or, more specifically, acceptance for LIHEAP assistance – are used for a variety of low-income assistance programs such as Telephone Lifeline and Linkup programs and the utilities’ Electric Low-income Program (ELP). Commenters asserted that this uniform approach will reduce confusion and is consistent with other utility-sponsored electric programs.

SESCO, Inc. submitted the only comments advocating a different definition for low-income consumers. According to SESCO, the LIHEAP criteria will restrict the group of customers for whom these special conservation programs should be implemented. Because LIHEAP-qualified customers already have other energy efficiency programs available to them, SESCO asserted that using the same eligibility for Commission-sponsored programs unfairly duplicates the effects of the existing programs. SESCO urged a wider definition, so that a larger number of customers would be eligible. Specifically, SESCO supported definitions that include:

- 1) a wider group of assistance recipients, including LIHEAP, TANF, food stamps, and housing subsidies;
- 2) residents in neighborhoods representing the poorest 20% of the state by per capita income; or
- 3) households at a greater percentage of federal poverty guidelines, in order to include “working poor” families – suggested at or below 250% of federal poverty guidelines, with renters and senior citizens qualifying at up to 300%.

The proposed rule defined “low-income consumer” using the LIHEAP criteria.

We are persuaded that consistency with existing State programs will produce significant administrative savings and will eliminate potential confusion by those who are administering or benefiting from the program. Further, we expect our program designs to complement, rather than compete with, current programs such as LIHEAP and therefore do not see any conflict with these programs.

The final rule does not require a consumer to become certified for LIHEAP benefits to be considered a low-income consumer. The rule simply states that the statewide LIHEAP criteria apply for purposes of this rule. As a practical matter, specific programs may require that a consumer be certified as eligible before he or she may receive the benefits of the program.

In their comments in this rulemaking, OPA and MCAA support the definition of “low-income consumer.” MCAA notes that the definition “provides for the broadest eligibility for low-income people while retaining a standard of measuring eligibility that is used to determine eligibility for a wide variety of low-income programs.” MCAA comments that the group of customers eligible for LIHEAP (and thus considered low-income within the rule) is far larger than the group actually receiving LIHEAP and asserts that very few low-income customers would not be LIHEAP-eligible.⁵⁷ OPA and MCAA both comment that the definition will resolve administrative issues, reduce confusion, and facilitate provision of services to the appropriate customers. No other comments were received and we have made no changes to the definition in the final rule.

However, in response to questions by Commission staff at the public hearing, MCAA and CMP discussed the advantage of targeting a low-income program to an entire neighborhood, despite the possibility that the neighborhood might contain both low-income and non-low-income citizens. MCAA commented that raising the value of all houses in a low-income neighborhood improves the entire neighborhood and can serve as a demonstration that spurs other neighborhoods to carry out the same improvements. CMP commented that offering a program to a neighborhood lowers the perceived inequity of treating neighbors differently from one another. In its written comments, MEEC cites statutory authority under which the Commission may target pilot programs to entire neighborhoods. MEEC comments that a “whole neighborhood” approach is acceptable if the number of ineligible customers is limited, and suggests that Section 4(B), allowing programs with unquantifiable benefits, might also allow this approach. Thus, despite the concerns we expressed in the NOR, we conclude that we will consider such a delivery approach when developing low-income programs. We will attempt to estimate the number of low-income customers (as opposed to non-low-income customers) who participate, but we will consider it acceptable to offer a program to all customers in the neighborhood, rather than preclude non-low-income persons. No revision to the final rule is necessary to allow this approach.

⁵⁷ MCAA states that these few consumers would likely be eligible for other assistance.

3. Subsection H - Definition of Small Business Consumer. In our inquiry, suggestions for the definition generally fell into two categories. The first focused on the number of employees and the revenue generated, which are criteria used to access other governmental programs, notably those administered by the Finance Authority of Maine (FAME) and the Department of Economic and Community Development (DECD). FAME and DECD target businesses with fewer than 50 employees or less than \$5 million in revenues, while the Small Business Development Centers suggested targeting businesses with fewer than 100 employees and maintaining uniformity statewide. We understand that 98% of Maine businesses have fewer than 100 employees, while 96% of Maine businesses employ fewer than 50 people.

The second approach focused on electricity usage, in particular T&D utility rate classifications. Each investor-owned T&D utility contains a rate classification for business customers with a maximum monthly kW load below a particular level.⁵⁸ Some commenters asserted that this breakpoint is convenient and verifiable because a customer's electric delivery bill contains the customer's rate class. Using the utility rate class breakpoint is consistent with activities delivered by T&D utilities.

In establishing a proposed definition of small business consumer, we considered two principles. First, we intended to choose a definition that would cause the statutory 20% funding target to reach customers who traditionally have not benefited from conservation programs. Second, we intended to coordinate our conservation efforts with other State initiatives that assist small business consumers.

With these goals in mind, the proposed rule defined a small business consumer to be a business with fewer than 50 employees. This definition is consistent with that used by the State's business development community, allowing our programs to complement the economic development and loan programs offered by other State government entities. We chose 50 (rather than 100) employees because this definition is consistent with criteria used by more State organizations with which we are certain to interact as we implement our programs. We rejected a suggested definition of 20 or fewer employees, because these levels could exclude some small businesses that have been underserved by previous programs. We did not propose to include company revenue as part of our definition, despite its inclusion in many agencies' criteria, because a revenue criterion might be difficult to obtain and confirm for the hundreds of customers who will participate in our programs.

Utility rate class definitions are convenient when utilities are implementing the programs, but are less convenient when that is no longer the case. Further, utility rate class definitions are not consistent across the state, which could

⁵⁸ CMP's SGS customers are 20 kW and below, BHE's General Service rate customers are 25 kW and below, and MPS's General Service rate customers are 50 kW and below.

complicate program marketing and implementation. We also rejected utility rate class definitions because electricity use may be a poor indicator for the customers that the Act intended to assist through its 20% target requirement. There may be customers with electricity-intensive business processes who have limited staff to address issues of energy efficiency. It is arguably more important to provide assistance to these customers than to customers with lower electricity use. A definition that depends on employment level will allow such customers to benefit from programs targeted to small businesses.

The proposed definition clarified the treatment of part-time employees and seasonal businesses. As discussed elsewhere in this order, we consider it important to maintain the flexibility to consider unique situations. With this in mind, the final rule broadens our ability to consider the appropriate treatment of businesses with varying employment levels.

In addition, the definition stated that, if a company has businesses in multiple locations, the number of employees in all locations shall be combined when determining the number of employees to be used under this definition. This provision excludes some smaller locations that are owned by larger chains, thereby limiting small business assistance to businesses that do not have access to the energy expertise that may be present through ownership by a regional or national organization.⁵⁹

In its comments in the rulemaking, OPA supports the proposed definition of “small business consumer,” commenting that this approach will resolve administrative issues, reduce confusion, and facilitate provision of services to the appropriate customers. No person commented on our concern that treatment of businesses with multiple locations would be inconsistent with their treatment by other agencies.⁶⁰

OPA also cautions that the level of overall funding will necessitate that programs be targeted to narrowly defined niches within the broad definition. We agree, and do not consider the Act’s requirement to target 20% of funding to small business customers to limit our ability to target specific programs to smaller groups. Indeed, the definition of small business within this rule defines the group of customers to whom we must target 20% of total funding pursuant to the Act. It does not define the customers who are eligible for any individual program. For example, a program might be available to all businesses and government organizations, regardless of size. When tracking the performance of the program, we would put in place a mechanism for determining the portion of funding that benefited “small business consumers” as they are defined in this rule.

⁵⁹ This treatment of businesses with multiple locations may be inconsistent with their treatment by other agencies dealing with small businesses.

⁶⁰ In our view, the commonly understood meaning of “business” does not include government entities, and thus, we do not treat government entities with 50 or fewer employees as small businesses for purposes of this rule.

C. Section 3: Conservation Programs

Section 3 of the rule incorporates the terms in the Conservation Act that require the Commission to establish goals for the conservation programs. We include a substantial portion of the Act so that Chapter 380 will be a comprehensive compendium of the basic State conservation program requirements.

Subsection A of section 3 restates the criteria, in the form of high level goals, that the Commission must consider in selecting its portfolio of programs.

Subsection B states that the Commission shall establish goals, objectives, and strategies that will govern selection of conservation programs. We completed the first phase of that process by issuing our Order Establishing Goals, Objectives and Strategies for Conservation Programs on September 24, 2002, in Docket No. 2002-162. In that order, we state that the Act directs the Commission to develop an “overall energy strategy.” We further state that, in our view, it is not appropriate or reasonable for the Commission to develop a statewide energy policy that encompasses all fuels, nor is it necessary for successful implementation of the Act. It is more appropriate that we develop a group of goals, objectives, and strategies that will govern an electricity conservation program portfolio in a comprehensive manner. Subsection B reflects this approach, by requiring us to determine goals, objectives, and strategies for the statewide program.

Subsection B also establishes the immediate and longer-term processes the Commission will follow to establish and revise goals, objectives, and strategies for conservation programs. The Act directs us to determine a schedule to revise our objectives and overall energy strategy. In the final rule, we changed the timeframe within which we must review goals and objectives from two years to three. During the early years of the program, all aspects will be under continuous review, and we expect that some goals, objectives, or strategies will be revised in less than two years. However, we do not wish to interrupt the effort that will be required to complete ongoing program design to thoroughly review all goals, objectives, and strategies. Thus, we have increased the time requirement for doing so.

Subsection C summarizes the requirements in the Act that the statewide portfolio of conservation programs must be cost effective, must attain the goals, objectives, and strategies determined by the Commission, and must be delivered without exceeding the assessed funds.

No person suggested changes to Section 3. However, at the public hearing, MCAA expressed the concern that citizens in rural areas worry that they are “perceived to be unimportant.” MCAA presents this concern as being generic in nature, rather than specific to the conservation program being considered here. However, MCAA suggests that, when possible, we craft programs that are smaller than a “one size fits all” approach that might be appealing administratively, to allow programs to reach all segments of the population. To further address this concern, MCAA suggests

that the Commission ensure that there is a means by which citizens or groups may inform the Commission when they are not well-represented by the portfolio of programs.

The Act requires that program funds be apportioned among customer groups and geographic areas in a manner that allows all customers to have a reasonable opportunity to participate in conservation programs.⁶¹ We will actively incorporate this requirement into our program planning. Indeed, we have already done so by expanding the Building Operator Certification program to include Northern Maine consumers. We have been thorough in allowing any interested group to provide input into all our decisions, and we will continue to do so. We will follow the practice of many other states, by monitoring our portfolio with geographic and demographic diversity in mind. Thus, while we have not expanded section 3 in the final rule for this purpose, we consider the provision and our own actions to be responsive to MCAA's concern. In addition, when, in Docket No. 2002-162, we consider ongoing procedures for program development, we will remain mindful of MCAA's comments.

Finally, we add a sentence to subsection (3)(C), based upon comments on cost effectiveness tests, described below.

D. Section 4: Cost Effectiveness Criteria

1. Background. In Docket No. 2002-161, we discussed the background of, and offered options for, determining the cost effectiveness of interim programs.⁶² In that proceeding, we decided to rely on the framework established in the current version of Chapter 380 (Ch. 380-O) to determine the cost effectiveness of individual interim programs and of the portfolio of programs. Under that framework, we rely on the All Ratepayers Test to screen for cost effectiveness, but we also consider whether a program or group of programs is likely to have a significant impact on T&D utility rates.

Cost effectiveness testing for conservation programs has a long history before this Commission. Twenty-five years ago, the Electric Rate Reform Act authorized the Commission to order electric utilities to submit programs for implementing energy conservation techniques.⁶³ Throughout this time period, we have periodically considered how to test whether proposed conservation measures are likely to minimize electricity costs. The debate typically is framed in terms of which of various cost effectiveness tests should be applied. That debate is generally reducible to a debate over our goals in adopting conservation programs.

⁶¹ See 35-A M.R.S.A. § 3211-A (1)(B) and (2)(I).

⁶² The Proposed Order Establishing Goals and Criteria for Interim Conservation Programs, issued April 26, 2002 in Docket No. 2002-162, and the Order Establishing Interim Conservation Programs issued June 13, 2002 in Docket 2002-161 contain extensive discussion of cost effectiveness tests. Both documents are available on our web page, www.state.me.up/mpuc in the "Electric Conservation Activity" site. Comments from interested persons are available on the Commission's Virtual Docket, also available on our web page.

⁶³ See P.L. 1977, ch. 521.

Historically, the Commission has considered three cost effectiveness tests. The primary test has been the All Ratepayers Test (ART), which measures whether a conservation program provides the same level of end use amenity (e.g. lighting or hot water) at a lower overall net cost to utilities and ratepayers taken together. The ART generally measured savings in terms of avoided generation and delivery costs. The second test has been the Rate Impact Test, which measures the impact of a program on the average electric utility rate. Finally, the Societal Test is an expansion of the ART, in that it includes environmental and other social benefits external to the transaction between the utilities and their customers.

The Commission's use of these tests was prescribed in earlier versions of Chapter 380. Chapter 380 was developed in the 1980's and remained substantially unchanged until 1999, when legislation associated with electric restructuring shifted the responsibilities for conservation programs within the State. During the 1980's and 1990's, the purpose of Chapter 380 was to provide a set of rules under which utilities could implement conservation measures without seeking Commission approval. However, Chapter 380 allowed utilities to seek approval for programs that did not meet the three tests.⁶⁴ Thus, the tests were not absolute limiters. The Commission could exercise its judgment in approving additional programs if it determined that such programs exhibited benefits not captured in the three cost effectiveness tests.

The current Conservation Act is broad in scope and includes goals that extend well beyond savings associated with generation and delivery costs. Increased consumer awareness, sustainable economic development, reduced environmental impact, the creation of more favorable market conditions for efficient products, a 20% funding target for low-income and small business consumers, and geographic and income diversity are all statutory goals that are likely to be difficult to accomplish under a strict cost effectiveness test. At the public hearing, the Public Advocate urged the Commission to be flexible in its use of cost effectiveness tests. In the Public Advocate's view, the Legislature has encouraged the Commission to "come to its own conclusions about a fair distribution of benefits." He comments that "there's no way to avoid the exercise of judgment in the design of cost effectiveness screens." We agree that our decisions regarding cost effectiveness criteria must include the flexibility to balance all the goals in the Conservation Act – whether strictly quantifiable and related to electrical generation and delivery, or less quantifiable and related to broader goals in the Act. At a minimum, we must retain the flexibility the Commission

⁶⁴ In adopting the 1987 version of Chapter 380, the Commission stated that the rule permits utilities to seek program by program approval, but that the Commission intends that programs that satisfy the tests set out in the rule and that do not exceed 2% of annual revenues should not be brought to the Commission for approval. Docket No. 86-81, Order Adopting Rule, p.6. In 1989, the Commission stated: "This rule authorizes utilities to undertake certain demand side energy management programs not specifically ordered or approved by the Commission, if the program is consistent with the standards set forth in this Rule." Chapter 380, § 1 effective January 1, 1989.

had under earlier provisions of Chapter 380. To comply with the Act, we must have as much flexibility as possible while retaining a consistent, economically rational approach to program design.

Currently, most other states – and particularly Northeast states -- use variations of the ART, variously called Total Resource Cost Test, Modified Total Resource Cost Test, Societal Test, or Modified Societal Test. These tests are distinguished by the fact that they include costs or benefits associated with "non-electric" resources (e.g., increased use of gas or water), customer O&M expenses (e.g., reduced maintenance), and improved ability to pay electric bills. They may include "spillover effects" (e.g., adoption of additional efficiency measures by customers outside of the efficiency program). Societal Tests may include costs and benefits accruing outside of Maine, such as environmental effects. Some states attempt to include economic development and job creation benefits. On the other hand, some states consider cost effectiveness from the participant's perspective or from the utility's perspective.

Quantification of some of these costs and benefits is difficult. Some states solve this problem by creating a percentage adder to represent environmental or other non-quantifiable costs. In general, these adders are not meant to represent a measured level of benefit, but are meant to acknowledge that some benefit exists and should be recognized.

Appendix A contains a summary of the most common costs and benefits included in commonly considered cost effectiveness tests. Appendix B contains a summary of our understanding of other states' cost effectiveness tests.

2. Subsection A – Modified Societal Test. In subsection A of the proposed rule, we defined a Modified Societal Test (MST) as the cost effectiveness test that will be used for ongoing (as opposed to interim) conservation programs. The proposed rule defined the MST as the ratio between benefits and costs.

OPA supports the MST, but suggests that it be expressed as the difference (rather than a ratio) between benefits and costs. OPA comments that the magnitude of this difference (using a net present value calculation) is the "true economic value provided by the conservation measure or program" and that the MST should at least consider the net difference. In earlier comments and at the public hearing, OPA emphasized that, regardless of whether a ratio or a "net benefits" approach is used, the test should not be so rigid as to eliminate the Commission's ability to use judgment in balancing goals.

In our view, the choice of using a ratio approach (as in the proposed rule) or a net benefits approach (as suggested by OPA) will have very little influence on our choice of programs, if any at all. For a fixed budget, each approach would yield the identical decision. Absent a fixed budget, implementing programs with the greatest net benefit might focus funding on a small segment of the population,

thereby conflicting with our efforts to offer programs to a wide variety of consumers. In either event, we agree with OPA's opinion that we should not choose programs rigidly based on the level of a ratio or net benefits. Notwithstanding these comments, we conclude that expressing the MST in terms of absolute dollars might make a program's effect more intuitively understandable without changing the intent or the impact of the proposed rule. Thus, we have revised subsection 4(A) and subsection 4(B)(1) of the final rule to express the MST as a net benefit measurement. We expect that we will express the results of the MST in terms of both dollars and a ratio, to retain the advantage of each.

The proposed rule included in the MST all costs and benefits that are reasonably quantifiable, regardless of who pays or experiences the cost or benefit. This approach is generally consistent with the All Ratepayer Test approach taken in years past, but expands the approach to include all impacts that clearly result from the programs. We recognize that some factors will continue to be difficult to quantify. We do not establish a percentage adder to represent those factors. Rather, we intend to quantify when possible and simply report program effects when quantification is not possible.

Subsection 4(A)(1) lists benefits to be included in the cost effectiveness calculation. Avoided electric generation costs will be estimated using regional prices. The proposed rule states that an average generation cost is adequate, but that more precise estimates based on time differentiation may be used when appropriate. Avoided T&D costs will rely on T&D utilities' marginal cost estimates, which also may be averages or time differentiated estimates. In the inquiry, utilities commented that their marginal cost estimates are imprecise. However, they are the most appropriate quantities available. Avoided fuel savings will include reduced use of oil, gas, or any other fuels saved. The rule does not specify a method for calculating fuel savings – we will use the best estimate available. Similarly, avoided costs of water, sewer, or any other resource will be estimated as accurately as is possible and reasonable. Finally, subsection (e) establishes that any other benefit that we can reasonably quantify will be included in the cost effectiveness test. We conclude that these benefits are important outcomes of conservation programs – sometimes by design and sometimes by good fortune – and they should be acknowledged whenever possible.

Subsection 4(A)(2) lists costs to be included in the cost effectiveness calculation. Direct program costs listed in subsection (a) and capital costs associated with the purchase and installation of appliances or equipment, listed in subsection (b), are traditional costs included in cost effectiveness tests. Subsection (c) lists other costs such as increased customer operation and maintenance costs. Considering such costs is consistent with considering all benefits that can be recognized as resulting from a program.

In its comments in the rulemaking, BHE suggests that we consider lost utility profits as a program cost, noting that lost utility revenue is a societal cost and

will ultimately result in higher rates. We reject BHE's suggestion. To the extent that a utility's rates exceed its marginal delivery costs, a utility will lose revenue if a conservation program lowers total kWh use. That loss is a transfer-payment from the utility's stockholders (in the short term) to program participants. The utility's monetary loss is offset by participants' economic gains (whether through lower costs for similar productivity or through increased productivity at a lower price than would have occurred absent the program). At the heart of the economic tests used in most states and in Maine has been the policy decision that lowering society's overall expense of using electricity without lowering productivity level is a desirable goal. Historically, a transfer of funds has occurred under Total Resource Cost Tests, All-Ratepayer Tests, and Societal Tests, and has been mitigated by offering a wide range of programs to all ratepayers. Currently, very few programs that reduce kWh use would pass a test that included lost utility profits as a cost. It is unlikely that the Legislature intended us to establish a cost effectiveness test that excluded virtually all programs that reduce kWhs. Thus, our final rule treats lost utility profits in the manner they have been treated historically in cost effectiveness tests.

We note, moreover, that conservation programs will not always lower kWh use. The Act includes many goals, including the goals that programs "create more favorable market conditions for the increased use of efficient products and services" and "promote sustainable economic development." We have incorporated those goals into our goals, objectives, and strategies, and have also stated that programs shall "improve the efficiency of electric energy use by Maine residential consumers, businesses and other organizations."⁶⁵ In our Order Approving Goals, Objectives, and Strategies, we assert that programs will not reduce kWhs per se, but will improve electric efficiency. Programs that meet these goals may *increase* utility sales, thereby improving, not harming, a utility's profits.

CMP suggests that we include the Rate Impact Test in a manner similar to its use in Chapter 380-O. According to CMP, under this approach the Commission would consider a program's impact on rates, rejecting the program if the impact exceeded a pre-defined level. CMP suggests that the 1% specified in Chapter 380-O would be reasonable.

We agree that we should consider the impact on rates from the portfolio of programs, and would do so as a matter of our normal approach to utility matters. However, we reject setting a specific rate impact that would automatically require program rejection. As discussed earlier in the order, the 1% level in Chapter 380-O only prohibited the utility from implementing a program without Commission approval. The Commission still retained the flexibility to use its judgment in balancing the rate impact with the program benefits. The breadth of the Act requires us to consider even more goals than we did under Chapter 380-O, and we intend to retain that flexibility to do so. Thus, in subsection 3(C) of the final rule we have added the provision that we must consider the likely impact of the full portfolio of conservation

⁶⁵ See Order Approving Goals, Objectives, and Strategies for Conservation Programs, issued September 24, 2002 in Docket No. 2002-162.

programs on a utility's rates, but we do not specify a level that would trigger program rejection and we do not state any action that must be taken based on our consideration. Under the final rule, we will weigh the program benefits with the harm to utilities and their ratepayers given the conditions at the time.

BHE and CMP comment that “non-electric benefits”⁶⁶ should not be included in the MST. CMP advocates using the methods used in the All Ratepayers Test, which CMP asserts did not include such benefits as increased amenities and decreased operating expenditures not related to electricity use. CMP contends that quantifiable externalities may be considered as program benefits, but only if an All Ratepayers Test is first satisfied. BHE advocates capping non-electric participant benefits to participant costs, and capping non-electric benefits at some portion of total benefits. CMP notes that the All Ratepayers Test emphasized avoided cost benefits, while the MST is overly expansive. CMP quotes Commissioner Diamond in his separate concurring statement to the June 13 Order in Docket No. 2002-161 as asserting that it is difficult if not impossible to measure non-electric benefits such as environmental benefits. Both utilities comment that the programs are funded by electric ratepayer money and should be targeted to electric savings. On the other hand, OPA supports inclusion of non-electric benefits in the MST. OPA states that the Legislature has given the Commission a new mandate to “consider, without limitation” programs that promote sustainable economic development and reduce environmental damage. The OPA believes that a strict All Ratepayers Test is “neither necessary nor feasible” under the new mandate, and that it is appropriate to consider both quantifiable externalities and non-ratepayer specific benefits that result from a conservation program.

We agree that programs should be targeted to savings associated with how a customer uses and obtains electricity. However, we disagree that savings such as reduced operating expenses and alternative fuel savings should be excluded from the cost effectiveness test. As long as such savings result from the electric efficiency measure, they are a savings of the program and should be considered in a cost effectiveness test. We disagree with an implication that Commissioner Diamond asserted that *all* non-electric benefits are difficult to quantify; indeed many will be easily quantified. The Act allocates ratepayer funds to implement programs that are beneficial for reasons that extend far beyond avoided generation and T&D utility costs. The Act targets economic development and environmental benefits in particular. The Act directs the Commission to make an investment decision on behalf of the citizens of Maine. When making an investment decision, one considers all savings associated with the investment. While we agree that a program must focus primarily on electric use, we see no reason to ignore a subset of savings that result when the electricity measure is undertaken. Thus, the final rule retains the “non-electric” benefits contained in the proposed rule.

⁶⁶ Within this order, operating costs, deferred replacement costs, and reduced water or fossil fuel costs are called non-electric costs. However, they are the *result* of an electric efficiency decision. We do not suggest that a program that does nothing more than reduce oil usage could be considered an electric energy efficiency program under the Act.

Having stated our decision regarding the cost effectiveness test that is required before we will fund a program, we turn to a different decision – namely, the amount of funds we will commit to customer incentives within a program. We acknowledge that non-electric savings such as reduced maintenance and non-fuel costs benefit only the participant, while avoided generation and T&D costs generally benefit all electric users. This becomes relevant because we desire that the program portfolio benefit as many consumers as possible. With this concern in mind, we are initially inclined to limit the incentive we award participants to the level of savings attained through avoided generation and T&D delivery costs. This approach would address many of BHE's and CMP's concerns. We decline to adopt a rigid provision that requires imposing this limitation. Rather, we will judge each situation on its merits. Thus, in Section 4(A)(6) of the final rule, we have added the sentence that the Commission consider the value of the program savings associated with electrical production and delivery when setting incentive values.

In addition, we observe that environmental benefit in the form of reduced emissions has, for many years, been considered by some to be an important benefit of conservation programs. The current law is no exception. The Act contains a goal of attaining environment benefits, yet program proposals made to us have contained no estimates – either quantified or not -- of environmental impact. While it is difficult to determine precise quantification of this benefit, it is not impossible to produce estimations. We ask persons who view environmental improvement to be important to submit program suggestions that explicitly target environmental improvement. For example, a program that reduces energy use or demand at a time when the marginal generating units produce high emissions would help us fulfill the Act's environmental goal. We also ask all persons submitting program proposals to provide, if possible, information on the environmental impact of the program. Finally, we intend to issue a solicitation, separate from this order, that requests proposals for conservation programs that explicitly target environmental improvement as a primary goal. These actions will allow us to include programs in our portfolio that may reasonably be considered to meet the environmental goal of the Act.

Finally, BHE and CMP recommend that the Commission reject non-quantifiable benefits in the MST. CMP comments that the All Ratepayers Test was a "simple, objective, mathematical test" while the MST is imprecise and encourages disputes and second-guessing. In our view, the Act clearly rejects a "simple, objective, mathematical" view of cost effectiveness by including a variety of broad and difficult-to-quantify goals. As pointed out by the Public Advocate in his comments, the Act requires that the Commission exercise judgment when determining cost effectiveness and when balancing goals. The fear of less than perfect precision should not cause us to ignore important benefits that are consistent with the intent of the Act. The proposed rule used terms such as "reasonably identifiable costs" (subsection 4(2)(a)) and "to the extent such costs can be reasonably quantified and valued" (subsection 4(2)(c)). We consider these phrases to be adequate protection against disputes or abuse and have not changed them in the final rule.

In the proposed rule, subsection 4(A)(3) established guidelines for the discount rate to be used in cost effectiveness calculations. We commented that the cost effectiveness of a program is calculated from the perspective of Maine consumers as a whole (as opposed to only the participant). Thus, the discount rate should be a societal discount rate. Long-term treasury securities yields are reasonable for this purpose.

In its comments in the rulemaking, BHE suggests that, for each program, the Commission choose a discount rate that reflects the risk profile of the program. BHE points out that some measures are short-lived and that some costs and benefits cannot be predicted with certainty. In our view, establishing a discount rate to use when evaluating most programs establishes consistency and predictability and creates a result that is reasonably accurate. However, consistent with comments made earlier in this order, this rule should not limit our ability to exercise judgment. We acknowledge that variability in certainty and measure life exists. Thus, while we decline to state a prescribed method for linking risk to the discount rate, in subsection 4(A)(3) of the final rule we have introduced the flexibility to consider alternative discount rates when conditions warrant doing so.

Subsection 4(A)(4) establishes that costs and benefits will all be measured on a comparable, net present value, basis. This is a traditional, established calculation method. No person suggested changing this subsection.

Consistent with our intent to consider all costs and benefits that can be recognized, subsection 4(A)(5) establishes that costs and benefits will be estimated for as many years in the future as seems reasonable.

3. Subsection B – Non-Quantifiable Cost Effectiveness Test.

Subsection B of section 4 accommodates programs that satisfy statutory or Commission-established goals but whose benefits cannot be quantified. While we will measure costs and benefits whenever possible, we conclude that there are programs that will benefit consumers in Maine, or that meet statutory criteria, but whose benefits cannot be reliably estimated. Indeed, there may be requirements of the Act that cannot be met if all programs must pass the Modified Societal Test. In particular, it may be impossible to spend 20% of total funds on low-income or small business programs and it may be impossible to conduct energy education as the Act contemplates, unless programs with non-quantifiable benefits are considered. The subsection includes three criteria, all of which must be met, before a program can be implemented without passing the Modified Societal cost effectiveness test. Subsection 4(B)(1) allows a program with non-quantifiable benefits to be implemented, while subsection 4(B)(2) establishes that the program must meet statutory or Commission-established goals and subsection 4(B)(3) establishes that the entire portfolio must be substantially cost effective.

This subsection creates the possibility that a program whose benefit-to-cost ratio *is* quantifiable but is less than one, and that meets particular goals,

cannot be implemented. However, a program whose benefit-to-cost ratio *is not* quantifiable, and meets the same goals, may be implemented.

In its comments in the rulemaking, MCAA supports the inclusion of a non-quantifiable cost effectiveness criteria, calling the provision “forward-looking.” MCAA comments that this provision will allow the Commission to implement “cutting edge” ideas to determine whether they are successful. BHE expresses the concern that subsection 4(B) could result in abuse and reiterates the suggestion that non-quantifiable benefits be limited to a portion of total benefits. While we decline to specify such a percentage, as a practical matter we expect to limit our funding of programs with non-quantifiable benefits.

In the inquiry, we invited interested persons to express their views on whether there should be a quantitative standard for the distribution of benefits. To elaborate, the MST looks at benefits and costs in the aggregate. We wondered whether the Commission also should be required to find that benefits will exceed costs for some minimum percentage of Maine consumers. For example, if it were determined that for a particular portfolio of programs the benefits will exceed the costs in the aggregate (i.e., the portfolio passes the Modified Societal Test) but that only 20% of consumers will actually receive more in benefits than they pay in costs, should that portfolio be deemed cost effective?

The OPA does not support this approach, commenting that, given limited resources, it would foreclose many programs, particularly those in smaller service territories. BHE comments that resources should not be diverted from high benefit programs in favor of high penetration programs. We did not introduce such a provision in the final rule.

In the inquiry, we also welcomed comments on whether the existence of statutory requirements that certain percentages of the spending be directed at specified groups and that all groups be given the opportunity to participate warrants the conclusion that the Legislature did not expect the Commission to deal further with distributional equity issues. Even if one answers this question in the negative, we asked whether it is realistic to expect the Commission to be able to determine the percentage of ratepayers who will have a benefit-to-cost ratio in excess of 1 (or a net benefit greater than 0) for a particular program or portfolio of programs. Finally, given the Commission’s conclusion that the Rate Impact Test is not feasible in a restructured environment, which means that some and perhaps many ratepayers may have costs in excess of benefits from these programs, we inquired whether the Commission should suggest to the Legislature that it may want to reexamine the statute.⁶⁷

⁶⁷ We stated that this would not necessarily mean abandoning the concept of imposing an assessment on ratepayers for the purpose of achieving societal goals related to the use of electricity. To the contrary, we wondered whether there are more effective ways to achieve the environmental objectives associated with conservation programs.

The OPA suggests that, in the Act, the Legislature has already determined the distributional equity it considers to be appropriate. The Commission should not delve further into the issue. BHE suggests that the Act should be re-evaluated. We made no change in the final rule based on these comments.

E. Section 5: Funding Level

Section 5 of the proposed rule restates the terms in the Conservation Act that establish a funding mechanism for the conservation programs. We include this restatement of law so that Chapter 380 will be a comprehensive compendium of the basic State conservation program requirements. Subsection A directly quotes the Act, and describes the upper and lower bounds of the amounts the Commission will assess T&D utilities to fund the programs. Subsections C and D directly quote the Act, and describe the means by which the Commission will categorize the budget and spending of the funds assessed. Subsection B is not contained in the Act. It establishes broad guidelines for determining the dollar amount that we will assess as time goes by. It states that the Commission's periodic assessment will be based on projections of the factors⁶⁸ that determine the assessment, but that reconciliation will occur to ensure that the assessment over time comports with the actual values of those factors.

No person suggested changes to Section 5 and we have made no changes in the final rule.

F. Section 6: Waiver or Exemption

Section 6 contains terms governing waiver or exemption from the Chapter. These terms are standardized throughout the Commission's rules. No person suggested changes to Section 6 and we have made no changes in the final rule.

IV. RULEMAKING PROCEDURES

Pursuant to 35-A M.R.S.A. § 1311-A (10), this rule is considered to be a "routine technical rule" as defined in Title 5, chapter 375, subchapter II-A.

V. FISCAL IMPACT

5 M.R.S.A. § 8057-A(1) requires the Commission to estimate the fiscal impact of this Chapter. In the NOR, we indicated that there is no fiscal impact through the rule, but that there is a fiscal impact associated with enactment of the Conservation Act, as described by the fiscal note attached to LD 420. No person commented on the fiscal impact.

⁶⁸ Pursuant to the Act, assessments must be capped at 1.5 mils per kWh, but must be no less than 0.5% of revenues. Currently, we assess CMP based on its kWh sales, and we assess all other utilities based on revenues. We will determine the basis – whether sales, revenues, or some other factor – and the level for long-term assessments in future proceedings.

Appendix A

Components of Cost Effectiveness Tests

Test	Participants	Utility Cost	All Ratepayers	Total Resource	Societal
Measures					
Participants	y	y	y	y	y
Spillover (a)			y	y	y
Free Riders (b)		y	y	y	y
Post Program Adopters (c)				y	y
Benefits					
Avoided electricity					
Energy	(1)	y	y	y	y
Capacity		y	y	y	y
T&D		y	y	y	y
Avoided resources					
Gas & oil	(1)			y	y
Water & other	(1)			y	y
Customer benefits	y		y	y	y
Other benefits					
quantified					y
non-quant. Adder (d)				(2)	(2)
Costs					
Program costs		y	y	y	y
Customer Costs	y		y	y	y
Performance incentives (e)				(3)	(3)

Notes

- 1 At retail rates
- 2 Adders included in some states
- 3 Incentives included in some states

Definitions

- a Those EEM's installed as a result of, but outside a program
- b Those EEM's that receive an incentive, but would have been purchased/installed even without the program
- c Those measures that are installed, outside of a program, after the program has ended
- d A percentage added to EEM benefits, to account for environmental benefits that have not been measured or quantified
- e Some states allow utilities to earn an incentive, based on their performance relative to a set of energy efficiency program metrics

Appendix B Comparison of Cost Effectiveness

State	NH	VT	MA	RI	CT	NY	NJ	OH	TX	CA	PNW
Test	TRC	Societal	Mod.TRC	Mod.TRC	(3)	TRC	Societal			Societal	Societal
Measures											
Participants	y	y	y	y		y		y	y		y
Spillover	y	y	y	(2)		y					y
Free Riders		y	y								y
Post Program Adopters	y	y	y			y					y
Benefits											
Avoided electricity											
Energy	y	y	y	y		y		(5)	y		y
Capacity	y	y	y	y		y		(5)	y		y
T&D	y	y	y	y		y		(5)			y
Avoided resources											
Gas & oil	y	y	y			y					y
Water & other	y	y	y			y					y
Customer benefits	y	y	y			y		y			y
Other benefits											
quantified	y	y	y			(4)		y			y
non-quant. adder	15%	(1)							(6)		(7)
Costs											
Program costs	y	y	y	y		y		y	y		y
Customer Costs	y	y	y			y		y			y
Performance incentives	y	y	y	y							

Notes

- 1 Vt adds 0.07 cts/kwh for env. externalities and an 11% adder on benefits for risk mitigation.
- 2 RI includes participant spillover only
- 3 CT is in the process of reviewing tests; currently they use a TRC for res. & LI (some w/ a 15% adder) and a UCT for C&I
- 4 NY includes non-resource benefits only where they could be reasonably quantified, and thus are probably understating them
- 5 OH uses retail electricity prices, and assesses programs from a customer perspective
- 6 TX uses a 20% adder in non-attainment areas only
- 7 OR adds a 10% conservation credit; MT uses 15%; ID & WA don't have an adder

DEFINITIONS OF LOW-INCOME AND SMALL BUSINESS CONSUMERS

I. Background

- The Conservation Act requires that the Commission target at least 20% of available funds to programs for low-income consumers and at least 20% to programs for small business consumers. The Act requires that the Commission define low-income consumer and small business consumer by rule.
- Other State agencies provide services to persons considered to be “low-income” or “small businesses”. In addition, utilities’ rates are differentiated by level of electric use, including a “small” non-residential group.
- The Commission’s revised rule, Chapter 380, establishes these definitions. The rule and our order approving the rule may be found in the Cost Effectiveness section of this report.

II. Definition of Low-Income Consumer

- In the Commission’s Chapter 380, we established that a low-income residential consumer is “a customer of a transmission and distribution utility living in a household that would qualify to receive assistance through the Low Income Home Energy Assistance Program (LIHEAP), as those qualifications are established in Rule by Maine State Housing Authority from time to time. If a customer has not applied for authorization to receive LIHEAP benefits but conforms to the criteria established by Maine State Housing Authority, he or she shall be considered a low-income consumer for the purpose of this Chapter.”
- We expect our low-income programs to complement and coordinate with existing State programs. Using a consistent definition will produce administrative savings and will eliminate potential confusion.

III. Definition Of Small Business Consumer

- In the Commission’s Chapter 380, we established that a small business is “a business customer of a transmission and distribution utility that employs 50 or fewer full-time equivalent employees. A company with multiple locations shall be considered one company, and employees at all its locations shall be counted when determining whether the company is a small business. If the number of employees of a company varies over a calendar year, the number of employees at the time when the company participates in a program shall apply. When determining whether a customer is a “small business consumer,” the Commission may consider the average number of employees that the business employs annually.”

- We expect to coordinate our small business programs with other State initiatives offering services to small businesses. Thus, we chose a definition that is consistent in most respects with that used by other State agencies and we chose an expansive definition of small business that would allow the 20% funding targeted by the Act to reach as many small businesses as possible.

PROGRAM ADMINISTRATION AND TOTAL SPENDING

I. Background

- The Conservation Act establishes an administration fund that will be used to defray administrative costs of the statewide program. The fund may not exceed \$1.3M annually, and will be funded with a portion of the money collected from utilities.
- The Conservation Act authorizes the Commission to hire up to 3 additional people to support the energy efficiency program.

II. Commission Activities Funded From The Administration Fund

- In June 2002, we hired a new employee to direct the development and implementation of the Commission's energy efficiency programs.
- In November 2002, we hired two additional employees as energy efficiency program administrators, to oversee the implementation of efficiency programs.
- A number of Commission staff people work on efficiency programs while carrying out other Commission duties.
- During 2002, we contracted with technical consultants to improve our knowledge of technical matters and current issues and to assist in program design.
- During 2003, we expect to obtain consulting assistance in developing program evaluation plans and to assist in program design.

III. Commission Spending On Administration And Programs

Commission Spending		
April 2002 – October 2002		
	Spent	2002
	<u>Apr – Oct 2002</u>	<u>Pending</u>
<u>Administration</u>		
Salary*	\$ 146,023	
Consultant	\$ 3,489	
Newspaper Ads	\$ 10,606	
Supplies	\$ 174	
Telephone	\$ 227	
Travel	\$ 224	
Literature	\$ 29	
Transcription	\$ 490	
<u>Sta-Cap</u>	<u>\$ 1,023</u>	
Total Admin Spending	\$ 162,285	
<u>Programs</u>		
MEEP	\$ 25,000	
MSHA	\$ 200,000	
DECD	\$ 200,000	
Newspaper – RFPs	\$ 1,672	
Room	\$ 338	
Mail	\$ 44	
<u>Sta-Cap</u>	<u>\$ 80</u>	
BOC		\$ 126,000
Curriculum Task Force		\$ 10,000
<u>NEEP</u>		<u>\$ 10,657</u>
Total Program Spending	\$ 427,134	\$ 146,657
* Salary includes new staff and portions of existing staffs' time spent on energy efficiency activity		

IV. Statewide Spending On Energy Efficiency

Statewide Spending on Energy Efficiency			
	3/1/2000- 2002	2003	3/1/2000- 2003
Utility-Run Programs /1,2	\$35,284,453		
CMP Power Partners		\$7,096,000	
All utilities' (except Power Pttrs)		\$1,271,834	\$43,652,287
Available for Commission- Sponsored Programs /3	\$6,164,275	\$5,260,480	\$11,424,755
Commission Administration /4	\$146,657	\$1,300,000	\$2,200,000
Budget for Approved Interim Programs /5			\$7,986,735
Notes:			
1/ Utility-run programs in 2003 are estimates based on current activity. Some utilities did not estimate, pending Commission decision.			
2/ Before 2003, 80%-90% of spending on utility-run programs was for CMP Power Partners contracts. In 2003, Power Partners spending decreases significantly because of contract expiration.			
3/ At current assessment level			
4/ \$1.3M is the statutory maximum for annual administrative spending. 2.1M represents maximum spending during 2002-2003. The Commission will spend far less.			
5/ Includes the approved maximum for each program, plus a 10% contingency.			

ISSUES

I. Background

The Conservation Act requires that the Commission include in its annual report any recommendations for changes to the law. *We have no recommendations for change to the law*, and indeed are inclined to think that at least an additional year should pass under the current law before policy makers judge which provisions should be changed. However, we discuss below four policy issues that have arisen during our program planning and development, for the Committee's information and consideration.

II. Funding Levels

The Conservation Act sets a cap and a floor for the funding that each utility will contribute to the state's energy efficiency program. Recently, CMP has funded programs at the cap and most other utilities have funded at approximately the floor, resulting in considerable inequity among utilities. However, a significant portion of CMP's current funding pays for efficiency measures implemented many years ago through its Power Partners program. CMP's contribution to all other programs (approximately \$0.0004 per kWh in 2002 and \$0.0007 in 2003) exceeds that of other utilities (approximately \$0.0003 per kWh).

The Act directs the Commission to assess each utility within the specified range, but leaves to the Commission how much to assess within that range based on the particular circumstances (without additional specification) of each utility's territory. In light of the various objectives of the current law (including increased consumer awareness, sustainable economic development, reduced environmental impact, a 20% funding target for low-income and small business consumers, and geographic diversity), and the fact that, for many and perhaps most programs, the distribution of benefits among customers is unlikely to match the assessment of costs, the legislature may wish to consider whether additional guidance concerning both the amount to be assessed and the weight to be given each objective should be provided.

III. Environmental Benefits

Achieving meaningful environmental benefits through energy efficiency programs presents unique challenges. To date, the Commission has not received proposals for programs specifically targeted at reducing the more environmentally harmful forms of generation. We recently issued a request for interested persons to submit proposals for such programs. While achieving greater energy efficiency in general should help the environment to some extent (although making appliances more efficient and thus cheaper to operate can theoretically increase their usage and thus the level of energy consumption), it is not clear that this is the most effective way to secure environmental gains. This raises the question of whether money raised from

ratepayers or taxpayers for environmental improvement might be focused on other programs than the energy efficiency programs implemented under the Act.

IV. Renewable Resources

A variety of stakeholders have suggested that funds collected pursuant to the Act be used to support installation and operation of renewable electricity generation by technologies such as solar panels. We have not funded these projects, and we are not inclined to consider them eligible for funding under the Conservation Act. If the Legislature wishes to fund renewable generation sources under the Act, it may wish to say so explicitly in the law.

V. The Role of Judgment in Choosing Conservation Programs

The Conservation Act directs the Commission to consider a number of other items (environmental benefits, economic development, targeting of programs to low income residential customers and small businesses, and equalizing the offerings geographically throughout the state) when choosing which energy efficiency programs to implement. Each is a worthy goal but balancing these separate and occasionally competing goals is more art than science, requiring the Commission to achieve a reasonable balance. We hope to use these periodic reports as a tool to communicate our decisions and to make sure that our judgment is, and remains, consistent with the Legislature's intent.

ADDITIONAL COMMENTS OF COMMISSIONER STEPHEN DIAMOND

While I fully agree with the contents of this report, I would add the observation that at some point the Legislature may wish to clarify its priorities under the Conservation Act and determine whether conservation is always the best means of achieving them.

The Conservation Act sets forth various goals for the programs it authorizes. While that potentially broadens the benefits of, and support for, the programs, it can also make it more difficult to know the Legislature's priorities and to evaluate the Commission's success in achieving them.

The Act's primary objective, embodied in the cost effectiveness requirement, would appear to be to ensure that ratepayers save money in some verifiable way by purchasing less electricity or paying less for that which they purchase. As explained in this report, the Commission has adopted a cost effectiveness test that requires that in the aggregate the savings from conservation programs exceed their costs, but has concluded that it is not feasible to require that all ratepayers individually come out ahead. As a result, there will almost certainly be some transfer of wealth from the "losers" to the "winners."⁶⁹

Given the fact that some, and perhaps many, ratepayers will pay in the conservation assessment more than they receive in program benefits, there is a threshold question of whether aggregate savings under the Commission's cost effectiveness test alone suffice to justify the conservation assessment.⁷⁰ This becomes an issue, in part, because in similar situations government does not intervene in the market to levy a cost on all so that some may benefit. For example, we do not impose a tax on heating oil or gasoline to enable some consumers to save money through the purchase of more efficient furnaces or vehicles or by better maintaining those that they have, even though this might allow us as a society to spend less on those fuels. Indeed, if we are not concerned about the distribution of the savings, but only that they exceed the costs,

⁶⁹ Ironically, as explained in the report, maximizing kilowatt-hour savings and maximizing the distribution of benefits may be conflicting goals.

⁷⁰ This might not be the case if all of the savings were directed at groups deemed to need them for articulable policy reasons. For example, programs aimed at low-income consumers are consistent with an already established government objective of assisting those in need. In addition, since virtually all ratepayers contribute to the utilities' low-income assistance programs, reducing the consumption of those who receive that aid may benefit everyone.

one could envision this kind of government program for a vast array of products; yet, it is not a common role for government to play. There is, of course, no reason why the approach cannot be limited to electricity, especially given the existence of a regulatory agency to implement it, but it does raise the question of whether achieving collectively measured net savings, regardless of how distributed, is enough by itself to justify our conservation programs.

The conclusion that aggregate net savings, while a reasonable test for cost effectiveness, may not suffice as a standalone rationale for conservation programs suggests that a higher priority should be placed on the Act's other, albeit less measurable, objectives, such as protecting the environment. This presents some challenges for the Commission. While all conservation should help the environment, the objective should be to maximize the benefits. Unfortunately, as noted in the Commission's report, we have not received any proposals specifically aimed at environmental improvements, and unless they materialize, we will have to rely on the rather vague proposition that all conservation should do some good. A related issue for the Legislature, if we are to meet our obligation to make the best use of ratepayer money, is whether conservation is necessarily the most effective way to maximize environmental gains or whether the State should be able to use the ratepayer assessment to fund other measures.

Similar questions exist with respect to the goal of promoting economic development. Is the Commission the best-qualified entity for determining how best to promote Maine's economy? If it is to play this role, how can it best secure input, particularly of a disinterested nature? Would we be more effective in promoting economic development if we did not limit our options to conservation measures? Again, the objective here is to make the best use of ratepayer money.

Let me emphasize that my comments reflect neither a hostility toward conservation programs nor a view that urgent action is required on these issues. Rather, government programs tend to follow their own version of Newton's law – those in existence tend to remain in existence – and it strikes me that that periodically revisiting our objectives and the means for achieving them is something we owe to those who pay the bills.