REPORT OF THE AUDIT AND PROGRAM REVIEW COMMITTEE ON ITS STUDY OF THE OFFICE OF ENERGY RESOURCES PURSUANT TO S.P. 772

December 3, 1980

Senate

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House

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Summary of Findings

1. The Office of Energy Resources is utilizing their State funds in a cost-effective manner. These funds comprise less than 10 percent of their total budget. There is evidence that this money is adequately administered, and used to impliment State mandates.

2. The Committee has some concern about the expenditure of Federal funds by the Office. The total budget has increased at an average rate of almost 200% each year, and most of this money is provided from Federal revenue sources. There has been a rapid proliferation of staff positions, programs, and projects, and it is difficult to determine whether all these programs and projects are necessary and cost-effective. There is no adequate legislative review of the Federal portion of the Office's expenditures. However, last year the Legislature repealed the statutory mandate (Public Law 1979, chapter 711) for legislative review of Federal expenditures.

3. The Office has expanded its staff and quarters since the passage of S.P. 772. The staff has expanded from 31 to 35 and the office space has been increased from 2,300 to 6,000 square feet. This expansion, however, is within previously authorized legislative and executive guidelines.

4. The Office has satisfied most of its State and Federal mandates. The most important mandate that has not been fulfilled is the requirement for submission of an Annual Energy Plan to the Legislature. The latest Comprehensive Energy Plan was submitted in January, 1976. The Office intends to submit a revision of this plan to the 110th Legislature in January, 1981.

5. The Office is fulfilling an important role in the energy security of the State of Maine. The Office has implimented effective programs in several areas, including:

a) resource allocation;

b) information and technical assistance; and

c) energy conservation.

These programs have resulted in significant energy savings to the State. Perhaps even more importantly, these efforts have prevented energy supply disruptions, and have enhanced an orderly transition to more energy self-sufficiency for the people of the State of Maine.

Recommendations

Based on its findings, the Audit and Program Review Committee makes the following recommendations.

- That the hiring freeze imposed by S.P. 772 be recinded.
- That the Office of Energy Resources annually, by January 15, submit a detailed explanation of total projected revenues and expenditures to the Joint Standing Committee on Energy and Natural Resources for review.

The Study Order

Senate Paper 772 directs the Joint Standing Committee on Audit and Program Review to conduct a study of the Office of Energy Resources. It further orders that a freeze be imposed on any further hiring or expansion of the Office until this Legislative oversight is exercised.

The study order was prompted by rapid personnel and budget growth of the Office. Since 1976, the Office increased from 7 authorized positions and a budget of $65,000 to 47 authorized positions and a budget of $1,730,000. While Maine citizens are conserving energy and developing alternate sources of supply, it is not clear whether this is the result of market place conditions or through the efforts of the Energy Office.

Organization of the Office of Energy Resources

The Office of Energy Resources is an office within the Executive Department. It was first established on a temporary basis in 1973, and reestablished permanently in 1975. The purpose of the office is to provide a comprehensive energy plan; to analyze and recommend energy policies; to coordinate all State energy programs; to manage all Federal energy programs in Maine, including the Fuel Allocation Program; to encourage energy conservation; to encourage and sponsor research and development of indigenous renewable energy resources; and to provide information on all of these activities to the people of Maine.

The Office is divided into three administrative and four functional units. Administrative units include the Office of the Director, Policy Analysis and Liaison, and the Administration

division. The four functional divisions are Conservation Programs, Planning and Resource Development, Information Programs, and Fuel Management. Figure 1 depicts this organizational structure, with staff levels and funding sources for FY 1979-80. Appendix B dexcribes the program responsibilities of each of the divisions.

A wide variety of funding sources are used by the Office to carry out its programs. Table 1 depicts the complexity of their revenues for FY 1979-80. In that year 7.5 percent of their revenue was from State sources. Table 2 is provided to compare Federal funding levels in Maine with other New England states.

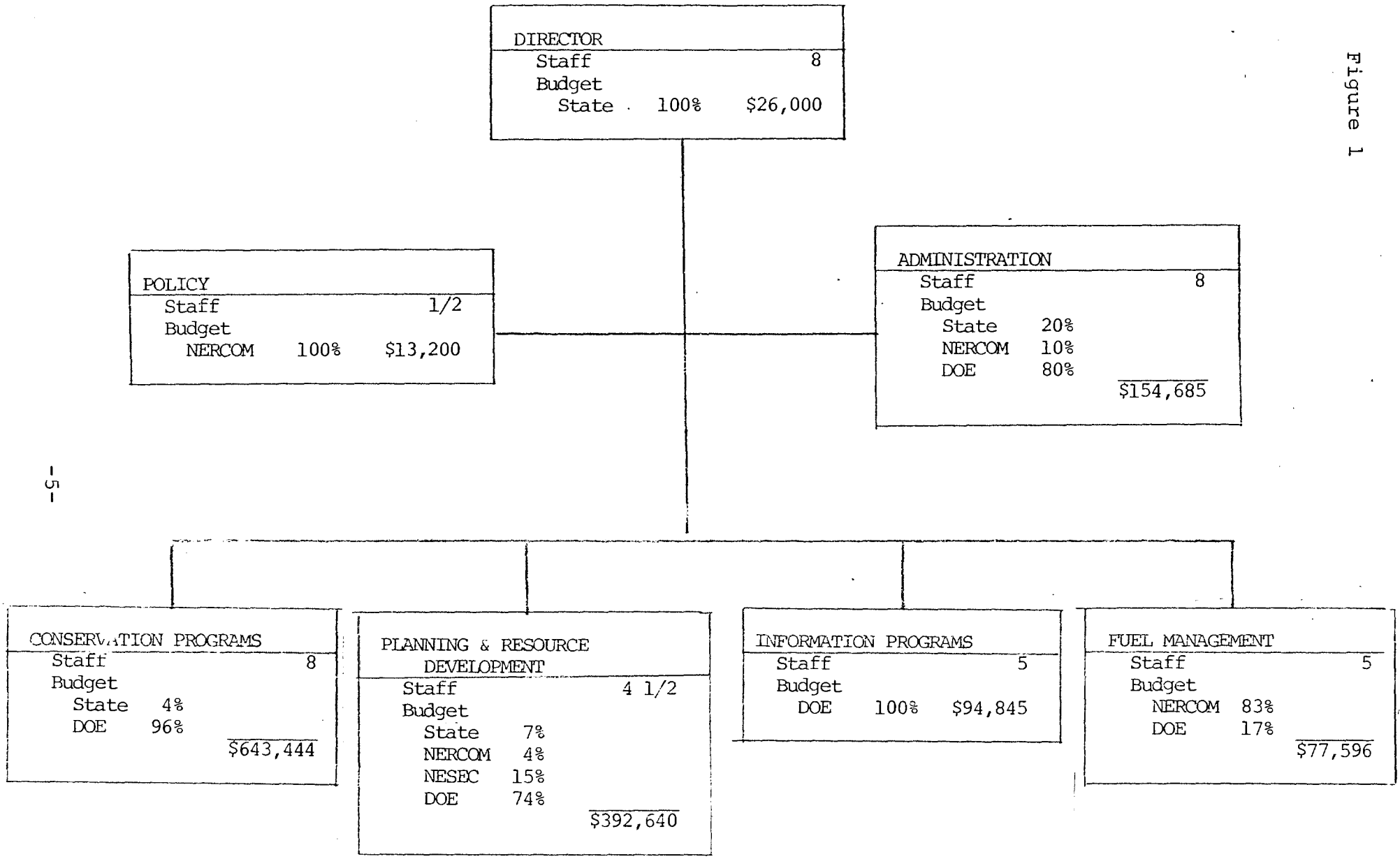
DIRECTOR
Staff 8
Budget
State 100% $26,000
POLICY
Staff 1/2
Budget
NERCOM 100% $13,200
ADMINISTRATION
Staff 8
Budget
State 20%
NERCOM 10%
DOE 80%
$154,685
CONSERVATION PROGRAMS
Staff 8
Budget
State 4%
DOE 96%
$643,444
PLANNING & RESOURCE DEVELOPMENT
Staff 4 1/2
Budget
State 7%
NERCOM 4%
NESEC 15%
DOE 74%
$392,640
INFORMATION PROGRAMS
Staff 5
Budget
DOE 100% $94,845
FUEL MANAGEMENT
Staff 5
Budget
NERCOM 83%
DOE 17%
$77,596

Figure 1

Table 1

OVERVIEW OF OER FUNDING SOURCES
FY 1979 - 80

SOURCE OF FUNDS	DESIGNATED USE	TOTAL AMOUNT OF GRANT	PASSED-THROUGH TO AGENCIES & BUSINESSES
New England Regional Commission (NERCOM)	Planning, Resources Development, Policy Analysis	$100,000.	$ 2,500.
NERCOM	Fuel Management Programs	50,000.	
Northeast Solar Energy Center	Development of a Solar Energy Commercialization Program	50,000.	10,000.
Department of Energy (DOE)	Planning & Implementation of the State Energy Conservation Program	442,400.	177,500.
DOE	Inventory and Analysis of Maine Peat Resources	250,000.	233,500.
DOE	Energy Extension Service (EES) Pilot Outreach Program	15,000.	4,700.
DOE	Energy Extension Service (EES) Outreach (Start 3/1/79)	20,000.*	($80,000. of the total budget (310,000) in FY81 will be pass through
DOE	Energy Analysis for Retrofit of schools, hospitals, public care institutions & local government buildings in Maine.	274,640.	187,503.
DOE	Emergency Building Temperature Restriction Program	56,950.	12,000.
DOE	Research Cogeneration & district heating techniques & applications for Maine	10,000.	
DOE	Developing of a specific computer program for use in other State energy offices	10,000.	10,000.
DOE	Fuel Price Monitoring Program	13,900.	
DOE	Report on Swan Lake level conflicts as a model for potential hydro dams in other States	5,000.	5,000.
State of Maine	Director & Clerical salaries & support	57,270.	
State of Maine	Energy Efficiency Building Standards Legislation implementation (Ch. 503 Laws of Maine)	27,250.	
State of Maine	Half Moon Cove Tidal Project; Passamaquoddy Tribe (Ch. 58, P&S Laws of 1979)	20,000.	20,000.
	TOTALS	$1,402,410.	$ 662,703. (47%)

* 1st Quarter Budget only

Table 2

DEPARTMENT OF ENERGY FY81 FUNDING TO NEW ENGLAND STATES

	MAINE	CONN	NH	RI	VT	MASS	
WEATHERIZATION	2,687,193[1]	1,187,971	852,117	1,064,500	1,322,800	5,514,300	
ENERGY CONSERVATION PLAN	365,500	631,800	320,100	370,100	2,822,000	5,000,000	(approx)
EXTENSION SERVICE	309,700	389,500	292,500	306,800	272,900	624,900	
SCHOOLS & HOSPITALS	1,248,683	2,065,774	671,978	855,825	814,266	3,993,790	
OTHER	250,000	20,000		6,230			
TOTALS	4,861,076	4,295,045	2,136,695	2,603,455	5,231,966	15,132,990	

1 Administered by the Division of Community Services.

Expansion of the Office of Energy Resources

The Office has grown dramatically since its inception, both in terms of staff and budget, as indicated in the following table.

	Staff (authorized positions)		Budget
	State	Total	
1975-76	2	7	$ 42,597
1976-77	2	7	201,859
1977-78	2	12	300,112
1978-79	2	28	555,106
1979-80	3	32	1,402,410
1980-81	3	47	1,780,526

Upon passage of S.P. 772, dated February 28, 1980, there were 47 authorized positions within the Office of Energy Resources, and people actually employed. Since that time, they have filled 4 authorized positions, bring the present count of people on board to 35. They have not changed or exceeded the number of authorized positions.

Since their permanent establishment in 1975, the Office has occupied a 12 room, 2,300 square foot office. On October 11, 1979, they applied to the Bureau of Public Improvement (BPI) for additional lease space. According to BPI formulae, the Office required approximately 6,200 square feet of space. On February 27, 1980, BPI selected for lease a 6,000 square foot office in the Olde Federal Building, 295 Water Street, Augusta. The property is owned by Kennebec Properties, Inc.

State Legislative Mandates

Within its broad mandate, the Office of Energy Resources

has been directed by State statute to accomplish a number of specific functions. The following lists all these State mandates, and the Office of Energy Resource's response.

Administration and Coordination

- administer Federal energy programs in Maine (e.g., Fuel Allocation and Conservation Program) (5 MRSA §5005(3)(G))

  OER currently administers the following federally mandated programs: all Conservation division programs, Fuel Allocation and Contingency Planning programs, and the Energy Extension Service.

- coordinate state energy programs and coordinate same with private and federal programs (5 MRSA §5004(3)(F))

  All state energy programs are coordinated from inception with federal and private programs to the maximum degree possible.

Advice and Technical Assistance

- assist Governor and Legislature in identifying State's energy needs and resources (5 MRSA §5005(1)(E))

  The OER director meets regularly with the Governor to advise him. The Legislature is presented with OER's "Analysis of Motor Fuel, Distallate, Residual Oils, and Electricity Consumption Patterns in Maine" each January. This January, the Legislature will receive a Comprehensive Energy Plan for review from the OER.

- assist public and private groups in energy planning (5 MRSA §5005(1)(F))

As a matter of course, each OER program provides assistance to public and private groups with regard activities planning in the particular program's subject area. In addition, the OER encourages and responds to planning assistance requests from interested groups.

- consult with Governor on energy emergency proclamations (37-A MRSA §57(2)(B))

  No energy emergency proclamations have been issued. However, during two recent energy emergencies (the winter heating oil shortage and summer gasoline shortage of 1979) the OER director consulted closely with the Governor to identify possible options and solutions.

- prepare manual of accepted energy conservation building practices (5 MRSA §5005(3)(L) and 10 MRSA §1415-A(3))

  The OER published the "State of Maine Energy Conservation Building Standards" in July, 1980. An accompanying "Manual of Accepted Practices" will be made available by February, 1981.

- provide assessments of conservation alternatives to proposed new electric power plants 5 MRSA §5005(1)(J))

  The OER has intervened in PUC hearings on the proposed Sears Island facility to propose conservation alternatives, and consults closely with the PUC with regard to alternatives to all new electric power plants.

Data Collection

- collect and analyze energy data from available energy sources in Maine (5 MRSA §5005(1)(D))

  OER prepares a variety of energy data reports on a regular basis. See Appendix C.

- collect information, reports and data regarding energy resources from New England Power Pool and appropriate state agencies (5 MRSA §5004(3)(C))

  Since New England Power Pool information is readily available, OER has not duplicated this effort. OER does collect energy information from State agencies.

- collect inventory and delivery data from State's primary oil storage facilities (5 MRSA §5005(1)(O))

  These reports are referenced in Appendix C.

- compile list of all statutes on energy and energy conservation (5 MRSA §6005(1)(L))

  OER has prepared a list of all State statutes relating to energy as well as a list of all energy legislation enacted from 1975-1980.

Policy and Planning

- formulate a state energy policy (5 MRSA §5004(3)(I) and 5 MRSA §5005(1)(B))

  A Comprehensive Energy Plan was promulgated in January, 1976. OER will submit a revision of the Comprehensive Energy Plan to the Legislature in January, 1981.

- prepare a comprehensive state energy resources plan (5 MRSA §5004(3)(I) and 5 MRSA §5005(1)(A))

The OER has annually submitted an Emergy Resources Plan to the Legislature as of 1979.

- study and report to the Legislature on car pool parking facilities in Maine (% MRSA §5005(1)(K))

  The OER has not fulfilled this mandate. However, DOT is assembling this information, and the OER has an active Rideshare program in this area.

Public Education and Information

- disseminate energy information to public (5 MRSA §5004(3)(H))

  OER has employed a variety of methods, including newspaper, radio and TV announcements, conferences, and publications to disseminate energy information.

- encourage use of solar energy equipment (5 MRSA §5005(1)(M))

  The overall goal of OER's solar programs is the encouragement of use of solar equipment.

- encourage voluntary energy conservation (5 MRSA §5005(1)(C))

  The OER has developed a broad range of programs to encourage voluntary energy conservation. More than 5,000 families have participated in the free home energy audit program alone.

- establish voluntary training program for solar energy equipment installers (5 MRSA §5005(1)(O) and 32 MRSA §8002))

  As a result of efforts in this area, OER initiated the first voluntary solar installers certification program in the nation.

- prepare and distribute insulation fact sheet (10 MRSA §1485)

  OER distributes such a fact sheet as part of an entire package on home energy conservation.

Standards Development

- adopt energy efficiency building standards (5 MRSA §5004 (3)(J) and 10 MRSA §1415-A(1 and 2))

  The OER promulgated voluntary energy efficiency building in March, 1980.

- establish express warranty for sale and installation for solar energy equipment (10 MRSA §1493)

  This mandate has not yet been implimented.

- prepare model wood stove installation standards (5 MRSA (1)(N))

  Model woodstove installation standards were prepared and made available to the public as of October, 1980.

Testing, Inspection and Research

- certify applicant buildings as energy efficient (5 MRSA (3)(K&M) and 10 MRSA §1416)

  OER made available its building certification program in July, 1980. Since that time, 22 applications have been received. Most of these have been or will be certified.

- certify solar energy equipment for purposes of sales tax refund (37 MRSA §1760(38))

  Approximately 175 certifications have been made to date by OER in this area.

- certify solar energy equipment installers (32 MRSA §8003)

  As stated earlier, OER's solar installers certification program was the first in the nation. Over 200 installers have been certified to date.

- encourage and direct or sponsor research and development of alternate energy sources (5 MRSA §5005(G&H))

  OER sponsors research or assists Federal/regional efforts either through contractual arrangements or internally with regard to these areas: hydro, wind, wood, tidal, solar, alcohol fuels, cogeneration and district hearing.

- ensure accurate metering of home heating oil deliveries (5 MRSA §5005(D-1))

  OER has coordinated this with the Department of Agriculture, Bureau of Weights and Measures.

Accomplishments of the Office of Energy Resources

Since the oil embargo of 1973, there have been dramatic energy consumption reductions in Maine. For example, gasoline consumption has decreased 14 percent since 1978, and home heating oil consumption has decreased 20 percent since 1976. At the same time, Maine has rapidly increased its utilization of renewable energy resources. More than half the homes in Maine use wood for some portion of their heating, and there are about 1,400 new solar installations. Many small hydropower sites are being developed, and there is developing interest in wind, tidal, and peat energy.

Certainly not all of this activity results from the Office of Energy Resources. Increasing energy costs have been an important driving force. There are at least three major areas, however, where specific accomplishments can be demonstrated. Resource allocation programs have averted major energy supply disruptions.

Information and technical assistance programs have helped consumers and industries make wise energy decisions. Finally, Energy Conservation programs, such as the Institutional Buildings Grant Program, have saved a tremendous amount of fuel oil and money.

The Office has played an important role in ensuing adequate energy supplies in Maine through energy resource allocation. For example, in February of 1979, during a severe cold spell, one of the largest marketers of fuel oil in the State failed to receive an expected shipment of the product. Due to the upheaval resulting from the Iranian revolution the major supplier was unable to deliver the needed heating oil. When the marketer contacted the Office of Energy Resources, the company could meet demand for only a few more days before it ran out of product, and no other source of supply seemed available. The Office was able to negotiate a loan of 2,245,578 gallons of heating oil from the Defense Fuel Supply Point in Casco Bay. This product enabled the marketer to meet demand and averted a severe supply disruption. Three months later, the marketer paid back the borrowed fuel.

The Office has made significant contributions to dealing with Maine's energy problems through technical assistance to a variety of individuals, agencies and organizations. This assistance ranges from information packages and pamphlets to general staff assistance to groups interested in energy programs and plans, involvement of agencies and organizations in specific OER programs, presentation of proposals to the Legislature and general information distribution through the Maine media. Two examples of this assistance

include the Governor's Conference on Coal Utilization and environmental mediation in water power disputes. The coal conference was held in June, 1980, at the request of industry, and attracted 240 participants. For the environmental mediation, the Office played a brokerage role in a very difficult (and probably increasingly common in the future) dispute between a private hydropower developer and a group of lake shore front property owners. Through the Office's efforts, an environmental mediator was able to facilitate an agreement among the parties concerned. As a result, a new hydropower site is being developed on the Androscoggin River in Auburn.

Maine is the first state to establish what has become one of the most successful and widely copied energy conservation programs in the nation. In 1976 the Legislature enacted a resolve directing state agencies to study methods of reducing energy consumption in schools. In response, the Office of Energy Resources, the Department of Education and Cultural Services, and the Bureau of Public Improvements implemented a school energy audit program. The energy audit showed that conservation measures could produce substantial savings in money and energy, but they would take an initial investment to implement. The Legislature followed up by passing a $10 million bond issue for conservation measures in schools. More than 500 schools were audited, and more than 1600 projects completed using 90% state and 10% local funding. While the $4.5 million will cost about $6.75 million over the 10 year life of the bonds, the energy conservation measures save almost 2.3 million gallons of oil each year. The program has paid for itself in 3 years, and will continue saving local communities in

the years to come. Partly as a result of this program many school districts have been able to hold their energy budgets level, while oil prices have escalated dramatically.

Following Maine's success, the federal Department of Energy initiated a similar, nation-wide Institutional Buildings Grant program that the OER has administered since 1978. This program funds energy conservation projects for schools, hospitals, and local government buildings. The Legislature has also enacted supplemental bond issues of $2.5 and $7.0 million. To date, about $3.7 million federal, $7.5 million state, and $3.4 million in local funds have been expended. This energy conservation investment is yielding dividends of almost 7.2 million gallons of oil, or $6.8 million saved each year.

Appendix A - Study Order

SENATE ADVANCE JOURNAL AND CALENDAR

On motion by Senator TROTZKY of Penobscot,

(4-2)

WHEREAS, the Office of Energy Resources was established and funded by the Maine Legislature in 1974 to provide emergency and long-range planning, management and development of energy resources of this State; and

WHEREAS, since 1976 this office has increased from 7 positions and a budget of $65,000 to 47 positions including 8 new field assistants and a budget of $1,730,000; and

WHEREAS, the Office of Energy Resources is now being funded by over 90% of federal funds; and

WHEREAS, the taxpayers of the State of Maine pay both Federal and State taxes; and

WHEREAS, this office is presently seeking to enlarge its quarters and to further enlarge its staff with taxpayers' dollars from the Federal or State government; and

WHEREAS, conservation comes from the market place and economic conditions and not through added bureaucracy; and

WHEREAS, the citizens of Maine are installing insulation, woodstoves, water savers and alternative sources of energy dispite this bureaucracy; now, therefore, be it

ORDERED, that a freeze be imposed on any further hiring or expansion of the Office of Energy Resources until Legislative oversight is exercised as provided in this Order; and be it further

ORDERED, the House concurring, subject to the Legislative Council's review and determinations hereinafter provided, that the Joint Standing Committee on Audit and Program Review shall study the operation and proposed expansion of the Office of Energy Resources; and be it further

ORDERED, that the committee report its findings and recommendations, together with all necessary implementing legislation in accordance with the Joint Rules, to the Legislative Council for submission in final form at the First Regular Session of the 110th Legislature; and be it further

ORDERED, that the Legislative Council, before implementing this study and determining an appropriate level of funding, shall first ensure that this directive can be accomplished within the limits of available resources, that it is combined with other initiatives similar in scope to avoid duplication and that its purpose is within the best interests of the State; and be it further

ORDERED, upon passage in concurrence, that a suitable copy of this Order shall be forwarded to members of the committee.

(S. P. 772)

DIRECTOR

The Director of the Office of Energy Resources is responsible to the Governor for overall energy policy planning for the State of Maine, for administering the Office of Energy Resources and for meeting all statutory responsibilities which result from Federal and State Legislation.

Budget Amount: $ 26,000.00

$26,000.00

FY80

POLICY

	BUDGET AMOUNT
1) POLICY DEVELOPMENT AND REVIEW	
Activities include monitoring and review of federal, regional and State energy planning and policy procedures on behalf of the OER Director.	$ 11,700.
2) LEGISLATIVE LIAISON	
Activities include development and presentation of OER Legislative package, monitoring of energy legislation proposals and coordination with affected government agencies and interest groups.	(No allocation in FY 80)
3) INTERGOVERNMENTAL RELATIONS	
Activities include liaison with other state agencies, local government and the Governor's office with regard to policy implementation strategies.	1,500.
	$13,200.00

ADMINISTRATIVE

	BUDGET AMOUNT
1) CLERICAL SUPPORT	
Activities include providing clerical support for OER Professionals.	$ 55,161.
2) FISCAL AND ADMINISTRATIVE SERVICES	
Activities include management of all fiscal, administrative and personnel operations and policies of the OER	59,434.
3) DATA MANAGEMENT	
Activities include collection. analysis and preparation for policy dissemination of energy data. These activities are in support of data needs of various OER programs and include items such as mailing address lists in addition to hard energy data.	40,090.
	$154,685.00

DIVISION OF CONSERVATION PROGRAMS

	BUDGET AMOUNT
1) RESIDENTIAL ENERGY ANALYSIS PROGRAM (REAP) REAP offers home energy audits to homeowners at no charge. To date, the OER has advised over 5,000 homeowners of potential energy savings.	$ 48,070.
2) RESIDENTIAL CONSERVATION SERVICE (RCS) RCS involves development of a plan for utility sponsored energy audits for consumers.	(No monies allocated with Federal Program)
3) TRANSPORTATION PROGRAMS These include development of carpool, vanpool programs for major employers and urban areas. In addition, funding has been provided to cities for promotion of transit services.	66,770.
4) LOCAL ENERGY MANAGEMENT PROGRAM (LEMP) Through a contact with the Maine Municipal Association (MMA), LEMP encourages and promotes energy conservation in local government.	28,070.
5) PROCUREMENT PROGRAM This program supports energy efficiency procurement efforts within the Bureau of Purchases and provides a liaison to the federal government.	20,070.*
6) ELECTRIC UTILITY LOAD MANAGEMENT This program includes electricity needs research, as well as technology research. It also provides ongoing support for the Sears Island intervention.	30,070.

* ($18,000 pass-through to Bureau of Purchases)

DIVISION OF CONSERVATION PROGRAMS (cont'd)

	BUDGET AMOUNT
7) BUSINESS AND INDUSTRY PROGRAMS	
Through contracts with a Professional Engineer, this program assists small commercial and industrial firms.	$ 22,070.
8) ENERGY EFFICIENCY BUILDING STANDARDS	
This program develops and implements voluntary Energy Efficiency Performance Standards for newly constructed buildings.	92,570.
9) SCHOOLS AND HOSPITALS PROGRAM	
This program coordinates a comprehensive energy audit program for schools, hospitals, public care institutions and local government buildings in Maine.	276,734.
10) EMERGENCY BUILDING TEMPERATURE RESTRICTIONS (EBTR)	
This program involves monitoring compliance with federal temperature restricitons for commercial buildings as proclaimed by President Carter in August of 1979.	59,020.
	$643,444.00

DIVISION OF PLANNING AND RESOURCE DEVELOPMENT

	BUDGET AMOUNT
1) COMPREHENSIVE PLAN This program has generated " Overview of Maine Energy Data: for the 109th Legislature " and currently is developing a Comprehensive Energy Plan for Maine.	$ 10,353.
2) COGENERATION DEVELOPMENT This program involves research on cogeneration and district heating potential to encourage more efficient energy generation in Maine	11,170.
3) SOLAR ENERGY PROGRAMS This program includes marketing of solar concepts, public information preparation and distribution, training courses, curriculum development, certification cources, assistance to banking community, FMHA, etc.	51,170.
4) HYDROPOWER DEVELOPMENT This program involves hydro research, potential hydro inventory and coordination with affected national, state and local agencies, as well as the private sector.	9,220.
5) ALCOHOL FUELS DEVELOPMENT This program established and supports the Governor's Alcohol Fuels Task Force in order to advise on long-range policies.	10,304.
6) WOOD ENERGY PROGRAM This program involves preparation and distribution of wood energy information, wood supply and demand monitoring in addition to coordinating with affected government agencies and private interest groups.	16,303.

DIVISION OF PLANNING AND RESOURCE DEVELOPMENT (cont'd)

	BUDGET AMOUNT
7) WIND ENERGY PROGRAM	
This program recommends for funding by DOE specific wind sites in Maine.	$ 6,220.
8) TIDAL POWER PROGRAM	
This program provides financial support of and monitors tidal project development in addition to providing technical information on request.	23,220.*
9) PEAT INVENTORY AND ANALYSIS PROGRAM	
This 3 year program involves development of an inventory, analysis and potential feasibility of developing Maine's peat resources.	247,045.
10) COAL PROGRAM	
This program involves promotion of coal as a fuel to affected interest groups and consumers.	7,635.
11) APPROPRIATE TECHNOLOGY	
The OER coordinates a DOE Program that awards grants to individuals who have innovative energy ideas.	(No monies allocated with Federal Program)
	$392,640.00

* $20,000 to Passamaquoddy Tribe
Half Moon Cove Project.

DIVISION OF INFORMATION PROGRAMS

	BUDGET AMOUNT
1) ENERGY INFORMATION DISSEMINATION This program includes preparation and dissemination of energy information to Maine comsumers, coordination and promotion of newsworthy events and publication of a bi-monthly newsletter.	$ 13,485.
2) ENERGY EDUCATION PROGRAM This program includes a mini-grants program for secondary level teachers, development of energy curriculum in Maine's public and private schools and liaison capability to Maine Department of Education.	46,360.
3) ENERGY EXTENSION OUTREACH SERVICE This program established a statewide energy extension service, utilizing five field offices throughout Maine for "hands on" energy education to Maine consumers, small businesses, homeowners, banks and other interested parties.	35,000.*
4) ENERGY LIBRARY This program was being developed in FY80 and involves organization of an energy library available to staff, legislators, other government agencies and the public.	(No allocation in FY80)
	$94,845.00

* Total Program cost $310,000. in FY 81

DIVISION OF FUEL MANAGEMENT

	BUDGET AMOUNT
1) EMERGENCY PETROLEUM ALLOCATION PROGRAM This program includes distribution of state Set-Aside fuel reserves to areas of special need.	$ 50,143.
2) EMERGENCY PLANNING PROGRAM This includes development of a Gasoline Contingency Plan and a Maine Energy Emergency Contingency Plan.	20,503.
3) INVENTORY AND PRICE SURVEY PROGRAM This involves monitoring fuel inventories and deliveries of petroleum products to Maine. Price surveys are performed on a monthly basis and provided to the Governor's staff, the press and other interested parties.	6,950.
	$77,596.00

Appendix C

INVENTORY OF DATA COLLECTION AT THE MAINE OFFICE OF ENERGY RESOURCES

A. INTRODUCTION

The OPEC Oil Embargo of 1973/74 forced Maine, the Nation and indeed the World to examine our energy resources, supplies and demands. More recently the Iraq/Iran war, the Iranian Crisis, Opec price increases, spot shortages of gasoline (Summer of 1979), spot shortages of home heating oil (Winter of 1979, combined with the world political and economic climate have made us painfully aware of the necessity to collect and evaluate energy data.

The formulation of sound energy policy is dependent on our ability to gather and assess energy data. We must define and understand our State's true energy requirements in order to insure an adequate energy future for Maine.

B. PERSPECTIVE ON DATA COLLECTION

In order to be useful, a data base must meet three essential requirements:

1. Reliability or Integrity -
   We must have confidence that the data truly reflects the supply and demand situation and can be used with assurance.

2. Timeliness -
   The data must be up-to-date.

3. Adaptability -
   The data must be in a format which is easily accessible for a wide range of uses.

Due to the lack of timeliness and integrity, national energy data bases are of little value in formulating energy policy for the State of Maine. If this data were available with a lag time of one year, this data could be used as a historical base from which refinements, projections and analyses could be made.

OER involvement in the New England Energy Management Information System (NEEMIS) and more recently the Emergency Energy Management Information System (EEMIS) has led OER to the following conclusions.

1. These efforts produce limited results. Energy policy and analysis is dependent upon the collection and evaluation of reliable, timely and adaptable data.

2. All too often energy data is produced in a "top-down" fashion (aggregate data based on national or regional data is allocated based on assumptions) rather than a "bottom up" method (data collected from the source of distribution).

3. The time has come to place greater emphasis on the collection of data based on "bottom-up" methodologies.

4. Since Federal and Regional groups have indicated they have neither the resources nor inclination to collect "bottom-up" data and since it is to our advantage to have a clear view of supply and consumption patterns on a timely basis, the OER should place a greater emphasis on "bottom-up" data collection. For example, in order to evaluate the feasibility of realizing and equity of recent voluntary gasoline targets and the standby gasoline rationing program we must have reliable data sources. While the data for this analysis is available from the Bureau of Taxation if targets are set for other products which are not reported to the State on a timely basis, the analysis will have to be based on data which is less reliable.

C. CONCLUSION

The Maine Office of Energy Resources is recognized Regionally and Nationally as a leader in energy data collection and analysis. To date, the OER has been very active in the utilization of computerized tools for data management and analysis. Participation in regional and national energy data management groups has provided the OER with various mechanisms for storage, retrieval and evaluation of energy data. Also, invaluable experience has been gained in the management and development of a comprehensive energy data base.

The OER is committed to a "bottom-up" data collection method. Now that computer tools and resources are available to meet analytic needs, it is necessary to populate our data bases with reliable and timely data. The complexity of deriving data based on "top-down" methodologies often obscures the reliability and understanding of this data.

Maine citizens must meet the "energy future" with wide-spread social, political and economic support if we are to have a successful "energy future." Data management accurate information is the key to Maine's policy makers and planners in decision making to ensure adequate energy supplies for the future.

TITLE:	OER Bi-weekly Stocks & Deliveries Report, OER-070179.
PERIOD/SUSPENSE:	Twice monthly, 1st and 3rd Mondays.
PURPOSE:	To comply with Chapter 372 Public Law, by providing data on existing stock levels, and anticipated deliveries (withon the next 15 days).
DESCRIPTION;	Two page (single sheet). Completion instructions on one side. Respondent identification, address, and stock levels/anticipated delivery information on the other side.
CONTENTS:	Date of report, address, point of contact and telephone, reporting period, types of products and, by thousands of barrels: storage capacity, stocks on hand, expected deliveries. Percent of sulfur content for #'s 4, 5, and 6, certification and signature of respondent.
SOURCE:	Bulk storage terminal owners/leasees, involved in the storage of petroleum products as identified by Chapter 372 PL.
DISTRIBUTION:	OER Director, Special Assistant, Public Affairs Coordinator, all OER Divisions, and file.
PROPONENT:	Conservation Division.
SPECIAL NOTES/ INSTRUCTIONS:	None

TITLE	Heating Oil Supply/Price Monitoring Report, OER-080179.
PERIOD/SUSPENSE:	Twice monthly, 1st and 3rd Mondays.
PURPOSE:	Provides past and current price information on heating oil/kerosene, and inventory levels of saem in support of the Price Monitoring System (PMS) and to provide information to Region I Department of Energy (DOE) Office.
DESCRIPTION:	Multi-page report in two parts: Part I Historic Data, and Part II Current Data. Each part contains a limited description of the methodology used.
CONTENTS:	Introduction, sample collection form methodology, historic listing of average on-hand inventories and sales/deliveries, volume of storage capacity surveyed, number of facilities, and number of residential customers. Current data, contains average retail price (cents) of #2, and kerosene, high price, low price, average rack price (plus high and low), current inventory, total gallons delivered. Kerosene price data, #2 price data summaries for retail and rack. Inventory and delivery data summaries, selected graphic depictions. Rpt. date.
SOURCE:	Survey of 300 heating oil/kerosene dealers.
DISTRISUTION:	OER Director, Special Assistant, Public Affairs Coordinator, all OER Divisions, Region I DOE, file.
PROPONENT:	Conservation Division.
SPECIAL NOTES/ INSTRUCTIONS:	None

TITLE: OER Monthly Projected Gasoline Availability Report, OER-112879.

PERIOD/SUSPENSE: Monthly, 1st of month.

PURPOSE: Provides monthly projections on availability of gasoline.

DESCRIPTION: Two page report giving fractional, %age, and periodic availability information on gasoline, broken out by prime suppliers.

CONTENTS: Report date, projected deliveries, actual deliveries (same month previous year), fractional representation of projected/actual deliveries, percentage actual report previous year deliveries vs. current planned, actual demand last year, excess or shortfall, % of excess or shortfall, miscellaneous comments, historic and current allocation fractions by dealer.

SOURCE: Prime suppliers.

DISTRIBUTION: OER Director, Special Assistant, Public Affairs Coordinator, all OER Divisions, and file.

PROPONENT: Conservation Division.

SPECIAL NOTES/ INSTRUCTIONS: None

TITLE:	EIA-25 (s/s FEA1000) Prime Suppliers Monthly Report.
PERIOD/SUSPENSE:	Monthly, 1st of month.
PURPOSE:	Provide an indication of how much of each product type will be delivered to the State of Maine for projected month.
DESCRIPTION:	A company by company report of product availability, allocable products, and amount of State Set Aside (SSA) for the State Fuel Allocation Division to utilize to alleviate spot shortages.
CONTENTS:	Report date, product identification, company supply obligation, availability, SSA, allocability, State totals by product, SSA totals by company by product, comparison of base/current data.
SOURCE:	Individual companies.
DISTRIBUTION:	OER Director, Allocation Division, file.
PROPONENT:	Conservation Division.
SPECIAL NOTES/ INSTRUCTIONS:	RESTRICTED INFORMATION, no dissemination of individual company data beyond this office.

TITLE: OER Monthly Projected Kerosene Availability Report
OER Monthly Projected #2 Heating Oil Availability Report.

The above reports are under consideration. If published they would be similar to the OER Monthly Projected Gasoline Availability Report (OER-112879).

TITLE: Heating Oil Supply/Price Monitoring Report.

PERIOD/SUSPENSE: Yearly, January.

All other information as shown in summary of OER-080179.

TITLE:	Analysis of Motor Fuel, Distillate, Residual Oils and Electricity Consumption Patterns in Maine, unnumbered.
PERIOD/SUSPENSE:	Yearly, January.
PURPOSE:	To provide information designed to assist in assessment, definition, and understand motor fuel requirements in order to plan for adequate supplies in the future and insure equitable allocation of fuels in the event of shortages.
DESCRIPTION:	Multi-purpose report giving various analytical representations of in-state consumption patterns of gasoline, oil, and electricity, from 1973 forward.
CONTENTS:	Introduction, yearly gasoline consumption patterns, monthly gasoline cons. patterns, baseline gasoline consumption, yearly/monthly diesel cons. patterns, yearly/monthly avgas cons. patterns, Maine vs. national consumption patterns, per capita consumption, data sources.
SOURCE:	Bureau of Taxation, U.S. Department of Transportation, Ethyl Corporation, U.S. Department of Energy, Edison Electric Institute.
DISTRIBUTION:	OER Director and internal office use only.
PROPONENT:	Conservation Division.
SPECIAL NOTES/ INSTRUCTION:	RESTRICTED INFORMATION, no dissemination outside office.

TITLE:	Heating Oil Use in Maine, 1973-1979.
PERIOD/SUSPENSE:	One-time report, no applicable suspense.
PURPOSE:	To assist energy planners in defining adequate supplies and insuring equitable allocation during shortage periods.
DESCRIPTION:	A multi-page report giving historical depiction of state heating oil use in graphic and tabular format.
CONTENTS:	Introduction, graphic/tabular yearly heating oil use, graphic/tabular monthly heating oil use, graphic/tabular monthly kerosene use, daily heating oil use.
SOURCE:	Ethyl Corporation, NOAA.
DISTRISUTION:	OER Director, internal office, file.
PROPONENT:	Conservation Division.
SPECIAL NOTES/ INSTRUCTIONS:	RESTRICTED INFORMATION, no dissemination outside office.

TITLE:	Degree Day and Heating Oil Use Analysis, 1972-1980, unnumbered.
PERIOD/SUSPENSE:	One-time report, no applicable suspense.
PURPOSE:	To provide basis for determining increase or decrease in consumption of heating oil.
DESCRIPTION:	Multi-page, tabular and graphic depiction of use patterns in the State.
CONTENTS:	Foreword, symbolic and formula explanation, tabular depiction of heating oil use, 1973-1974 - 1979-1980, graphic depiction of use, 1972-1973 - 1979-1980, conservation analysis.
SOURCE:	Ethyl Corporation.
DISTRIBUTION:	OER Director, Special Assistant, Public Affairs Coordinator, all divisions, file.
PROPONENT:	Conservation Division.
SPECIAL NOTES/ INSTRUCTIONS:	RESTRICTED INFORMATION, not for dissemination outside office.

TITLE: 1975 Fuel Distribution Survey.

PERIOD/SUSPENSE: One-time report, no applicable suspense.

PURPOSE:
a. To establish state energy requirements.
b. To develop background information on hydro-carbon emissions from storage facilities.
c. To determine in-state energy flow.
d. To evaluate need for state petroleum reserve.
e. To establish resource inventories for civil emergency purposes.

DESCRIPTION: Multi-page report containing rationale and background for survey, tabular and catalog-listing type information regarding companies engaged in petroleum and other fuel distribution and sales. Information regarding computerization of information and appendixes, presenting specific energy-related tabular matter.

CONTENTS: Abstract (foreword), introduction, data and coding information, sample survey documents, data series information, tabular depiction and definition, total fuel sales by county by fuel type, total storage by county by fuel type, total sales to consumers by county by fuel type, total inventory by county by fuel type, ration of consumer to out of state sales, ratio of inventory to total sales, aggregate data for major dealers, total reported sales - major dealers, total reported storage - major dealers, total sales to consumers, total inventories, aggregate data for all respondents, total 1975 sales, total 1975 storage, directory of minor/major fuel oil dealers, conclusions/recommendations, appendices.

SOURCE: Major/minor fuel dealers primarily. Individual governmental/private sources to support some of data presented in appendices.

DISTRIBUTION: OER Director, all divisions, all state and federal energy offices, State Library, file.

PROPONENT: Conservation Division.

SPECIAL NOTES/ INSTRUCTIONS: Planned for update this year.