## Voluntary Renewable Resources Fund

2007 Annual Report



## December 1, 2007

Submitted By:

Efficiency Maine Maine Public Utilities Commission 242 State Street Augusta, ME 04333-0018

#### I. BACKGROUND

The Voluntary Renewable Resources Fund (Fund) was established by the Legislature in 2000 and is supported by voluntary contributions made by consumers on their electric bills. Grants from the Fund are available to small-scale community projects that will serve as demonstration projects designed to educate the community on the value and cost-effectiveness of harnessing natural resources for clean electricity.

The law governing renewable resources and the Fund is codified at 35-A M.R.S.A.  $\S3210$ . Section 3210 provides for the development of renewable, efficient, and indigenous sources of electricity production in Maine. Section 3210(5) establishes the collection and distribution of a voluntary fund for research at the State's publicly funded universities, or demonstration projects at certain community-based organizations. Section 3210(5)(D) defines organizations that are eligible for funds. Eligible organizations include Maine-based nonprofit organizations that qualify under the federal Internal Revenue Code Section 501(c)(3), consumer-owned electric cooperatives, quasi-municipal corporations and districts, community based nonprofit organizations and community action programs using renewable energy technologies meeting the definition of "Renewable Resource" as defined in  $\S3210(2)(C)(1)$  and (2)

Chairman Adams, recently described the Fund as follows:

The Voluntary Renewable Resources Fund is an innovative approach to providing power, creating jobs and protecting the environment as it allows all electricity consumers the opportunity, personally, to support the expansion of a clean energy market in our state. Maine is a state rich in natural resources and this fund encourages the development of clean energy projects small in scale that can be replicated community to community. Our hope is that as these projects become more prevalent throughout the state, more communities will want to pursue renewable energy projects.

As initially established, the Fund was administered by the State Planning Office (SPO). The responsibility for administering the Fund was transferred to the Public Utilities Commission (Commission) effective July 1, 2007. PL 2007, ch. 18.

Section 3210(6-A) requires the Commission to submit an annual report to the Utilities and Energy Committee (Committee) on December 1<sup>st</sup>. Section 3210(6-A) directs that the annual report include the following elements:

- \* A description of actions taken by the Commission pursuant to §§3210(5) and (6) during them prior 12 months;
- \* An accounting of total deposits into and expenditures from the Fund during the prior 12 months; and

\* A description of any research and development or community demonstration project that received a distribution from the Fund during the prior 12 months, including its objectives, current status and results.

The purpose of this Report is to respond to the requirements of §3210(6-A).

#### II. ACTIONS TAKEN BY THE COMMISSION DURING 2007

As noted above, the Commission assumed administrative responsibility for the Fund on July 1, 2007. In anticipation of assuming administrative responsibility for the Fund, the Commission issued and RFP for demonstration projects on May 30, 2007.

In response to the RFP, the Commission received requests for over 70 grant application forms. The Commission received 13 completed application forms by the August 31, 2007 deadline. On October 7<sup>th</sup>, the Commission selected 10 projects to receive grant money. The awards were for wind, solar and tidal demonstration projects. The projects receiving funding were located in places ranging from Kittery to Presque Isle. The total amount of funding awarded was \$362,889.

The Commission held a kick-off ceremony announcing the awards at the Yarmouth High School on October 23, 2007. A list of the selected projects is included in section IV below.

#### III. DEPOSITS AND EXPENDITURES

As noted above, administration of the Fund was initially assigned to the SPO. Deposits to the Fund were made in the early years of the Program and SPO held several stakeholder group meetings to discuss Fund expenditures, but no grants were awarded by SPO. In 2003, the SPO entered into an arrangement with the Maine Technology Institute (MTI) for the awarding of grants from the Fund. A summary of MTI's activities regarding the Fund from 2003 through 2006 is included as Appendix A to this Report.

Unobligated funds held by the MTI were returned to the SPO and were then transferred from SPO to the Commission. The Commission received Voluntary Renewable Resources Fund money from SPO in the amounts of \$233,944 on July 12, 2007 and \$46,867 on November 7, 2007. Those amounts, combined with voluntary contributions from ratepayers in the Commission's possession produced a total Fund balance of \$400,173 as of June 30, 2007. The Commission has made no expenditures from the Fund since assuming administrative responsibility for the Fund on July 1, 2007. However, as discussed in section IV below, the Commission has completed an RFP process and has made commitments to award grants totaling \$362,889. The various grants described in section IV below are at different stages in the process and funds will be received by grant recipients as they submit invoices to the Commission over the next several months.

#### IV. PROJECTS RECEIVING FUNDING

Section 3210(6-A) requires that this Report include a description of all projects funded "during the prior 12 months." As noted above, the Commission did not assume administrative responsibility for the Fund until July 1, 2007 and has not actually distributed funds to any project during the 12 months prior to the due date of this Report. However, as also noted above, the Commission has issued an RFP for demonstration projects and, based on the resulting bids, has selected 10 projects that will receive grants from the Fund in the near future. The 10 winning projects are summarized below.

Applicant	Resource Type	Grant Award
	Solar-Bee PV system to power wastewater	
	circulators; 350,000 kWh per year; technology	
	which can be transferred to 37 other systems in	
Norway Wastewater	Maine; annual estimated savings for powering	
Dept.	aeration facilities is over \$37,000	\$50,000
	3.5 kW PV array (plus 1 kW pole system);	
	Power Geodesic dome being used as	
	sustainability laboratory - part of transforming	
	Lincoln Middle School to a green school by	
Lincoln Middle	cutting energy costs and reducing the use of	
School - Portland	fossil fuels	\$37,200
	400-700 kW wind turbine - 1,000,000 kWh/year	
	- significant energy and environmental savings	
	for university; exercising leadership in their	
	commitment to environmental sustainability not	
University of Maine	only at the University but in the community;	
– Presque Isle	actively involves students	\$50,000
	50 kW wind turbine installed at the Kittery solid	
	waste transfer station, as a demonstration	
	project for renewable wind energy and as an	
	educational facility for Shapleigh Middle School;	
Town of Kittery	with interpretive displays	\$50,000
	6,000 watt PV system power display aquaria at	
Downeast Salmon	new laboratory and teaching facility; conversion	
Federation – E.	oriented "green building;" collaboration with M	
Machias	Machias, Washington Academy	\$50,000
	Solar powered water pump and irrigation	
	system; provide cache of food for community for	
	predominantly low-income individuals;	
	individuals contribute by donating time in one	
	way or another to the project; education	
	opportunity for volunteers and through	
Winter Cache	workshops on designing, setting up and using	
project - Portland	solar irrigation systems	\$8,711

	3.44 kW PV system on west wing - remote monitoring system accessible to students via internet; heliotronics program; workshop for district teachers on accessing system and	
Gray - New	incorporating into curricula; reduces energy	
Gloucester High	costs and is an educational resource for	<b>ФОС 450</b>
School	students	\$36,450
	Educational component called Heliotronics;	
	MEEP building system into curriculum - 3 kW PV	
	system; students distributed 2,000 CFLs during	
	Yarmouth Clam Festival, organized Green	
Yarmouth High	Spaces event raising money to buy RECs to	
School	offset school's carbon footprint	\$26,400
Middle School of the	5.6 kW PV system - ground mounted panels -	
Kennebunks	signage, curriculum tie-in community support	\$35,213
Ocean Energy	Restoration of historic tidal power dam on	
Institute -	Vinalhaven Island; all power generated will go to	
Vinalhaven	Vinalhaven School - 335,800 kWh per year	\$18,915
TOTAL		\$362,889

#### V. CONCLUSION

There is a great deal of renewed interest in the Voluntary Renewable Resources Fund Program. Even months after the closing date of the May 30<sup>th</sup> RFP, calls and emails were received by the Commission's Energy Division on a daily basis requesting information on the Program, applications for grants and even how to contribute to the Fund. Communities and non-profit entities around the state seem to have a pent-up desire to take action to use renewable resources to produce energy, demonstrate the viability of these resources and improve Maine's environment by reducing their carbon footprint. We expect the next RFP, which we will issue as soon as the Fund has been replenished, will be the subject of many excellent applications.

We would be happy to meet with the Committee to present this Report and respond to any questions you may have about the Fund.

> For more information, contact: Denis Bergeron Director, Energy Programs Division Maine Public Utilities Commission (207) 287-1366 www.efficiencymaine.com

### APPENDIX A

#### MAINE TECHNOLOGY INSTITUTE VOLUNTARY RENEWABLE RESOURCES FUND HISTORY

Since 2003, MTI has received \$107,917 from the PUC. Since 2003, MTI has awarded three cluster enhancement award projects receiving match from the Renewable Resources Matching Fund to the following organizations:

# 2004: Chewonki Foundation, Wiscasset (in collaboration with the Hydrogen Energy Center)

A three-kilowatt hydrogen energy system and demonstration project at the Chewonki Foundation in Wiscasset providing backup power for its Center for Environmental Education, as well as clean, drinkable water and heat. Visiting school, technical and engineering group can tour the Chewonki site as part of variety of education and outreach programs.

Cluster Award:	\$80,100
Match:	\$155,785
Renewable:	\$40,050

#### 2005: Northern Maine Development Commission, Caribou

To conduct a feasibility study to determine the economic viability of processing available animal fat and vegetable oil feed-stocks in the northern Maine/New Brunswick region into biodiesel fuel. The purpose of this initiative is to further enhance and develop the agriculture and food processing industry cluster in northern Maine.

Cluster Award:	\$44,700
Match:	\$51,760
Renewable:	\$10,000

#### 2006: Maine Energy Investment Corporation, Brunswick

To develop an online commercial photo voltaic and solar hot water pricing calculator. The calculator will enable Maine businesses to easily asses the value of photo voltaic and solar hot water systems for their specific energy needs while allowing solar energy technology providers to identify commercial customers.

Cluster Award:	\$23,200
Match:	\$24,600
Renewable:	\$11,000

MTI received its first allocation of Renewable Resources Fund monies in August 2003 totaling: \$69,239

MTI received a second allocation of \$38,678 in March 2004 for a total of \$107,917

Total amount of Renewable Resources Match Funding approved by MTI Board since 2003: \$61,050