

# RESOURCE EFFICIENCY MANAGER PILOT

## FINAL REPORT FOR

### "Resource Efficiency Manager for United States Postal Service Facilities"

*a project funded by the U.S. Department of Energy, Federal Energy Management Program, the Florida Energy Office, the United States Postal Service Southeastern Area Environmental Office, and the USPS Central Florida District.*



U.S. Department of Energy  
Federal Energy Management Program



**FLORIDA ENERGY OFFICE**  
DEPARTMENT OF COMMUNITY AFFAIRS



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Prepared by Advantek Consulting, Inc.  
[www.advantekinc.com](http://www.advantekinc.com)  
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# PROJECT SUMMARY

## Overview

While the United States Postal Service (USPS) has been successful in raising building energy efficiency by approximately 15 percent as of FY 2000 compared with FY 1985, achievement of the mandated<sup>1</sup> 30 percent increase in energy efficiency over the next four years will require a doubling of the rate they have improved their energy efficiency to date. In striving to meet this challenge, the USPS recognizes the need for participation in FEMP's innovative Resource Efficiency Manager pilot project. The U.S. Postal Service Southeast Area teamed with the Florida Energy Office (FEO), the Federal Energy Management Program (FEMP) - U.S. Department of Energy (DOE), Advantek Consulting, Inc., and Environmental Science & Engineering, Inc. to translate this need into action.

The project goal is the piloting of a Resource Efficiency Manager (REM) position serving the Central Florida District USPS. A Resource Efficiency Manager fills the much needed role of energy champion, a person who is dedicated exclusively to awareness and reducing all resource use, especially energy use, thereby creating a revenue stream enabling the position to become self-funded. Project activities were carried out to implement FEMP's strategy<sup>2</sup> at the United States Postal Service in Florida through public-private sector partnerships. Implementation successfully and cost effectively reduced energy use at the targeted Central Florida District USPS facilities as well as piloting the REM process for Florida and the USPS Southeast Area. This pilot will help pave the way for REM positions at State facilities and in the other Florida and Southeast USPS Districts, possibly at the national level.

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<sup>1</sup> Section 543 of the National Energy Conservation Policy Act (as amended by the Energy Policy Act of 1992 and Executive Orders 12902 and 13123) requires the USPS and all other federal agencies to achieve a 30 percent increase in energy efficiency by FY 2005 and a 35 percent efficiency increase by FY 2010. In Florida's public buildings, this Federal legislation is formally supported by the Agency Strategic Plan of the Florida Energy Office (FEO).

<sup>2</sup> A key component of FEMP's strategy is to form partnerships with State organizations founded on areas of common interest and leverage resources to achieve more energy savings at State and Federal facilities than the small amount of grant funding would purchase alone.



## REM Objectives

A pilot resource efficiency manager program was initiated by the Central Florida District in May 2000 with a target of generating \$150,000 in annual savings. The USPS shared in the cost of the REM pilot with FEMP and FEO by providing office space, computers, metering equipment, specialized software, a travel allowance, and a small budget for project implementation.

### Major Accomplishments

1. Directly supported a highly visible pilot implementation of a Resource Efficiency Manager program at the USPS Central Florida District. The REM is housed at the Mid-Florida Processing & Distribution Center (341,000 square feet). Energy consumption for this cluster of 208 pre-screened buildings is about 180 million MBtu, and energy expenditures are approximately \$3.9 million per year.
2. The Resource Efficiency Manager teamed with the Utility Company Account Managers, the District Energy & Environmental Coordinator, the Postmasters, Associate Postmasters, Procurement personnel, and Managers of Maintenance Operations (MMOs). Energy and environmental expert consultants provide goal setting, review, technical support and backstopping as an integral part of the program
3. The REM is dedicated exclusively to reducing resource use. Project achievements include an established, proven REM process which the USPS can replicate at other clusters, energy savings to date of at least 6 million MBtu and \$154,700 per year that are wholly attributable to the REM program, probable extension to at least one other USPS District in the State, and USPS-funded continuation beyond the grant period into FY-2002 and possibly beyond. These accomplishments are beyond what is typically achieved through performance contracting alone.

## PROJECT ASSESSMENT

### ✓ Goal #1: Generate Savings

The project goal of realizing \$150,000 per year in energy savings was met using a combination of awareness & training and small equipment upgrades. For example, one project is the installation of 160 programmable electronic thermostats, ordered after the REM discovered that most of the air conditioning units were left on over night and on Sundays. Most of the buildings have standard mercury thermostats, which do not automatically set back at night. Internet communicating thermostats are being installed at five buildings with a history of particularly high HVAC energy use. The expected savings from these upgrades alone is \$41,000 per year.

**Table of REM project accomplishments for FY-2001.**

Project	Annual Savings	Cost	Payback Months
Enabling ENERGY STAR computers	\$15,000	\$2,000	2 months
Energy reports	5,000	2,000	5
Power Monitors	40,660	24,640	7
Monitoring, awareness, & training	39,000*	25,000	8
LED Dock Lights	9,340	7,410	10
Internet Thermostats	7,000	9,570	16
Programmable Thermostats	34,000	60,000	21
Chiller Auto-valves	4,700	9,100	23
<b>OVERALL REM PILOT FY-2001</b>	<b>\$154,700**</b>	<b>\$139,720***</b>	<b>11 months</b>

\* estimated at 1% of FY-2000 energy expenditures  
 \*\* savings will appear as reduced expenses by close of FY-2002  
 \*\*\* first year of REM salary funded by DOE-FEMP/FEO pilot grant

Another project is the installation of power monitors at the five most energy intensive buildings. The monitors allow the REM to keep watch over energy use in real time over the Internet. The system can analyze trends, check for billing errors, and automatically send an e-mail alert to the facility BEM<sup>3</sup> when electric demand exceeds a set threshold. In a third example, the REM worked with the maintenance department to institute the use of 1-Watt LED lamps to replace the 70-watt flood lamps used at the truck loading docks. The expected energy savings for the LED measure alone is expected to be \$9,340 annually, in addition to maintenance savings from replacement every few years instead of every few months.

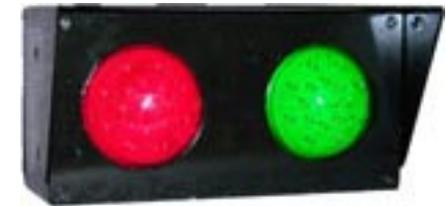
### ✓ Goal #2: Program Continuation

The project goal of continuation of the program beyond the grant period was realized through detailed documentation of savings generated, *Show Me the Money* justification reports, teamwork with and acceptance by other staff, and high visibility. Presentations and informal reports on the benefits and successes of the REM pilot were made to cultivate the support of managers at all levels. Projects were selected to compliment, not duplicate, those available via performance contracting. From the outset, the REM was well grounded in the importance of internal recognition of the REM program to its continuation.

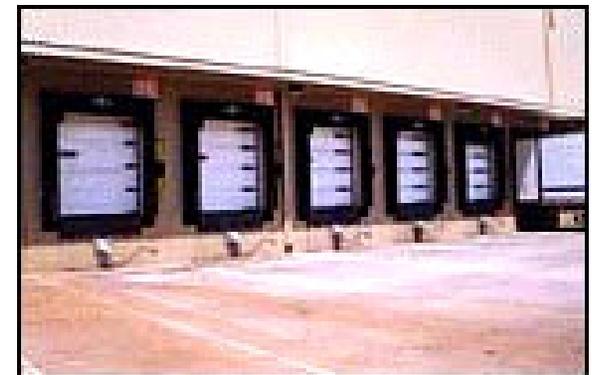
**Existing programmable thermostats are often not set up for energy savings, or bypassed altogether.**



<sup>3</sup> Building Energy Monitor / Equipment Mechanic



**These LED lamps draw only 1-Watt of power, as compared with the 70-Watt incandescent loading dock lamps they replaced. The LED lamps are guaranteed for 5 years of continuous service and they have an unbreakable polycarbonate housing.**



## STRATEGIES

Some of the methods used to implement the project are particularly effective. The first was to seek and hire a person to fill the REM position who is experienced with the way the Postal Service operates day-to-day, as well as having outstanding interpersonal skills, contagious enthusiasm for the REM concept, and excellent computer software skills. The second was to provide the REM with professional training and access to highly qualified energy experts for technical support and backstopping. Methods for achieving savings focus on awareness, information dissemination, detailed tracking and analysis of costs and savings, and small equipment upgrades. The selected upgrades are beyond what would be expected from performance contracting. This is because successful implementation required both team building and advanced technology.

Cooperation, awareness, and visibility have been key to the success of this pilot. In the last year, the Central Florida District REM has established a solid working relationship with account representatives from 12 of the 17 serving utilities, the district environmental coordinator, the district facilities specialists, postmasters, station managers, plant managers, maintenance managers, and the accounting technicians.

Energy awareness is a very important part of

### *Power Monitors*

As the saying goes, *you can't manage what you don't measure*. Internet communicating power meters are installed at some of the larger, most energy intensive facilities that account for \$1.6 million of the Central Florida District's annual energy expenditures. The selected meters, by Power Measurement<sup>b</sup>, were chosen based on a favorable combination of communication features, software capabilities, technical support, and life-cycle cost. With the meter connected to the main power line, the energy usage for the entire facility is monitored on a real-time basis and using the integral sliding-window demand feature. This allows the REM to identify and reduce expensive load peaks, and shift usage to lower rate periods. The system automatically sends an e-mail alert to the facility BEM when electric demand exceeds a set threshold.

The REM contracted with one of the serving utilities to do the installation at the first three sites since the meters had to be connected 'hot', that is, without interrupting power to the building. Savings is estimated to be around \$40,660 annually. In addition, the meters monitor power quality, harmonics, and power factor. Cost was \$17,900 for hardware and \$6,740 for installation. The project is expected to pay for itself in about one year.

<sup>b</sup> – <http://www.pml.com/Products/meters/7350.asp>

the program. Existing FEMP web training and *You Have the Power* materials are an effective and quickly available<sup>4</sup> resource for increasing energy awareness amongst staff. In addition to visiting the offices and speaking with the staff about energy conservation, the REM has put together a list of efficiency measures that has been distributed to all postmasters and station managers and is posted on the USPS Environmental website.

An especially successful awareness activity initiated by the REM is a monthly energy usage report listing all facilities in the district and their current month's usage compared to the baseline period. The report encourages competition amongst postmasters and station managers for recognition for the greatest savings. Others are made aware of lack of savings, or increases in energy use, which usually results in a request to the REM for assistance in identification and implementation of savings measures. The report is distributed to all postmasters and station managers. Facilities with reduced energy use are highlighted and congratulated in the report.

The REM has collected historical data from all utilities and input this information into a database using the Z-power software, a user-friendly

<sup>4</sup> <http://www.eren.doe.gov/femp/resources.html>

### *Programmable Internet Thermostats*

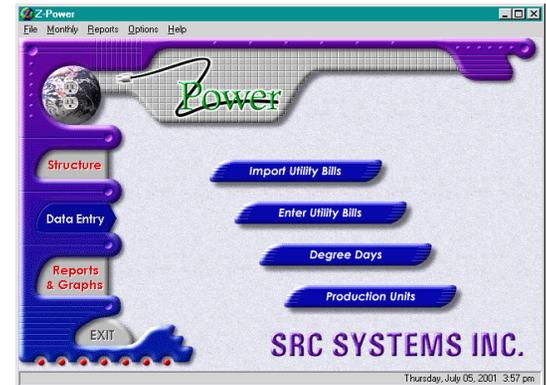
It is estimated that 40% of the \$1.7 million Central Florida District non-plant electric expenses goes to air-conditioning. According to REM surveys, only half of the usage is automatically controlled and many units are left on overnight and on Sundays. Installing programmable thermostats in those buildings that do not already have them will produce savings of about \$34,000 annually. Installed cost is about to be \$60,000 for 160 thermostats. The expected payback period is 21 months.

The selected thermostats, from Maple-Chase / Robertshaw<sup>a</sup>, were chosen because they have a number of energy saving features, they are compatible with most commercial equipment, and they are reasonably priced. The thermostats feature fuzzy logic control, which learns and adapts its control parameters to the particular building and air conditioning equipment. The units are capable of controlling fresh air dampers, and are available in single-stage, multi-stage, and heat pump models.

Internet communicating versions of the thermostats are being installed at five sites that have particularly high air conditioning energy use. The Internet feature allows the REM to monitor and program temperature set points and time changes from her workstation, while the station manager retains local control as well. Anticipated savings for the first five sites alone is approximately \$7,000 annually. Cost was \$9,570 and the expected payback period is about 18 months.

<sup>a</sup> – <http://www.mapleCHASE.com/robertshaw/>

MS-Access compatible front-end. The software allows the REM to track, audit, and analyze all utility information. Using Z-Power, the REM identified several facilities where the USPS was paying charges for meters that were no longer in use, billing errors, non-Postal Service meters, and other meter errors. Unused meters have since been removed and this cost has been eliminated. The estimated savings are approximately \$9,000 annually. The REM also discovered a billing error for one of the stations in Orlando for approximately \$5,000 that has since been corrected.



## Energy Star® Computers

*"Evolving technology will help resolve the quandary of whether to leave a computer on or turn it off. An emerging standard, called Energy Star®, lets computer equipment idle with almost no power consumption, and yet turn on instantly when needed."*

- Bill Gates, Microsoft Corporation

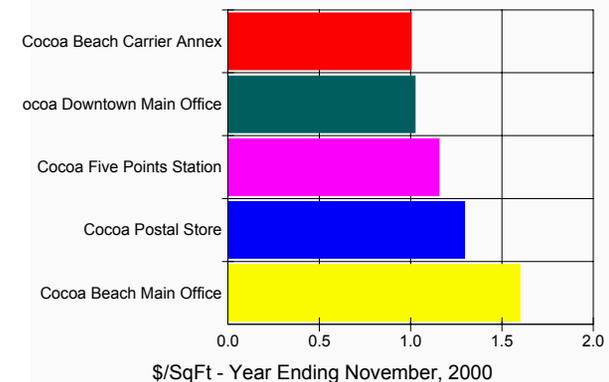
One PC with the Energy Star® feature disabled, if left on continuously, consumes between \$75 and \$100 worth of electricity a year. If turned off on weekends/nights, cost is about \$45 per year. The cost drops to about \$17 per year once the Energy Star® features are enabled. In comparison, a large photocopier consumes nearer \$500 per year. For a typical office environment with 100 computers and one copier, using Energy Star® enabled PCs, monitors and copier would save at least \$2,200 per year and as much as \$5,800 per year, depending on the current use pattern.

It's a myth that turning off computers and printers or allowing them to go into sleep mode causes problems with the network. The reality is that network software suppliers such as Microsoft and Novell confirm that properly configured networks should allow PCs and printers to become dormant or be turned off when required. This does not apply to servers.

Guide available at <http://eande.lbl.gov/EAP/BEA/LBLReports/39466/39466>

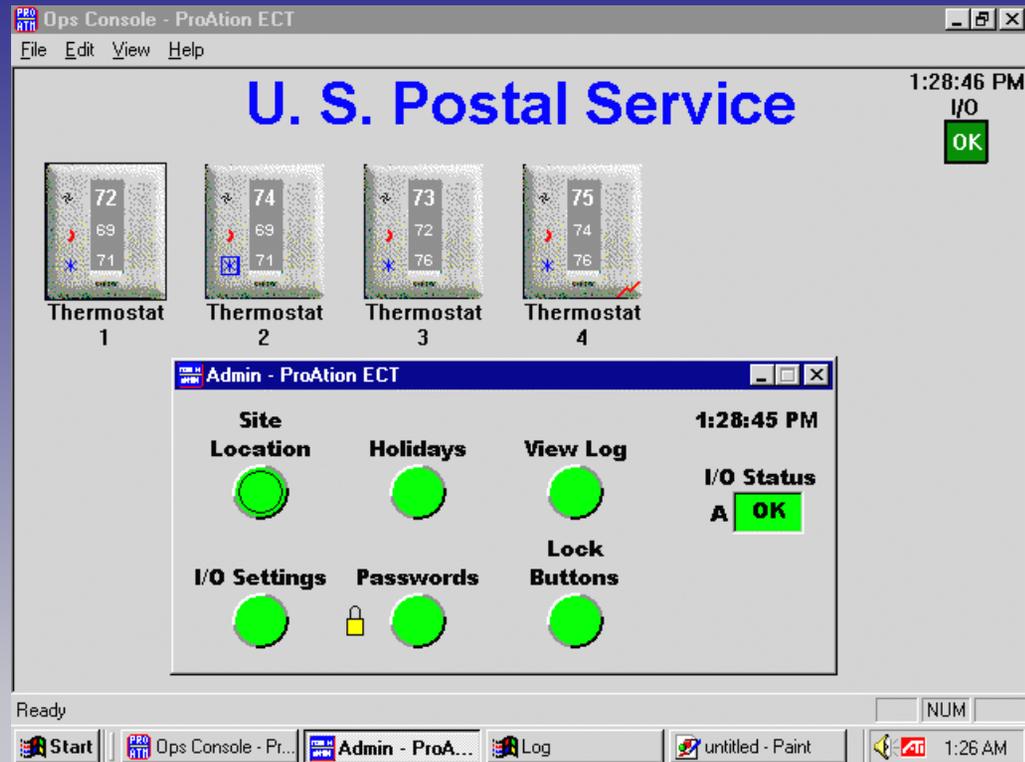
<sup>a</sup> - [http://www.energywise.co.nz/content/ew\\_business/office/offmyth.htm](http://www.energywise.co.nz/content/ew_business/office/offmyth.htm)

**All Energy Services Cost  
USPS Central Florida District (Selected Sites)**



**Software to track and analyze energy use and utility expenditures is a very useful tool for any energy management project. Z-Power is one of the more inexpensive and user friendly software options.**

Below is an actual screen capture of the Internet thermostat software as operated from the Resource Efficiency Manager's workstation. The REM's workstation is located at the District office in Orlando. The four thermostats pictured are located about 30 miles away at the Kissimmee Main Post Office. This saves the REM considerable travel time. The REM can monitor and control the air conditioning system in real time. The REM can observe set point changes made by staff at Kissimmee, read the actual space temperature, set occupancy schedules, and limit the changes that can be made locally.



Via trial and error, the REM has determined the most energy conserving temperature set points for each period of the day that do not result in comfort complaints. On each thermostat icon the upper number is the actual space temperature, the center number is the heating set point, and the bottom number is the cooling set point. The thermostats control units for the customer lobby, the office areas, the workroom floor, and the break and locker room area respectively. The REM has observed that the staff makes set point changes usually when their discomfort is due to an equipment failure. This points to the importance of preventative maintenance and proper operation of the air conditioning equipment.

# EVALUATION

The project team incurred numerous difficulties while paving the way for future REM programs. Nonetheless, the team was able to overcome or side-step most problems to meet the stated goals. Even the simplest energy savings projects are fraught with barriers and obstacles that require the REM’s constant attention for fear the project would otherwise ‘die on the vine’. Because operations and safety takes precedent over any other project, the energy projects are not always a priority with management and other USPS staff. Installation of energy saving hardware is dependent upon other management groups such as Facilities and Information Technologies, or upon outside contractors. Facilities staff is usually over tasked and under staffed just keeping equipment minimally operational, with little time available to install energy saving upgrades.

Walk-through energy surveys of four typical branch offices indicate significant savings potential from maintenance.

Unit Name	Area (SF)	Lighting	HVAC	Tot Savings	New ECI (\$/SF)
MELBOURNE MAIN OFFICE	20,640		4,174	<b>\$4,174</b>	\$1.42
PALM BAY BRANCH	6,453		2,996	<b>\$2,996</b>	\$1.86
INDIALANTIC STATION	3,364		1,479	<b>\$1,479</b>	\$2.07
MELBOURNE BEACH BR	3,360	855	534	<b>\$1,389</b>	\$0.86
<b>TOTAL</b>	<b>33,817</b>	<b>855</b>	<b>9,183</b>	<b>\$10,038</b>	<b>\$0.30 per SF saved</b>

Collection and entry of utility billing statements is a surreptitiously difficult task. This is due to the large number of serving utility companies, each with its own billing format, and the very large number of sites, each with one or more separate billing statements.

Unauthorized personnel having access to the thermostats and decreasing the energy conservation opportunities is a problem. Using remote temperature sensors throughout the facility and installing the Internet thermostats together in one area, usually the manager's or supervisor's office, seems to be the best approach. Flow down of incentives to all staff is needed to motivate them to support energy savings measures.

Lighting levels were checked using a color corrected, NIST accuracy traceable light meter to ensure that illumination meets, but does not exceed, the 35-50 foot-candle USPS requirements. Measurement of yellowish work bay HPS lighting with a non-color corrected meter usually gives erroneous readings.

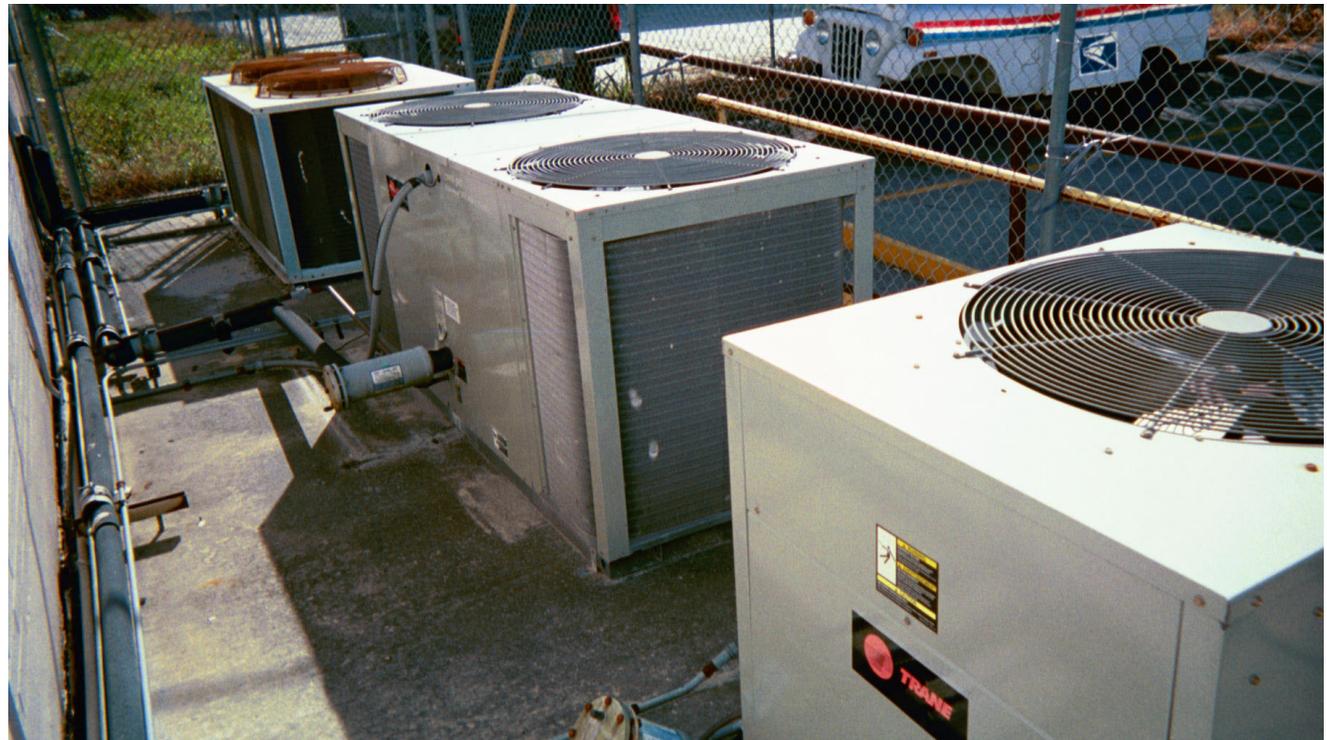


The requirement that the metering and software needed for REM program also be compatible with the USPS Intranet – to ensure that the system’s reliability was not compromised – made selection and installation unexpectedly time consuming and difficult. Furthermore, many components of the USPS Intranet are owned and operated by MCI and are outside control of the USPS Information Technology staff.

The REM encountered many unanticipated wiring problems and air conditioning maintenance issues during the installation of the thermostats. Contractors have had to perform unrelated repairs and rewire from unit to thermostat so that the new programmable ones would work properly.

Among the problems faced by the Postal Service during the pilot was a potential loss of revenue in Fiscal Year 2001 due to significant rise in the cost of fuel and of health benefits, and less than projected revenue growth. While this budget deficit underscores the need to reduce expenses such as energy costs, it also placed a heavy burden on the USPS staff supporting this project and contributed to delays in implementation and eventual savings realization.

**Proper maintenance of USPS air conditioning equipment is key to large dollar savings.**



## CONCLUSIONS

Conservative estimates of annual savings attributable to the REM are \$400,000 by the close of FY-2002 and \$800,000 by the close of FY-2003. These estimates assume that the USPS continues to support the REM, and that all measures are fully implemented. The expected cost for the REM-plus-expenses is about \$112,000 per year, and the cost for hardware and installation is about \$700,000. The REM program would have a payback period of at most 10 months with a net savings of \$150,000 per year in energy, plus significant maintenance savings due to servicing of existing equipment and replacement of older technology.

The challenges facing the REM for year-2 and 3 would shift from identification to implementation. Now that the REM has developed a successful menu of energy saving measures with proven and documented savings, the REM's attention can turn towards enlisting the full cooperation of management across departments and the immense logistics associated with even a deceptively simple project such as thermostat change out. Furthermore, the REM would support and help manage capital energy and SES<sup>5</sup> projects underway or planned for FY-2002 and 2003.

One priority would be to expand energy training across management groups in order to cultivate a cross-specialty of trained managers interested in saving energy. It cannot be overstated that the support and cooperation of facilities management and maintenance, information technology, district management, and operations managers is critical to realizing energy efficiency. *In fact, we have learned that energy savings are almost unachievable without concerted whole agency cooperation.* In addition to training, there is also the need to establish and maintain a "Management System for Energy" to ensure continuous improvement in energy efficiency. Teaching and training to promote

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<sup>5</sup> SES – Shared Energy Savings, the USPS's method of performance contracting of energy projects. It is anticipated that the first round of SES projects in the Central Florida District will reduce energy costs by \$356,500 per year (38% savings). The cost of implementation was expected to pay for itself within a simple payback period of 3.9 years based on a one time capital investment of \$ 1,403,200 (25.4% SROI). Performance contracting costs raised the payback period to 6.6 years. Finance charges will increase the payback period to about 9.6 years with a bottom line cost of \$3.4 million.

the Area's strategic energy management strategy would be one of the fundamental priorities for the REM at the Area level.

The recommended strategy for continuance of REM pilot would be to expand activities from the one district to several or all districts across the Southeast Area. This is in keeping with the larger role of the Environmental Compliance Specialists for FY-2002 onward. As the projects are shepherded to completion at the Area level, savings attributable to the effort of the REM will increase five to ten-fold (since the Central Florida district accounts for about 10% of total area

### **Energy Use by Automated Mail Sorting Equipment**

Sorting mail by automation offers a ten-fold overall savings over manual processing. It costs more than \$55 to sort 1,000 letters manually versus approximately \$5 to sort the same amount through automation. Postal sorting technology to read handwritten and poorly machine-printed addresses has increased from just two percent in 1997 to nearly 75 percent today. Sorting mail by automation decreases labor costs, but increases energy costs due to more equipment. The result has been a steady increase in the energy intensiveness of mail processing plants despite conservation efforts. From one-fifth to one-third of the energy used at processing plants goes to automated sorters.

Furthermore, the USPS has deemed that the energy use of sorting equipment is process energy, and therefore exempted from Executive Order 13123 requiring a decrease in energy use of 30% by 2005. According to the Department of Energy, there are two categories for exempting facilities from the goals of EO 13123. One is the EIF category, which includes industrial, laboratory, research buildings; these must achieve 25% savings in lieu of the standard 35% savings mandate. The second is the "Exempt" category as defined under Section 704: "a facility...for which an agency uses DOE-established criteria to determine that compliance with the Energy Policy Act of 1992 or this order is not practical." The latest FEMP guidelines restrict exemptions to "*Buildings and facilities in which it is technically infeasible to implement energy efficiency measures...*" A related FEMP-funded project is currently investigating the technical feasibility of increasing mail sorting equipment energy efficiency.

energy expenditures). From the pilot experience, we estimate that at least two years would most likely be needed to complete projects and realize savings at the Area level.

A second priority would be to automate and expand the collection and analysis of energy use data. This effort has three purposes: first, to identify potential projects and focus efforts on the most energy intensive sites. The second purpose is to follow up and be able to accurately document energy and dollar savings from both REM and SES projects. When the Postal Service invests in energy efficiency, they naturally want to know how much was actually saved and how long that savings lasts. The third purpose is, once implemented, the resulting data stream allows the REM to monitor savings persistence and pinpoint the need for corrective actions.

A third priority would put together energy efficiency with reductions in total operating expenses, with increases in mail volume, and with improvements in operations efficiency. There is an energy cost associated with each piece of mail. The effect on energy efficiency should be accounted for as mail volume and operations efficiency increases. This would be a crosscutting effort with finance and operations managers. The REM would work with information technology staff to tap into the existing finance and operations data-streams; and coordinate with Headquarters, Area, and District management to develop protocols for integrating finance and operations data streams with energy use analysis. Such a whole-organization approach would provide tools for better understanding and management of energy consumption at all Postal Service operations. This approach would likely benefit all the USPS departments.

**Two power monitors as installed in the main electric room at the Mid-Florida Processing and Distribution Center. The units continuously measure kW, kWh, KVAR, pf, Volts, Amps, and harmonic content.**



## **Resource Efficiency Manager Pilot Program Implementation Plan**

Task 1. Gain top-level management commitment and support.

- Establish a Resource Efficiency Management policy
- Establish an incentive, award and/or shared savings plan
- Develop strategies to involve and inform top management to keep the program visible
- Provide monthly activity and objective reports and quarterly progress reports to facility operators, management, and energy consultants.

Task 2. Contact utility account managers (water, gas and electric)

- Review incentive program offerings, rate schedules, and electronic metering options.

Task 3. Organize resource accounting data.

- Install and learn resource accounting software and/or remote metering software
- Input / transfer billing data and analyze for billing errors and anomalies
- Establish base year for each facility. Savings goal will be \$150,000 over 12 months.

Task 4. Regularly meet with DEC, MMO, consultants and coordinators.

- Determine monthly and quarterly goals, focus areas, training, and action plan
- Arrange introductory meetings and presentations – *visibility, visibility, visibility*
- Develop savings measures through a brainstorm process with all levels of staff

Task 5. Develop REM teams with BEMs

- Establish REM team at each building (Postmaster, BEM, Manager, Custodian, ...)
- Use teams as eyes and ears and to develop and implement facility operations guidelines and other activities

Task 6. Conduct energy management walk-through and interviews at all facilities

- Review consultants/ESCO energy reports and participate in on-site energy audits
- Develop a recommendations report and action plan for each facility / group of facilities

Task 7. Plan and execute training events

- Coordinate FEMP training for all members of REM teams
- Complete and certify in FEMP and AEE training workshops

Task 8. Set facility-specific task objectives

- Provide energy awareness “show and tell” workshop with REM team at each site

Task 9. Document successes, as they occur to justify continuation of REM position.

Task 10. Regularly solicit feedback from Postmasters, DECC, REM team, and consultants.

- Is it generally recognized that REM pilot program is saving much more than it costs?
- What would ensure continuation of the REM position beyond the 12-month pilot?

## **RESOURCE EFFICIENCY MANAGER WORKPLAN**

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- The overall goal is to generate documented savings of \$150,000 / 6,000,000 MBtu to make the REM position self-funded after the first year of pilot operation under the grant.
- Throughout the pilot, presentations and informal reports on the benefits and successes of the REM pilot will be made to cultivate the support of managers at all levels.
- The REM will be well grounded in the importance of high visibility and internal acceptance of the REM program to its continuation
- Teamwork, acceptance of the REM by existing USPS staffs, coordination with the ASO FEMP representative, and documented revenue are the highest priorities.

### **Four primary activity focus areas**

1. Resource accounting and sub-metering  
The REM will implement an advanced software program to better account for all site resources. Use of sub-metering as needed at larger sites will make on-site groups more aware and accountable to their resource use.
2. Energy Policies and Incentive Programs  
The site REM will work alongside Head Postmasters and other facility management to develop and implement resource efficiency policies with incentive programs for staff. Existing FEMP and *You Have the Power* materials will be utilized.
3. Building Energy Monitor programs  
The REM will work alongside the USPS Managers of Maintenance Operations (MMOs) to recruit and train site Monitors. They will be the “eyes and ears” of the REM at each facility, and help the REM in identifying opportunities for increasing efficiency and in evaluating programs and initiatives as they are implemented.
4. Facility-wide training and promotion  
The REM works with internal personnel such as maintenance and operations staff, as well as external personnel responsible for maintenance contracts, to provide informal training. The REM will develop articles and announcements for USPS newsletters and keep all levels of management and the RSO FEMP representative informed of progress.

### **Evaluate Effectiveness**

- A system for tracking the resource savings related to and/or wholly attributable to the REM program will be developed. This system will be integrated into the resource accounting system, with the addition of a REM project database listing expected savings, and actual savings where verifiable.
- All partners beforehand will agree upon a system of determining the revenue produced by the REM. Overall facility energy use would be statistically analyzed to remove as much of the variations due to weather, other energy projects, and other changes in equipment or operation as possible.

## POSITION DESCRIPTION

### PILOT PROGRAM - RESOURCE EFFICIENCY MANAGER (REM-FEO-DOE/USPS)

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**Location:** USPS Mid-Fla P&DC – responsibilities apply to entire Central Florida District

#### Position Overview

Under the general direction of the District Energy Coordinator the Resource Efficiency Manager will:

- ❑ Develop and implement resource conservation programs;
- ❑ Monitor and report resource use at each district facility;
- ❑ Promote a strong resource conservation ethic within the USPS and the community
- ❑ Provide appropriate training, and;
- ❑ Coordinate/communicate with the DEC, MMO, AECC, FEMP, and energy consultants.

#### Qualifications

The REM will be well grounded in the importance of high visibility and internal acceptance of the REM position to promote its continuation beyond the 12-month pilot period. Teamwork, acceptance of the REM by USPS staff at the facilities, coordination, and documented revenue are the highest priorities.

- ❑ Experience in business, education and/or technical positions
- ❑ Strong interest in operational resource management
- ❑ Experience coordinating and conducting workshop presentations and incentive programs
- ❑ Exceptional interpersonal communication skills, enthusiasm, flexibility and creativity
- ❑ Computer and analysis skills – MS-Excel a must
- ❑ Educational or experience pre-requisites for completion of FEMP and AEE training workshops

#### General Responsibilities

1. Resource accounting and sub-metering  
The REM will implement an advanced software program to better account for all site resources. Use of electronic sub-metering as needed at larger sites will make on-site groups more aware and accountable to their resource use.
2. Energy Policies and Incentive Programs  
The site REM will work alongside facility management to develop and implement resource efficiency policies with incentive programs for staff. Existing FEMP and *You Have the Power* materials will be utilized.
3. Building Energy Monitor programs (BEMs)  
The REM will work alongside Managers of Maintenance Operations (MMOs) to recruit and train site BEM's. The BEMs will be the “eyes and ears” of the REM at each facility, and help the REM in identifying opportunities for increasing efficiency and in evaluating programs and initiatives as they are implemented.
4. Facility-wide training and promotion  
The REM works with internal personnel such as maintenance and operations staff, as well as external personnel responsible for maintenance contracts, to provide informal training. The REM

## Performance Tasks

Presentations and informal reports on the benefits and successes of the REM position will be made to cultivate the support of managers at all levels. A system for tracking the resource savings related to and/or wholly attributable to the REM program will be developed. This system will be integrated into the resource accounting system, with the addition of a REM project database listing expected savings, and actual savings where verifiable.

- I. Monitor and report use habits and trends:
  - Establish an energy accounting database using designated software
  - Coordinate with the facility operator to identify savings opportunities
  - Complete walk-through surveys of each facility during and after normal operating hours
  - Develop and use standardized survey forms
- II. Report base year consumption data to management and building staff.
- III. Prepare monthly status reports that include an assessment of savings for review by management, building staff and occupants.
- IV. Coordinate with management to provide resource efficiency information and training for all staff and occupants through such means as posters, newsletters, presentations and workshops.
- V. Develop a recognition program that encourages actions towards goals and provides financial or other rewards when goals are met.
- VI. Coordinate with BEMs and Postmasters to develop conservation teams to assist with implementation of REM program initiatives at each building.
- VII. Work closely with representatives of local utilities.