

Energy Efficiency FACTSHEET

RCM: A Tool for Public Facilities

So many utility customers – school districts, local governments, universities, and others – have been unable to implement even simple energy efficiency improvements with short paybacks. The reason is often a lack of qualified staff. Few have the time and expertise to systematically investigate and capitalize on energy efficiency opportunities. Many organizations feel unable to justify the expense of hiring someone to accomplish this, especially in tough economic times.

A resource conservation manager (RCM) is one potential solution. This person helps a facility reduce operating costs, increase efficiency and promote environmentally friendly operations.

A RCM program is a coordinated effort to manage the resources and services used – and waste generated – by the facility. It involves careful tracking of resources and attention to operational efficiency. The program focuses on occupant comfort, cost-effectiveness and assuring that equipment is used only when needed. Operational savings are gained through organization, analysis and communication.

A facility can expect to see quantifiable results within the first six months once a comprehensive RCM program is in place. Most RCM programs achieve eight to 10 percent savings on utility bills after the first year, depending on the number of facilities involved and level of management commitment. In a good application, the energy savings more than cover the salary of the RCM.

Even as public-sector budgets shrink, RCM programs are cropping up in organizations, both large and small, particularly in school districts and local governments. Many of these new RCM programs are supported by utility incentive assistance to cover the start-up costs.

RCM Activities

Among the activities of a RCM are the following key tasks:

Itemize and track resource use in all aspects of the organization

Using resource accounting software, a RCM can analyze billing data to identify billing errors, select better rate schedules, track down inefficient equipment, locate hidden water leaks, institute efficient operational

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procedures, and more. Once established, resource accounting can be used to set savings goals for the organization and forecast resource budgets.

Useful accounting tools include **Utility Manager** from LPB Energy Management (www.lpbenergy.com) and **EnergyCAP** (www.energycap.com). EPA's **Energy Star Portfolio** is not as in-depth as the others but can also be useful. A directory of building energy software tools can be found at www.eere.energy.gov/buildings/tools_directory.

Stimulate resource efficiency interest among staff and occupants

Efficiency thrives on good communication. RCMs use proven in-house communication and

education strategies to heighten efficiency awareness among operations staff, management and occupants.

Identify cost-effective and efficient capital projects

A RCM can help to identify cost-effective capital projects through resource tracking, facility audits and by gaining a good understanding of each facility's operations. RCMs can also simplify budget forecasting because anticipated savings can be calculated in advance and documented during post-project operations.

Demonstrate responsible resource use to the public

When budgets get tight, the RCM can document the progress of efficiency efforts and demonstrate that the organization is carefully and successfully managing resources.

Leverage programmatic and financial resources

Utilities, local governments, state government and federal agencies all have tools and services (and, in some cases, funding) that can be used in RCM program efforts.

Key Elements for Success

Some key elements for success have revealed themselves as RCM programs have evolved. The applicability of these elements varies according to the need and culture of the particular organization:

- Strong policy outlining RCM goals and responsibilities and highlighting management commitment



A sample of equipment used by RCMs to measure and track facility resources.

- A qualified person, properly equipped to act as the Resource Conservation Manager
- An administrator or manager who helps navigate the RCM program through policy/management channels – a “champion” for the program
- Buy-in and support by facilities and maintenance staff and occupants
- A recognition program with awards for occupants and staff who contribute the most
- Patience by all to allow the work to be done correctly and consistently

What to Expect

A full-time RCM will stay very busy for two years in an organization that has been spending at least one million dollars per year on utility costs. That level of involvement may decline naturally after the resource accounting system is fully operational, facility audits and reports are completed and facility operating guidelines are instituted. Capital efficiency projects could be scheduled beyond the two-year period.

In approximately three years, the RCM's workload may evolve to include helping with plans for new facilities and making plans for more capital intensive projects. Ongoing work will consist of data entry and analysis, periodic routine reports, facility surveys, and training/education refreshers.

With changes in staff, building use, and technology, the RCM role continues to have ongoing importance. Renewal of occupant and management encouragement and training programs is crucial throughout the life of the RCM program, as is recognition for continued or maintained improvements.

The annual salary of a full-time RCM can range from \$50,000-\$100,000, depending on experience and qualifications. Experience shows that after the first year, the salary can be paid for by utility savings. By the end of the second year, savings will likely surpass the cost of the RCM program. After that, some level of involvement is needed to maintain savings and continue to free the organization's budget of avoidable resource expenditures.

Additional costs include:

- Resource accounting software – \$500-\$10,000
(depending on the organization's size and complexity)
- Computer and printer – \$2,000
- Light meter and miscellaneous tools – \$500
- Incentives and recognition
- Staff training

A Role for Utilities

Utilities seeking to stimulate energy savings among their customers would do well to consider promoting (and financially supporting) the formation of RCM programs. Focus on the larger school districts, local governments, colleges, universities, and other utility customers with enough buildings and energy use to make the investment worthwhile. Once kick-started, the program will hopefully operate for years and deliver an excellent return on investment.

Additional Information

For additional information on getting a successful RCM program started that will generate energy savings for years, visit the WSU Extension Energy Program RCM website:

www.energy.wsu.edu/apps/Projects/ResourceConservationManagement.aspx.

Check out other resources on energy efficiency and best practices at www.EnergyExperts.org.

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