Energy Efficiency Case Study

Varian Medical Systems

At a glance

Varian Medical Systems
Utah

Projects:
25 energy efficiency projects in 12 years using Energy FinAnswer®, FinAnswer® Express, Recommissioning and Self-Direction Credit programs. Projects involved high-efficiency lighting, process cooling and other upgrades to 350,000 sq. ft. facility.

Annual energy savings:
$294,236 (4,453,695 kwh/year)

Project cost:
$751,753 before incentives
$457,828 incentive payments
$293,925 after incentives

Simple payback:
2.6 years before incentives
1 year after incentives

Project highlights:
- Lighting
- HVAC, process cooling & controls
- Other benefits:
  - Operational improvements
  - Lower maintenance costs
  - Improved space temperature control

Energy consultant:
ETC Group, LLC

Electrical contractor:
Hunt Electric, Inc.

Efficiency projects save money, help environment

As the world’s leading independent supplier of X-ray tubes and digital image detectors for filmless X-rays, Varian Medical Systems in Salt Lake City does things in a big way. That includes finding ways to cut energy costs while being an exemplary steward of the environment.

Toward those efforts, Varian teamed with experts from Rocky Mountain Power’s energy efficiency programs and together they scoured Varian’s 350,000 sq. ft. facility to find ways to trim energy use and costs.

“ When we started, our motivation was cost savings, but over time the environmental aspects have become more and more important.”

Doug Carlisle
Facilities and services manager
Varian Medical Systems

The projects

Using the technical services from the Energy FinAnswer® program, Rocky Mountain Power helped Varian identify energy efficiency opportunities — one project at a time — starting with a lighting retrofit. Varian took the information along with the incentive offer and implemented the recommendations. Meanwhile Rocky Mountain Power provided the analysis for the next set of energy-saving opportunities. Over time, Varian has used all of Rocky Mountain Power’s energy efficiency programs to implement a long list of projects.

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For example, Varian installed variable frequency drives (VFD) on the fan motors of four cooling towers. The fans operate more efficiently if their speed is changed to match process needs instead of periodically being turned on and off. During a facility expansion, more efficiency and cost-savings were realized when Varian chose T8 fluorescent lighting with electronic ballasts for their new maintenance, receiving and office areas.

Since 2001, Varian has implemented 25 energy efficiency projects, using Rocky Mountain Power’s Energy FinAnswer, FinAnswer® Express, Recommissioning and Self-Direction Credit programs. The collaboration with Rocky Mountain Power’s programs has been so successful, Varian has integrated energy efficiency into its business plan. The X-ray products manufacturer includes a specific allocation for energy efficiency improvement projects in their budget each year. Varian is now moving to the next generation of lighting projects and further improving on the upgrades they completed when they first began working with Rocky Mountain Power.

Savings
Varian Medical Systems’ energy efficiency projects are saving more than 4.4 million kilowatt-hours of electricity. That translates into $294,000 in annual savings. What’s more, Varian has received more than $457,000 in Rocky Mountain Power incentives for lighting, heating/cooling and other upgrades at its plant site.

Sustainability commitment
To demonstrate their commitment to the environment, Varian is investing their dollars saved from energy efficiency upgrades in Rocky Mountain Power’s Blue SkySM renewable energy program. Varian’s participation in the Blue Sky program will avoid 1,260 tons of carbon dioxide annually, which has environmental benefits equivalent to not driving a car more than 2.5 million miles.

About Rocky Mountain Power programs
We offer a variety of programs to help our commercial, industrial and agricultural customers in Utah, Idaho and Wyoming build energy efficiency into new construction and retrofit projects. Programs offer technical expertise and cash incentives for lighting, HVAC, industrial processes and more.

Let us help you get started
For more information on how we can assist your facility:
- Visit wattsmart.com and inquire online.
- Email energy.expert@rockymountainpower.net.
- Call our energy experts toll free at 1-800-222-4335.

Because there are some requirements to qualify for an incentive, it is important to call us before you start your project.

Pictured from left: Chris Helmers, Rocky Mountain Power, demand-side management; Lori Hansen, Rocky Mountain Power; and J.C. Smith, Varian Medical Systems’ environmental manager.

“Varian has always been supportive of our energy efficiency programs and has established an annual budget item to implement them. This drives them to identify new energy efficiency projects every year.”

Lori Hansen
Customer and community manager
Rocky Mountain Power