

Utah Renewable Energy Conference Energy Efficiency

April 2011

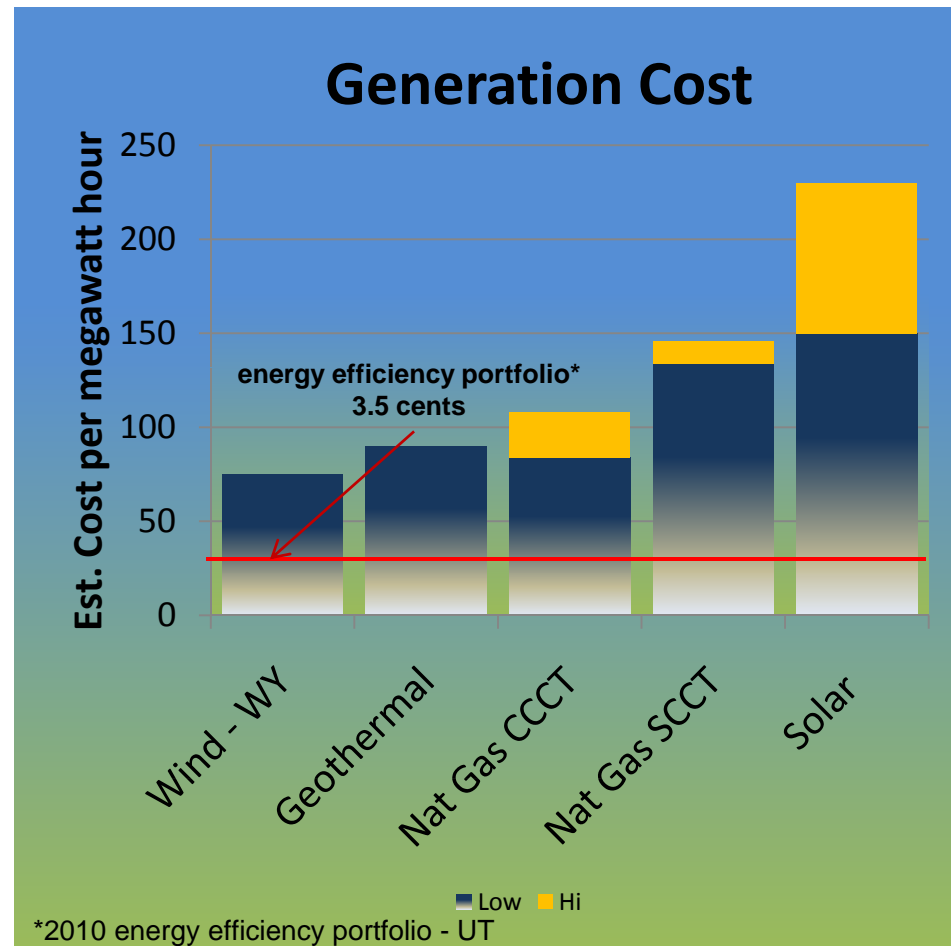


 **PACIFICORP**

Let's turn the answers on.

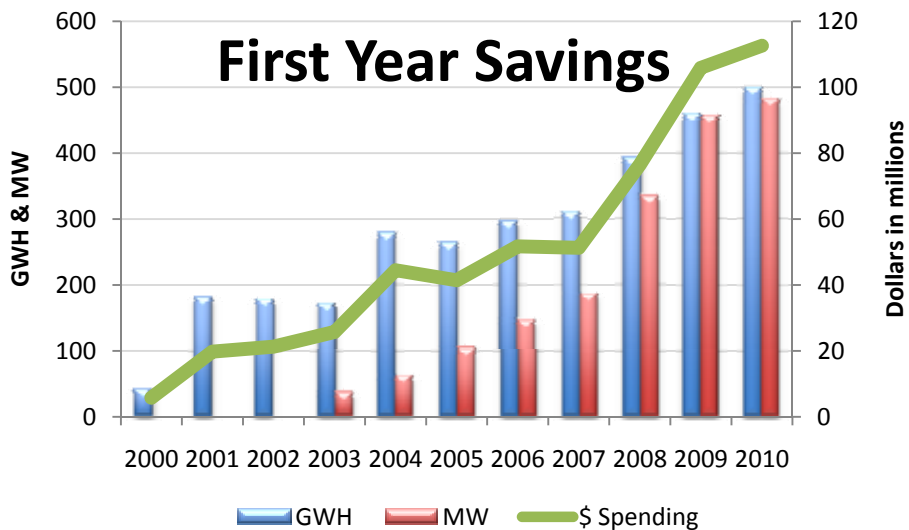
Saving Energy = Saving Money

- Rocky Mountain Power and Pacific Power customers invested \$112 million in energy efficiency, conservation and peak reduction programs in 2010
 - High efficiency equipment, appliances, fixtures and processes
 - Structural improvements (insulation, windows, etc.)
 - Education and outreach
 - Utility dispatched control of customer equipment (air conditioning and irrigation pumps)
- Cost effective for PacifiCorp's customers compared to alternatives



\$1 investment → ~ \$2.36 in long-term benefits*

Saving Energy



* 2010 Rocky Mountain Power and Pacific Power

Benefits are predictable, measurable and long lasting

2010 Utah energy savings =

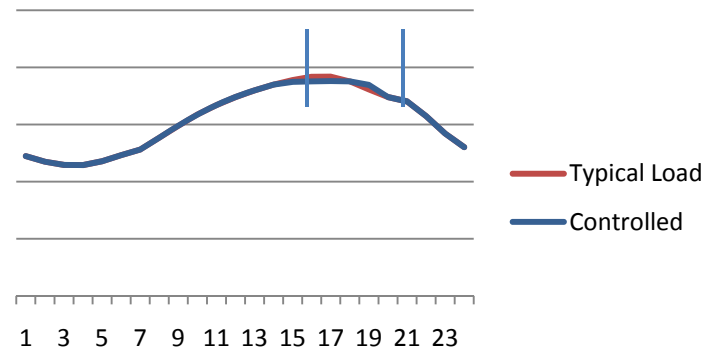


**Generation from
~ 80 MW Wind Farm**

Peak Reduction

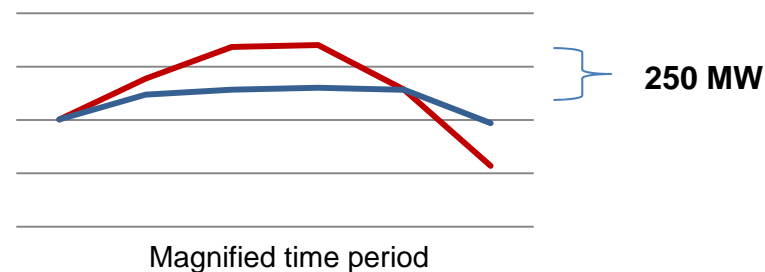
Air Conditioning Program

- Increased customer outreach
- Increased participation by 6.9% from 2009-10
- Increased capacity under control by 7.1% from 2009-10
- Approximately 15% of residential customers participate in Cool Keeper; 25% of those eligible or with central electric cooling



Irrigation Programs

- Increased participation
- Increased capacity under control
- Addressing impacts on distribution system



Dollar invested results in \$1.50 in benefits

2010 peak reduction from control of customer equipment



~100,000 Homes

How did we do in 2010?

- **State, regulatory and customer support**
- **975 commercial and industrial projects**
 - 55% of the savings
 - Lighting, process improvements (variable speed drives, high efficiency motors, heating and air handling, etc.), refrigeration and space cooling, fruit storage, etc.
- **Residential Programs**
 - 36.8 million square feet of insulation
 - 0.75 million square feet of windows
 - 1.3 million compact fluorescent light bulbs
 - 36,000 high efficiency appliances
 - 15,500 refrigerators/freezers removed and recycled
- **125,000 volunteers in Cool Keeper and irrigation load control**

**In 2010 industrial contributed 20% of the funding
and benefited from 22% of the investment***

*Excludes Oregon

Commercial and Industrial Programs

- **Prescriptive (New and Retrofit)**

- Defined Measures
- Defined Incentive



On average a dollar invested returns \$3.65 to all customers

- **Custom (New and Retrofit)**

- Comprehensive, investment grade engineering analysis funded by utility
- Incentive based on commission approved formula recognizing:



On average a dollar invested returns \$4.37 to all customers

- **Self Direction of Investment**

- Customers > 1 MW or 5 Gwh/yr
- Comprehensive, investment grade engineering analysis funded by customer
- Customer receives monthly credits against the Customer Efficiency Charge for 80% of project cost



On average a dollar invested returns \$3.10 to all customers

For every dollar invested participants receive > \$3.50 in benefits

Examples

High-efficiency Air Conditioning Units (New Construction - Prescriptive)

Annual energy savings: 25,500 kwh/yr

Energy efficiency upgrade costs

\$10,425 (*incremental) cost

(\$ 5,792) utility incentives

\$ 4,633 participant's cost

Simple payback

4.1 years before incentives

1.8 years after incentives

Other benefits

Improved working conditions

Easier equipment maintenance

*Cost to upgrade from code compliant to high efficiency

Condenser unit & controls system upgrade (Retrofit -Custom)

Annual energy savings: 2,133,434 kwh/yr

Energy efficiency upgrade costs

\$463,786 total cost

(\$231,893) utility incentives

\$231,893 participant's cost

Simple payback

5.9 years before incentives

2.9 years after incentives

Other benefits

Facilitates maintenance of ISO certifications

Increased plant production

Lower impact on the environment

How to take advantage

FinAnswer Express

Prescriptive

1. Before you start your project contact us or an Energy Efficiency Alliance Vendor
2. Sign an agreement before you order equipment for retrofits.
*Post purchase application for new construction
3. Upgrade your equipment
4. Submit project cost documentation including invoices identifying material and labor cost
5. We complete a post-installation inspection
6. Receive incentive check

Energy FinAnswer

Custom

1. Before you start your project contact us
2. We provide an engineering study
3. Sign an agreement before you order equipment
4. Upgrade your equipment
5. Submit project cost documentation including invoices identifying material and labor cost
6. We complete a post-installation inspection
7. Receive incentive check

Self-direction

Custom

1. Perform an investment grade engineering study
 2. Submit your project for pre-qualification* along with the program agreement
 3. Upgrade your equipment
 4. Submit project cost documentation including invoices identifying material and labor cost
 5. Post-installation inspection
 6. Receive a credit on your bill
- * Pre – qualification recommended but not required.

What does the future look like?

- **Energy efficiency will become increasingly important in meeting the nation's energy requirements**
- **Investments are designed to reduce the long term cost of energy**
- **Benefits are shared**
 - **Participating customer benefits from lower overall energy prices, improved process efficiencies and improved quality of life**
 - **All customers benefit from a lower energy supply cost**
 - **States benefit through increased employment and financially stronger industries**
- **What we need to overcome**
 - **Competition for capital**
 - **Lack of incentives other than from electric utilities**
 - **Overcome the limited focus on capital investment**

Questions