



# IT'S JUST SMART BUSINESS

**HOLLADAY PARK PLAZA UPGRADES NEW CHILLER AND TRIMS ANNUAL ENERGY COSTS BY AN ESTIMATED \$16,700**

## HOLLADAY PARK ASSISTED LIVING PROJECT-AT-A-GLANCE

### Equipment installed

- Centrifugal magnetic-bearing chiller with variable frequency drive
- Direct digital controls

### Financial analysis

- \$47,964 in Energy Trust cash incentives
- \$95,927 project costs
- \$16,700 estimated annual energy cost savings

### Estimated annual savings

- 223,000 annual kilowatt hour savings
- 85 tons annual carbon dioxide savings

Life at Holladay Park Plaza, a continuing care retirement community in Portland, is geared toward living life to the fullest. And comfort is a key ingredient. When the 50 year-old chiller that serves Holladay Park's 16-story Tower Building could no longer keep up with demand, it was a problem that needed prompt attention. Temperatures were inconsistent, particularly during spring and fall when the 382,000 square-foot building went from heating to cooling in the course of a day. In the heat of the summer, the chiller couldn't deliver comfortable temperatures to Holladay Park's 270 residents.

Having worked with Energy Trust of Oregon on ten previous energy improvements, Holladay Park decided to add a new chiller to its list of improvements.

Energy Trust arranged for a technical study to outline the costs and savings of different energy-efficient chiller options. After Holladay Park made its selection, the retirement community received more than \$47,900 in Energy Trust cash incentives to help offset the cost of the project.

The new 375-ton, water-cooled, magnetic-bearing centrifugal chiller has a variable frequency drive and sophisticated direct digital controls. Unlike the old chiller, it excels at part-load performance—sensing outside and inside temperatures and precisely adjusting output to match demand. Now,

residents are comfortable even if the outside temperature swings from hot to cold in a matter of hours. "With the old chiller, we had to try to make those adjustments manually, often with limited success," said Marty Rowe, director of facility services, Holladay Park. "The new system is so much more efficient and responsive. It also requires less maintenance and is quieter."

The chiller's electronic controls allow facilities personnel to monitor the system online and make adjustments from any location.

With the chiller located two levels below grade, removing the old chiller and installing the new model posed a logistical challenge.



**We'll save over \$16,700 in utility bills each year because we upgraded to a new energy-efficient water-cooled, magnetic-bearing centrifugal chiller that keeps our 382,000 square-foot building at a consistent temperature all day long.**

**Plus, Energy Trust gave us over \$47,900 in cash incentives just for upgrading.**

**Marty Rowe, director of facility services  
Holladay Park Plaza**

### The solution?

Energy Trust trade ally contractors dismantled and removed the old equipment. They then took apart the new chiller and reassembled it in the mechanical room to meet their fast-track schedule.

Now, all areas of Holladay Park Plaza—from resident apartments to offices, restaurant and swimming pool—are comfortable year-round, and Holladay Park is saving an estimated \$16,700 on annual energy costs.



**Energy Trust takes good care of us and watches out for our best interest.**



Marty Rowe, director facility services  
Holladay Park Plaza Assisted Living



### PROJECT BENEFITS

- Reduced maintenance
- Improved system control and monitoring
- Increased energy cost savings
- Improved comfort
- Reduced noise



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