



STAFF PHOTO: BILL KLOTZ

The University of Minnesota is nearing completion of a project that will turn this 104-year-old facility at 1180 Main St. SE in Minneapolis into an efficient combined heat and power plant.

Power plant as tourist attraction

Hundreds want to check out U of M's energy project

BY BRIAN JOHNSON

Staff Writer

The University of Minnesota's effort to turn a century-old heating plant on campus into a clean source of heat and power isn't quite finished, but the \$113 million project is

already gaining national and international attention.

Hundreds of energy experts and other curious visitors -- including a group from as far away as Germany -- have toured the project in advance of its expected March completion, said Jerome Malmquist, the U of M's director of energy management.

"Our name is out there with regard to people across the U.S. and even internationally now," Malmquist said Wednesday.

The project is creating an efficient combined heat and power plant within the 1912-vintage Old Main plant at 1180 Main St. SE in Minneapolis. The plant, which sits above the Mississippi River, had a number of deficiencies and has been mothballed since 2000.

Not everything has gone according to plan.

Originally scheduled to open in mid-December, the new plant is now expected to be operational in March,

Malmquist said. He blames the delay on a series of minor setbacks, such as issues with fuel lines and treating the piping systems.

"It's not like a major design flaw or equipment that failed," Malmquist said. "It's just the price of getting this thing put together, step by step and making sure everything is going right. It's going well, but slower than expected."

Malmquist said the project is still on or under its current budget, though the cost went

up two years ago from \$96 million to \$113 million.

As Finance & Commerce reported at the time, the \$17 million increase was related to the equipment and systems (\$7.1 million), demolition and abatement (\$4.3 million), building renovation (\$3.4 million) and “non-construction” costs (\$2.3 million).

Funding sources include about \$100 million in university debt, \$10 million in state bonding money and \$3 million in the university’s repair and replacement funds.

Malmquist said the design team is doing an “excellent” job. The team includes construction manager Adolphson & Peterson of St. Louis Park and prime design contractor Jacobs Engineering of Pasadena, California. Subcontractors

include St. Paul-based Harris Cos., Eden Prairie-based Metropolitan Mechanical Contractors, and St. Paul-based Hunt Electric.

“When we have run into trouble, we have been able to find solutions very quickly,” Malmquist said. “We have a solid team working on this.”

Among other things, the project swaps out inefficient coal burners with new equipment including a 22.8-megawatt dual-fuel combustion turbine generator and a duct-fired heat recovery system generator.

The university says the new plant will provide much-needed additional boiler capacity, reduce the carbon footprint on campus by 10 percent, and slash utility costs by a projected \$1.9 million annually.

Energy experts from abroad are taking note. A delegation representing five German cities toured the plant project in October as part of an energy policy exchange between Germany and Minnesota.

The partnership’s goals include working together on clean-energy and “climate-smart” initiatives at the community level, said Sabine Engel, director of international partnerships at the U of M’s Institute on the Environment.

Engel said the German visitors were interested in the project, in part, because they “take climate issues seriously” in Germany. Combined heat and power plants are much more prevalent in Europe than they are here, she added.

“It was great that the U of

M could show off the new ... plant,” Engel said. “It signals that Minnesota is moving forward.”

The project hasn’t been easy. As Malmquist has said previously, it involves putting high-tech equipment into an old building on the side of a cliff looking over a protected river in an urban setting, among other challenges.

Malmquist said it’s not unusual to have a few “bumps in the road” on complicated projects like this. Even so, the work is going well from a quality standpoint, he said.

“I’m not happy about [the delay], but this is a 30-year life-cycle project,” Malmquist said. “I would rather have a piece of machinery that is highly reliable and works well.”