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EWEB's steam heating system is failing fast | The antiquated system that still supplies plenty of heat downtown might have to go sooner than its 2012 target

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The Eugene Water & Electric Board had planned to shut down its steam heating plant — which still serves about two dozen buildings in and near downtown Eugene — in 2012. But after a series of steam pipe failures — the most recent one last month — the utility said it may shut down some lines to customers sooner to avoid costly repairs to a system whose days are numbered.

Commissioners will vote tonight on a resolution allowing EWEB to permanently shut down individual steam lines, rather than repairing or replacing them, if there is a system failure. Among the customers that are still using steam heat are City Hall, the county courthouse, the Shedd, Northwest Christian University, PeaceHealth Medical and EWEB itself, according to an EWEB status report.

Despite the stark language of the resolution, no one will be left out in the cold, EWEB spokesman Joe Harwood said.

“We’re not going to leave anyone without heat. If there’s failures between now and the end of the 2011 heating season, we would fix them. We’ll get you through the heating season,” he said.

EWEB has owned the steam heating system — in addition to its electric and water utilities — since buying it from a private firm in 1962.

Back then, there were 275 customers — including downtown businesses and apartment complexes, churches and government office buildings.

But customers have slowly been moving away from steam heat and by 2003, EWEB had just 100 steam customers.

With the loss of some of its big users — a vegetable cannery that used the steam for food processing as well as heat, and much of the operations at Sacred Heart Medical Center — the utility several years ago began to warn that shutting the system down might be the most cost-effective option for customers as well as the utility.

EWEB estimates the heating cost for steam at 65 cents per square foot, compared with 35 cents for high-

efficiency natural gas and 22 cents for an electric heat pump.

By 2008, with dwindling customers facing ever higher costs, the utility set a shutdown date of June 2012 and began working with its remaining customers to help them switch to a new system.

Of the 58 buildings that had steam heat in 2008, 36 have either completed their transition or are in the design and construction phase, he said.

Now it's a waiting game: waiting to see whether or not the failing system holds up while the remaining customers make the switch.

When a steam pipe failed last month beneath the road at Olive Street and Eighth Avenue, EWEB had to replace a section of 8-inch pipe that had several holes and that dated back to 1910, EWEB steam project manager Mike Logan said.

Logan will be showing that section of pipe to commissioners at the board meeting tonight, he said. He estimates that there are about six miles of steam pipe under downtown streets and it's safe to assume more sections could fail between now and June 2012.

While it's costly for the utility to fix those pipes, they also represent a safety risk.

A blown pipe could send hot steam up through a breach in the pavement and burn someone, all the more reason to decommission them as soon as possible, Logan said.

"We just don't know the status of the rest of the line. We'd be speculating," he said.

Among the customers who have made the change from steam is First United Methodist Church, which last May swapped out the aging steam heat system for gas-fired on-demand hot water boilers that were first fired up in October, church trustee Will Sutton said.

As a result, the church's December 2010 heating and electricity bill was a third what it was for the same period in 2009, Sutton said. Based on that experience and on increased insulation that the church plans to install, Sutton expects annual savings of \$33,000, he said.

Converting to the new heating system for the 43,660 square foot building hasn't been cheap. The gas-fired boilers cost about \$124,000, while upgrading the existing air handling systems and replacing the old pneumatic thermostats with a more efficient computer-controlled zone system, cost \$308,000, Sutton said. But the savings will pay off the boilers in five or six years, and the total costs should be recouped in about 13 years, he said.

The church also anticipates that the new system will reduce its carbon output by 135,000 tons per year, Sutton said. EWEB has smoothed the transition by providing grant funds that helped pay for an engineering study on the changes and a loan that helped pay for the new boilers.

The utility also has let customers know about other grants, loans and tax credit options available through the state Department of Energy.

EWEB hopes other customers will be inspired by the savings experienced by the Methodist church, Harwood said.

STEAM PLANT

EWEB commissioners consider line breaches

When: 6:35 p.m. today

Where: 500 E. Fourth Ave.

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