



Prison begins construction of biomass plant

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Work began Tuesday on a wood-fired power plant that will provide enough heat and electricity to eliminate three-quarters of Northern Nevada Correctional Center's utility bills.

Director of Corrections Glen Whorton said the plant will replace both the electric power and natural gas the prison now purchases from Sierra Pacific Power Co. In fact, he said Sierra Pacific will be purchasing excess power from the plant in periods when it generates more than it needs.

And contrary to the concerns of some area residents, he said it won't generate air pollution.

"It's going to be a very clean operation and should not have an impact on air quality," he said.

The APS Energy Services plant will burn "biomass" - wood chips gathered from forests surrounding the capital city, including the Waterfall fire area. Experts say there is enough biomass to supply the plant for decades.

Whorton said in addition to saving the prison utility costs, the project will reduce the amount of fuel for wildland fires in nearby forests and cut down the amount of wood fill dumped at local landfills.

State Sen. Mark Amodei, R-Carson City, said he hopes this is just the first such plant in the Carson area. He said the huge amount of burnable fuel in the nearby mountains and Lake Tahoe Basin could greatly reduce utility costs at other public entities, saving taxpayers millions. He said he would like to see not only prisons but the Capitol Complex, the school district and Carson City government eventually getting electric power and hot water from larger versions of the NNCC biomass generating plant.

Pat Murphy, of the Nevada Fire Safe Council, said biomass is nothing new in Nevada, that wood provided power for mining mills and steam engines on the Comstock.

"This resource was a big part of Nevada's history and I think it can be a big part of Nevada's future as well," he said.

Jay Johnson, of APS Energy Services, said this is the first combined heat and power plant running on woody biomass in Nevada. He said construction begins immediately and APS plans to have its three hot water and one steam boiler in operation by April. It will generate a megawatt of electric power in addition to the hot water and heating for the prison at the southern border of Carson City.

The boilers and generator will be housed in a simple metal building south of the prison yard at NNCC. The structure will be about 20 feet high and roughly 80 feet square.

The contract to build the plant is for \$6.5 million. In addition, the prison will pay \$1.78 per million BT's of thermal energy for its fuel - wood chips. According to Stan Radon of CCRR, that is much less than the \$11.90 per million BTUs the system currently pays for natural gas.

Whorton said NNCC pays utility bills totaling about \$2 million a year. The plant, he said, will reduce that by \$1.3 million. With the savings and the ability to sell excess power to Sierra Pacific, he said the plant is projected to provide a positive cash flow of nearly \$9 million to the state over the next 20 years.

And that, he said, is at current natural gas and electric costs with projected rate increases of just 2 percent a year.

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Taxpayer savings

- Northern Nevada Correctional Center pays annual utility bills of about \$2 million
- The biomass plant will reduce that by \$1.3 million
- Savings and the ability to sell excess power to the power company is projected to provide a positive cash flow of nearly \$9 million to the state over the next 20 years.

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