



Cogeneration

Integration of 1.3 megawatt system

The City Wastewater Treatment Facility (WWTF) has been generating electric power by burning the methane gas produced by the sewage treatment digestion process since 1989, using a 650 kW generator. The recently completed cogeneration system project upgraded the existing generator to 820 kW and installed a new 500 kW generator. These generators run on a combination of methane biogas and purchased natural gas.

The upgrade project cost \$1.7 million but a grant from the California Energy Commission SB5X Incentive Fund provided \$396,000. The City and County Sanitation District provided the difference. The state SB5X grant program was set up in response to the energy crisis to motivate construction of alternative generation to offset peak loads on the electric grid. The WWTF system is expected to generate 7.75 million kWh of electric power a year, enough to power around 717 homes.

Anticipated energy savings are over \$93,000 at current rates per month! Using our methane gas production, we are offsetting carbon emissions by 6,004 tons annually-

For more information please contact:

Dan Seidel

Superintendent of Wastewater Collection and Treatment Facility

110 California Street

Santa Cruz, California 95060

831-420-6050

Fax: 831-420-6489

[email](#)