

Anaerobic Digestion and Co-generation Demonstration

Demonstrate biogas CHP systems on dairy farms.

BACKGROUND

The Sunny Knoll, True and Emerling Farms, three of the largest dairy farms in Perry Township, have partnered with the Town of Perry and seven agricultural agencies to form the Perry Waste Management Committee. The Town of Perry worked with the Committee to conduct a NYSERDA funded Feasibility Study of Anaerobic Digestion Operations. This study recommended that these Town of Perry farms use anaerobic digestion and C systems to process manure generated each day.

OBJECTIVE

Biogas CHP systems will be demonstrated on two dairy farms (Sunny Knoll and Emerling). The heat from the engines will be used to improve digester efficiency, provide hot water, comfort heating and compost drying.

DESCRIPTION

Biogas CHP systems consisting of an anaerobic digester, internal combustion generator set, and heat recovery system will be installed on two dairy farms in the Town of Perry. The two farms are of about the same size and the CHP systems will use the same design.

BENEFITS

This project is expected to result in peak load reduction of 260 kW, reduce annual electricity usage by 1,700,000 kWh/year, and result in over \$170,000 annual energy savings.

Funding	Encumb to Date	Pending	Total Anticipated
NYSERDA	\$833,250.00	\$0.00	\$833,250.00
Perry, Town of	\$1,259,576.00	\$0.00	\$1,259,576.00
TOTALS	\$2,092,826.00	\$0.00	\$2,092,826.00

Manager	Kear, Edward
Contracts	STD-7313
Contractors	Perry, Town of
Technologies	Agriculture, Cogeneration
Cities	Perry
Counties	Wyoming