



RENEWABLE ENERGY SOLUTION LANDFILL GAS TO ENERGY PEI POWER CORPORATION

OWNER

PEI Power Corporation

PROJECT ENGINEERING

Concord Engineering Group

PRODUCT

Two Mercury™ 50 Gas Turbine Generator Sets

CUSTOMER VALUE

Environmentally Friendly Renewable Energy Source

When PEI Power Corporation learned that Solar Turbines had recently modified their Mercury 50 gas turbine to burn landfill gas, the company contacted Solar. Intrigued with the turbine's high simple-cycle emissions signature, PEI made the decision to purchase two Mercury 50 generator sets for their Archbald cogeneration plant. The landfill gas for the two turbines is provided from two separate landfills and delivered to the site through 32 miles of piping. At full operation, the plant produces close to 30 MW of electricity from landfill gas for the PJM Interconnection, a regional transmission organization that coordinates the movement of wholesale electricity in all or parts of 14 states.

Solar® Turbines

A Caterpillar Company

Renewable Energy Solution – Landfill Gas to Energy



PLANT DATA

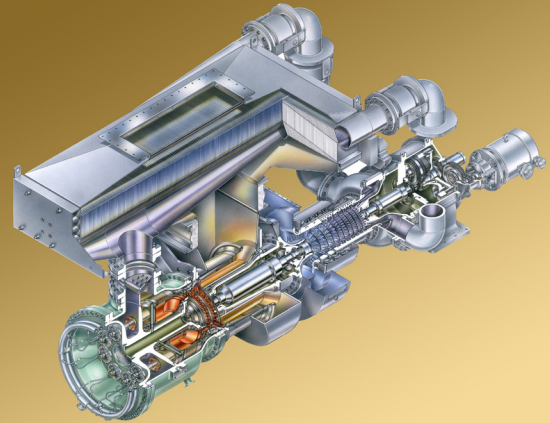
Two Mercury 50 (4.6 MW) Recuperated Gas Turbines

Gas Conditioning and Gas Compression Equipment

Plant Controls for Remote Operation

18 Mile Pipeline to Plant

Fuel: Natural Gas and Landfill Gas



OUR PRODUCTS AND SERVICES

Gas Turbine Packages and Auxiliaries

Commissioning

Turbotronic™ Turbine Control System

Extended Service Agreement

CLEANER AIR

RENEWABLE ENERGY

ECONOMIC DEVELOPMENT

IMPROVED PUBLIC WELFARE AND SAFETY

The total electricity generated by landfill gas offsets 133,000 tons of CO₂ annually, or the equivalent of removing approximately 18,000 cars from the road. PEI is able to generate enough electricity from landfill gas to power approximately 30,000 homes, making it one of the largest individual renewable energy facilities in the United States. The project has excellent environmental benefits as well as economic value. PEI partnered with the United States Environmental Protection Agency in their Landfill Methane Outreach Program, a voluntary public/private partnership encouraging cost effective landfill use as a way to mitigate global climate change. The use of landfill produced methane gas creates a reusable source of energy that will lower the cost of producing electricity which, in the end, lowers the cost of electricity for the consumer.

Solar Turbines Incorporated
Tel: +1 619 544 5352
Mail: infocorp@solarturbines.com Web: www.solarturbines.com

Caterpillar is a registered trademark of Caterpillar Inc. Solar, Mercury and Turbotronic are trademarks of Solar Turbines Incorporated.
© 2013 Solar Turbines Incorporated. Specifications subject to change without notice. All rights reserved.
CSRES-PPC/0313/E0

Solar® Turbines

A Caterpillar Company