Solar Turbines

A Caterpillar Company

COGENERATION PROJECT

University of California San Diego

Location: San Diego, California U.S.A. Installed: April 2001

In April of 2001, the University of California San Diego (UCSD), one of the most prestigious medical research universities in the United States, completed a 27-megawatt cogeneration plant on their campus.

Two *Titan*[™]130 gas turbine generator sets, manufactured and installed by Solar, are in service at at the cogeneration plant to provide reliable electrical and steam production for heating, ventilating and air conditioning of the campus community. The plant provides up to 90% of the peak campus electrical demand, while capturing exhaust heat to generate up to 75% of the steam demand.

Each turbine is equipped with $SoLoNO_x^{\text{TM}}$, Solar's industry leading low emission, dry combustion technology which reduces the nitrogen oxide emissions to one of the lowest levels for



cogeneration in the San Diego Air Pollution Control District.

UCSD is saving energy with the plant by cogenerating electricity and steam at an efficiency of approximately 75%. When the campus had to import this electricity, the efficiency to produce and transmit it was only 25-30%.

In addition, the university is achieving savings of nearly \$250,000 per month by producing its energy instead of purchasing it. In April of 2002, the project received a VIP (Very Important Planet) Clean Air Award from San Diego Earthworks. The award recognized UCSD's dedication to maintaining a clean environment and utilizing the most advanced technology.

The customer chose Solar's Asset Management Services Group to assist in running the plant, with a full-time technical services manager and an extended services agreement on the installed turbomachinery. This includes not only the turbines, but the balance-of-plant equipment.

Solar Turbines Incorporated is a wholly-owned subsidiary of Caterpillar Inc., a world leader in in the design, manufacture, installation and operation of power generation equipment.

For more information on this project and how Solar Turbines can help generate results for your business, contact:

Solar Turbines Incorporated Marketing Communications, SP3Q P.O. Box 85376

San Diego, CA 92186-5376 U.S.A.

Telephone: +1 (619) 544-5352

Telefax: +1 (858) 694-6715 E-mail:

universitychp@solarturbines.com Internet: www.solarturbines.com