Solar® Turbines

A Caterpillar Company

Generating Results for Your Business

COGENERATION PROJECT

Rice University

Developer: Self-Owned and Operated

Location: Rice University, Houston, Texas, U.S.A.

Installed: January 1989

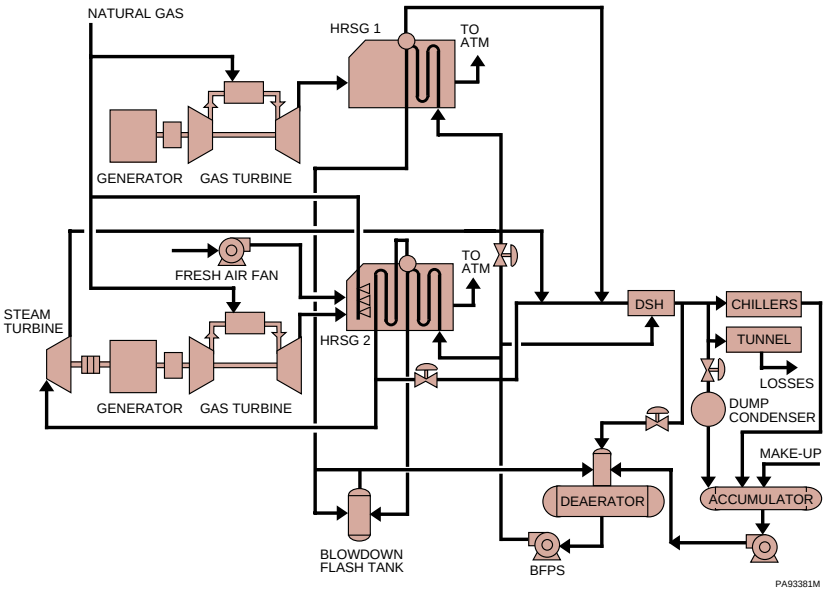
A combined-cycle *Taurus™60* gas turbine generator set at this site is part of the central power plant that supplies electricity and thermal energy at Rice University.

Originally equipped with a *Centaur® 50* gas turbine rated 3880 kW at 12.47 kV, the generator set was uprated (via retrofit) to a *Taurus 60* gas turbine.

The engine drives a double-ended generator that also is powered from the opposite end by a 400-kW back-pressure steam turbine through an automatic clutch.

The *Taurus 60* gas turbine uses natural gas as its primary fuel. It also has a dual-fuel system that enables it to operate on No. 2 fuel oil.

The gas turbine's exhaust stream is used as preheated combustion air for a heat recovery steam generator, equipped with a duct-mounted supplemental burner, which produces steam for the steam turbine and for other central plant applications, which include providing electricity, steam and chilled water to buildings across the sprawling university campus.



Solar Turbines Incorporated, P.O. Box 85376, MZ SP3-Q, San Diego, CA, 92186-5376
Telephone: (619) 544-5352, Telefax: (858) 694-6715, Internet: www.solarturbines.com

Caterpillar is a trademark of Caterpillar Inc. *Solar*, *Taurus*, and *Centaur* are trademarks of Solar Turbines Incorporated
Printed in U.S.A. © 2002 Solar Turbines Incorporated. All Rights Reserved.
DSCP-RU/702/5C