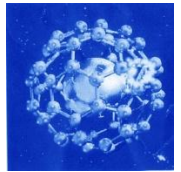


PEEKER ENERGY CORPORATION

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The Hydrogen “on demand” fueling system is proposed for integration with the Solar Turbines division of Caterpillar. Solar Turbines is a World Leader in Designing, Manufacturing and Servicing Industrial Gas Turbine Power Systems Solutions in many industries. Peeker Energy Corporation is not associated with Solar Turbines and/or Caterpillar in any ways. Provided that you, the client, are interested in getting the Solar Turbines (natural gas driven) type turbines for integration with hydrogen gas as a fuel for cleaner and higher efficiency output, Peeker Energy Corporation would like to team with you.



PEEKER ENERGY CORPORATION will design a hydrogen generation providing “on demand” hydrogen fuel, on site, for integration of the standard Solar Turbine system so to replace the natural gas input with hydrogen gas at the site. Each turbine system must be custom modified to allow the burning flame of the gas inside the turbine at a safe distance from any turbine components that may be damaged due to the high temperature of the burning hydrogen gas. These special burners have been designed at the Berkley’s Labs (UCB) and need to be custom adjusted to every model turbine we’ll use.

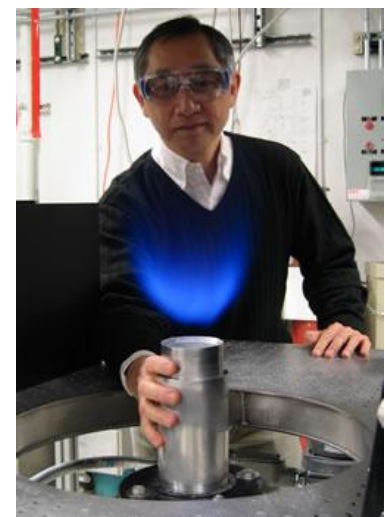
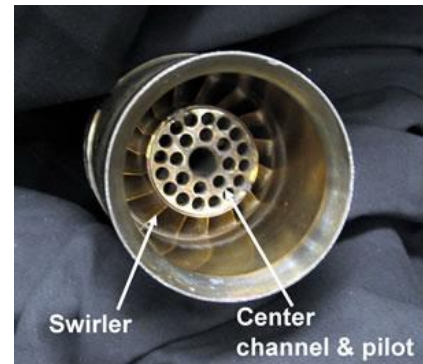
Berkeley Lab’s Ultraclean Combustion Technology For Electricity Generation Fires Up in Hydrogen Tests

BERKELEY, CA — An experimental gas turbine simulator equipped with ultralow-emissions combustion technology called LSI has been tested successfully using pure hydrogen as a fuel – a milestone that indicates a potential to help eliminate millions of tons of carbon dioxide and thousands of tons of NOx from power plants each year.

The Department of Energy’s Office of Electricity Delivery and Energy Reliability initially funded the development of the LSI for use in industrial gas turbines for on-site (i.e. distributed) electricity production. The purpose of this research was to develop a natural gas-burning turbine using the LSI’s ability to substantially reduce NOx emissions. The Berkley’s Group adapted the low-swirl injector technology to the Taurus 70 gas turbine that produces about seven megawatts (7 MW) of electricity.

The low swirl injector is a mechanically simple device with no moving parts that imparts a mild spin to the gaseous fuel and air mixture that causes the mixture to spread out. The flame is stabilized within the spreading flow just beyond the exit of the burner. Not only is the flame stable, but it also burns at a lower temperature than that of conventional burners. The production of nitrogen oxides is highly temperature-dependent, and the lower temperature of the flame reduces emissions of nitrogen oxides to very low levels. Natural gas-burning turbines with the low-swirl injector emit an order of magnitude lower level of NOx than conventional turbines. Tests at Berkeley Lab and Solar Turbines showed that the burners with the LSI emit 2 parts per million of NOx (corrected to 15% oxygen), more than five times less than conventional burners.

Berkeley Lab is a U.S. Department of Energy national laboratory located in Berkeley, CA. It conducts unclassified scientific research and is managed by the University of California.



Dr. Cheng of Berkley’s Lab views an LSI flame. He is touching the burner, demonstrating that it stays cool because the flame is completely lifted from its body.

Peeker Energy Corporation, located in Lakewood, Colorado, develops a number of state-of-the-art technologies dealing with the generation of clean, alternative energy. Among others, the Company developed a hydrogen generating system for fuelling on demand on site through chemical reactions. In other words, whenever the turbine requires more fuel with higher loads, the system will increase the reaction and more hydrogen can be produced.

Compared to natural gas, hydrogen burns faster, hotter flame. Hydrogen/air mix are flammable over a wide range of mixtures, however when burning with oxygen only, no pollution is emitted, only water is exhausted. A closed loop of inert gases may be employed (such as argon, etc) to eliminate any pollution. The inert gases, which do not burn at high temperatures, are being recirculated, so if there are no loose fittings (seals) the same gas is circulated over and over.

The main compound of the catalyst, water and other elements is aluminum which at the end it is just a carrier of energy. Since making aluminum requires lots of energy, the hydrogen fuelled turbines are only recommended for applications where natural gas is not readily available, or if the level of pollution requires drastic measures or the use of advance technology is not permitted. Still, Peeker Energy Corporation develops other technologies that may justify or reduce the costs of aluminum production through the making of electricity by alternative means, i.e. nuclear power, or ion acceleration cyclotronic generators (a proprietary technology of PEC) outside of the region where the hydrogen gas systems are exported.

Gas Turbine Power Generation Packages



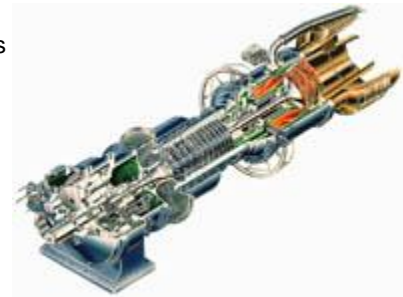
Solar offers factory packaged gas turbine-driven generation sets from 1-15 MW. The sets have three-phase generators, meet or exceed numerous European and North American standards, and can be equipped to operate in harsh environments. Solar turbine generator sets can be applied in combined-cycle systems or the turbine exhaust heat can be recovered for processes requiring thermal energy.

Generator Sets

Power Range, MWe		1	5	10	15	20	30
Saturn 20	Single Shaft	█					
Centaur 40	Single Shaft		█				
Centaur 50	Single Shaft		█				
Mercury 50	Single Shaft		█				
Taurus 60	Single Shaft		█				
Taurus 65	Single Shaft		█				
Taurus 70	Single Shaft			█			
Mars 90	Two Shaft			█			
Mars 100	Two Shaft				█		
Titan 130	Single Shaft					█	
Titan 250	Two Shaft						█

Taurus 60 PG - Generator Set

The family of *Taurus*[™] gas turbines represents years of intensive development by the engineering and manufacturing groups at Solar and offers many advanced features.



ISO Performance/Specifications

Metric

Power	kWe	5670
Heat Rate	kJ/kW-hr	11 425
Exhaust Flow	kg/hr	78 280
Exhaust Temperature	°C	510
Steam Production	tonnes/hr	11.6-56.9
Axial Exhaust		Yes
SoLoNOx		Yes
Power	kWe	5670
Heat Rate	Btu/kW-hr	10,830
Exhaust Flow	lb/hr	172,575
Exhaust Temperature	°F	950
Steam Production	klb/hr	25.5-125.4
Axial Exhaust		Yes
SoLoNOx		Yes

Industry Solutions/Applications

Integrating Peeker's Hydrogen generator on Demand fueling system the Solar Turbine units may be used in the following industries:

Total Power Generation Units >4200

Industrial Units

- Ceramics
- Chemicals, Petrochemicals and Pharmaceuticals
- Food Processing and Breweries
- Manufacturing
- Mining
- Pulp and Paper
- Textiles

Commercial Units

- Banking
- Communications
- Hospitals

Electric Power Facilities Units

- Distributed Generation (Public Power, Co-ops, Associations, Investor-Owned Utilities)
- Government Owned

Government and Institutional Units

- Airports
- Landfills and Sewage/Waste Treatment Plants
- Universities and Research Facilities

For Further information, or a quote, please contact us at <http://peeker-corporation.com>