

The logo for Advanced POWER PROJECTS is centered in a white circular area. The word "Advanced" is in a blue, italicized sans-serif font. "POWER" is in a large, dark blue serif font, with the letter "O" containing a grid of blue dots. "PROJECTS" is in a smaller, blue, spaced-out sans-serif font below it.

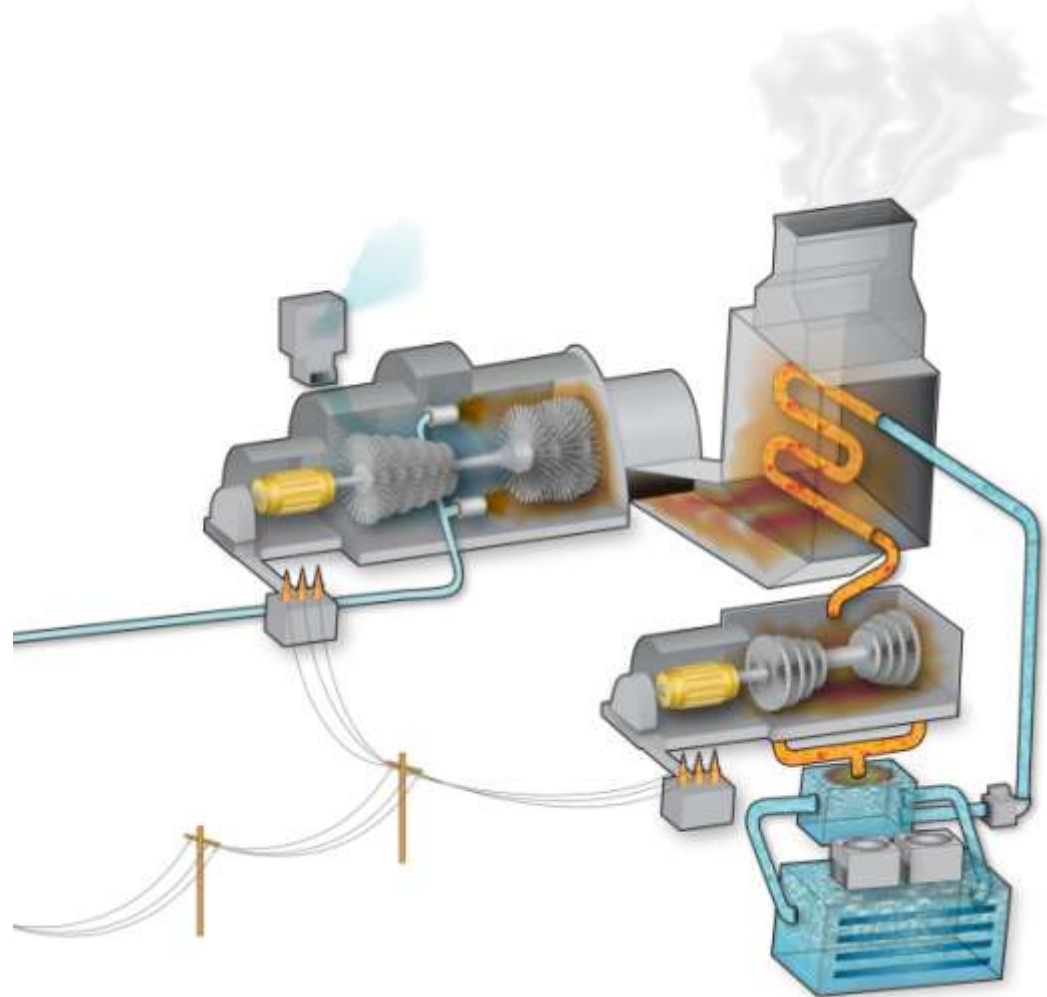
Advanced
POWER
P R O J E C T S

Green Tech Connect Forum
August 3, 2009

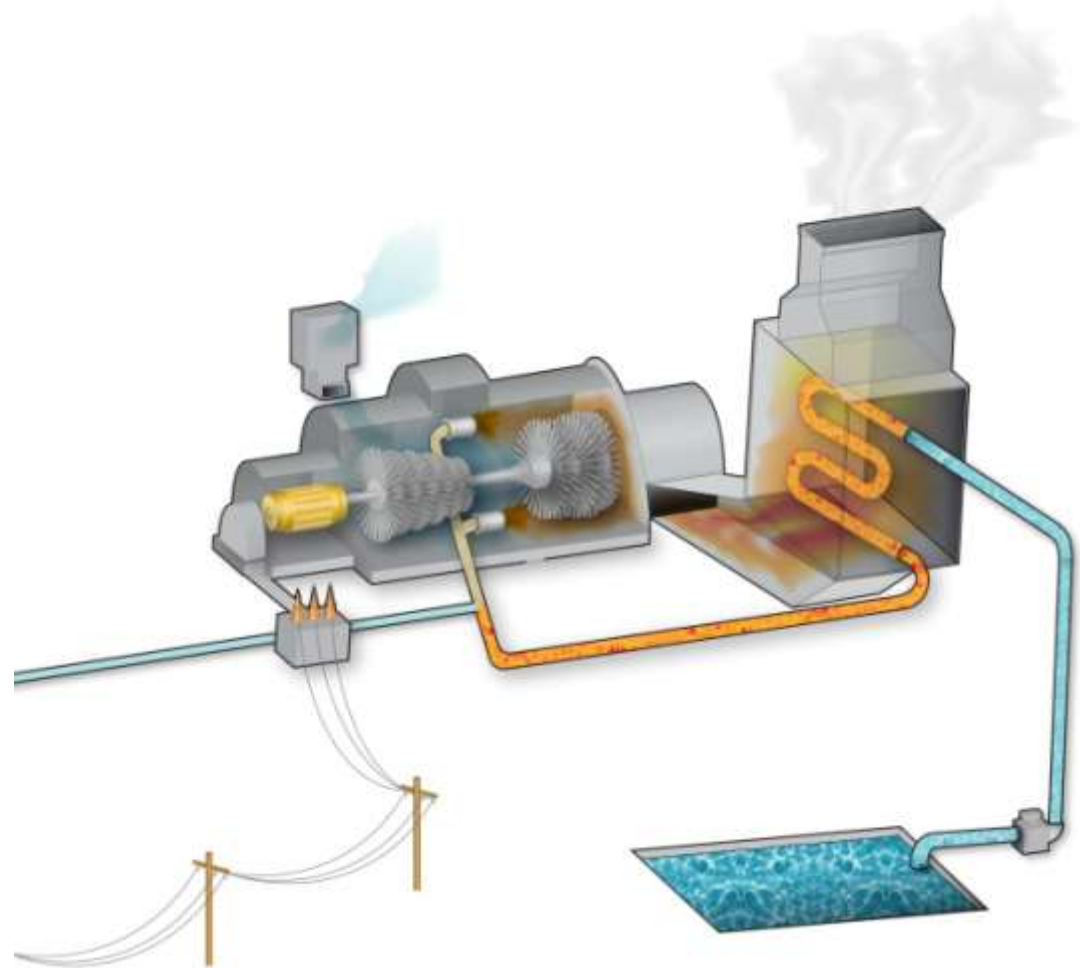
Financing

- **\$13 million of preferred stock sold in March 2008**
- **Investors include**
 - **Sequoia Capital**
 - **Bay Partners**
 - **Redpoint Ventures**
 - **Aubrey McClendon (CEO of Chesapeake Energy)**

Combined Cycle



Simplified Combined Cycle



Commercializing SCC

- **Targeted turbines**
 - **GE LM2500** **22 MW**
 - **GE LM6000** **48 MW**
 - **GE 6B** **40 MW**
 - **GE 7EA** **80 MW**

- **Secondary targets**
 - **GE 7FA** **180 MW**
 - **SW 251 B12** **73 MW**
 - **SW 501 D5A** **116 MW**
 - **SW 501 F** **190 MW**

Plant Performance

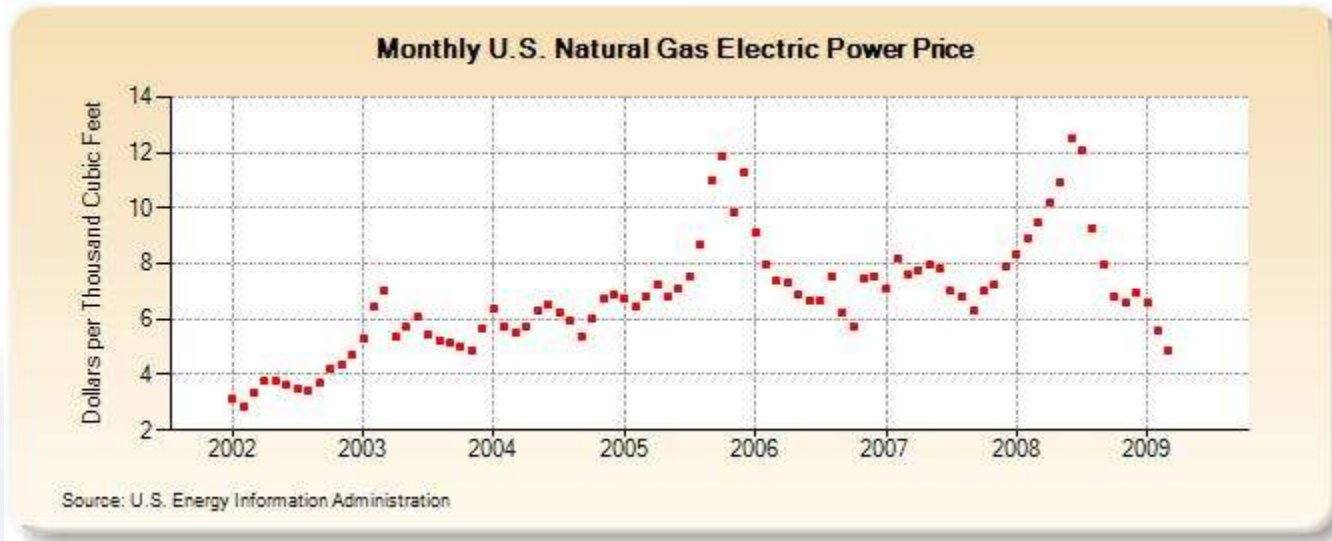
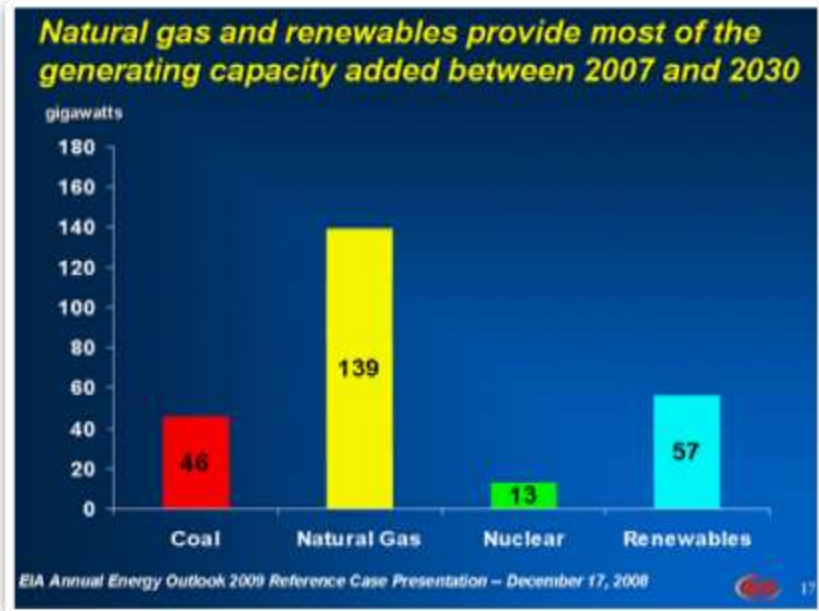
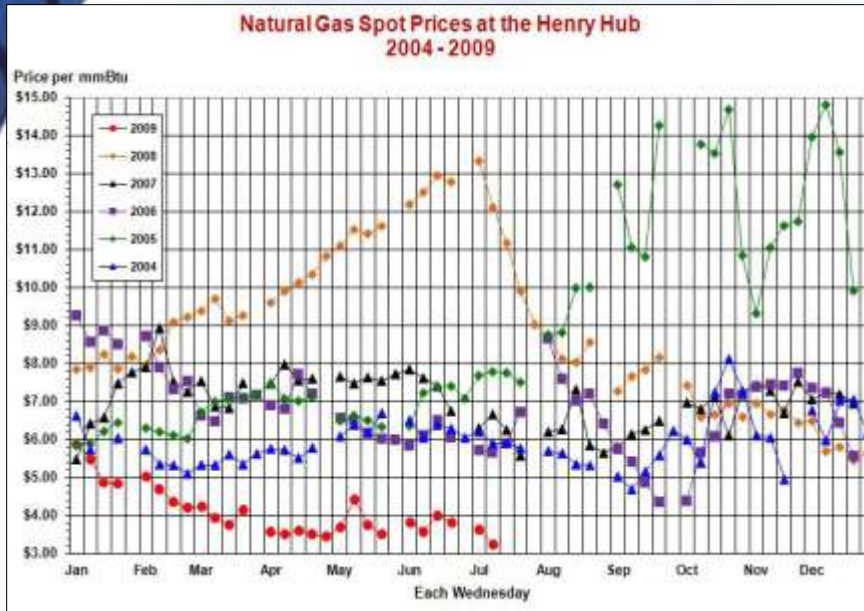
Turbine Model	Heat rate, LHV Btu/kWh		Capacity, MW	
	Before	After	Before	After
GE LM2500	9,500	7,500	~ 22	27
GE LM6000	8,500	6,900	~ 48	60
GE 6B	11,000	8,500	~ 40	55
GE 7EA	10,500	8,200	~ 80	109

Each plant will have somewhat different results

Additional Benefits

- **Lower NO_x emissions and CO per kWh**
- **Reduce or eliminate SCR ammonia slip**
- **Lower CO₂ per kWh**
- **More power at existing sites**
- **Peaking starting with high efficiency**
- **Increased turn-down ratio**

EIA Information



Market

- **U.S. peaking, cogeneration and baseload plant upgrades**
 - 1000 power plants
 - \$12 billion
- **New U.S. power plants**
 - \$40 billion potential market was expected in the next five years
 - New natural gas power plants will dominate
 - Strong need for intermediate power
 - Wind power/SCC projects
 - Biomass fueled SCC power plants
- **International markets**

LM2500

SCC Installed Equipment

Steam/Fuel Manifold



Flexible Connectors



More Power – Cleaner Air

