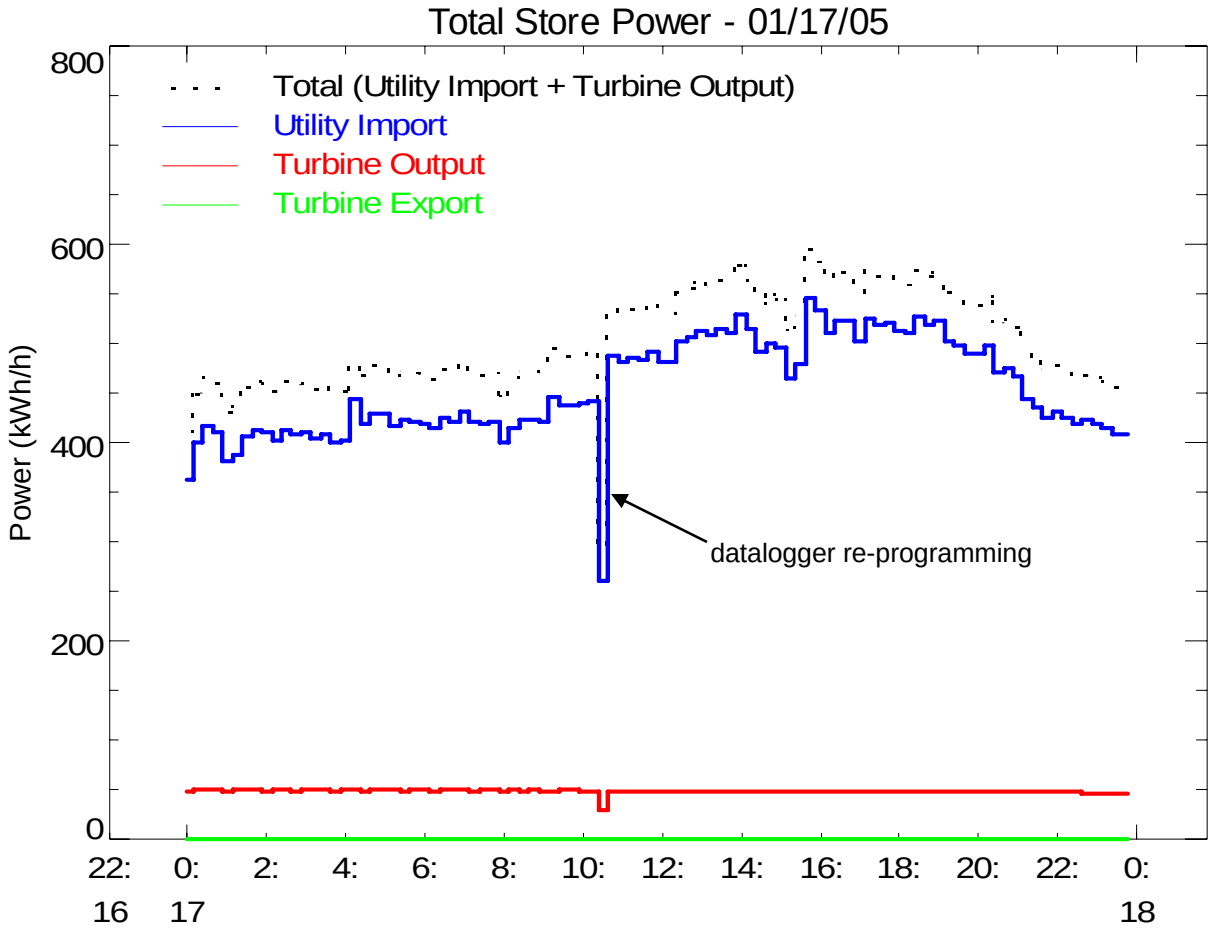
HEB CHP Plant San Antonio, TX

HEB CHP Plant
San Antonio, Texas

HEB Store Daily Power Use



Peak Total Demand: 596.4 kW @ 03:45 PM
Peak Utility Import Demand: 546.7 kW @ 03:45 PM

Total Load: 12084.2 kWh
Utility Energy Purchased: 10895.6 kWh
Energy Generated: 1188.6 kWh
Energy Exported: 0.0 kWh

Capstone Turbine Performance

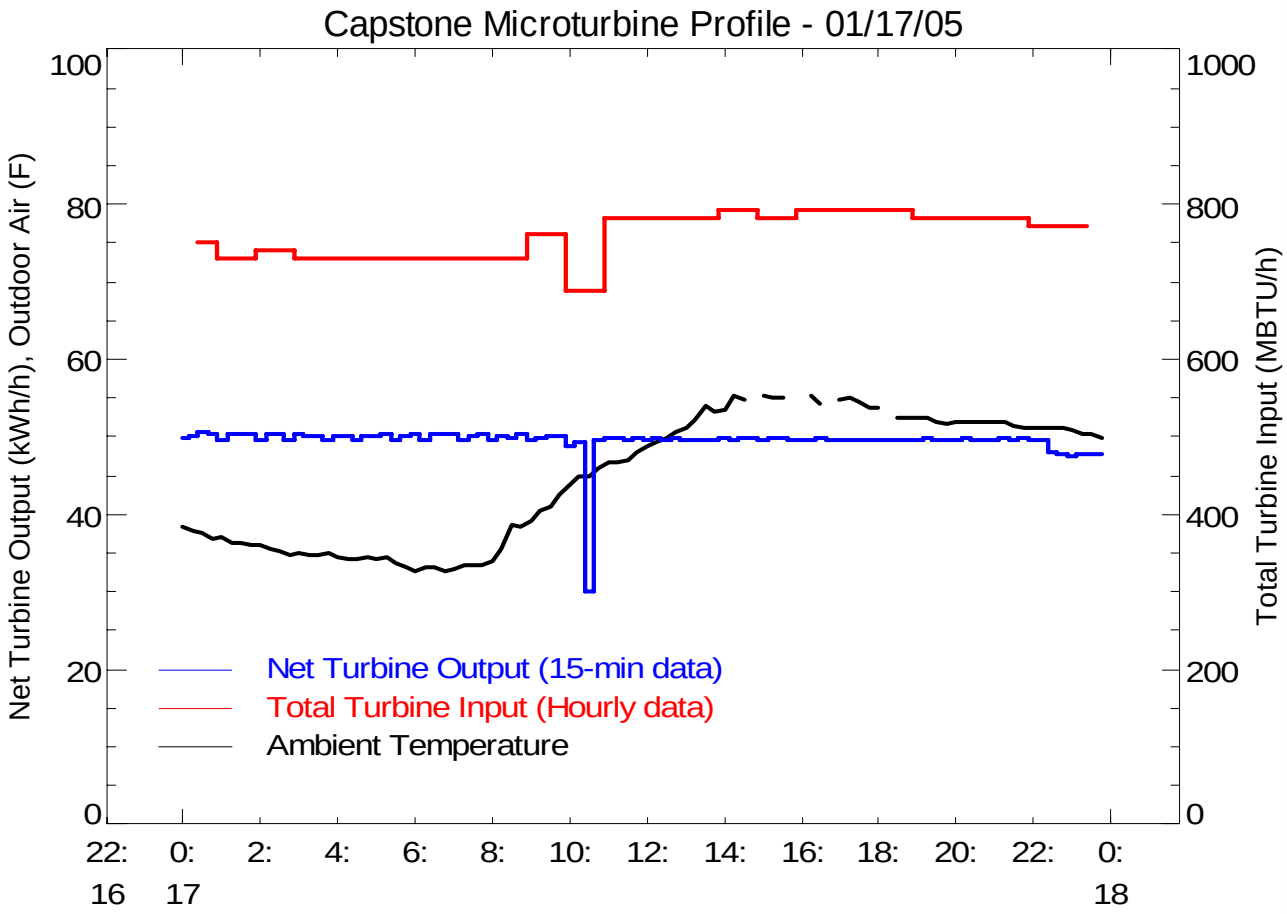
Net Turbine Output (kWh) : 1188.6

Total Turbine Input (MBTU) : 18261

Net Turbine Generation Efficency : 22.2%

Average Ambient Temperature : 44.5 F

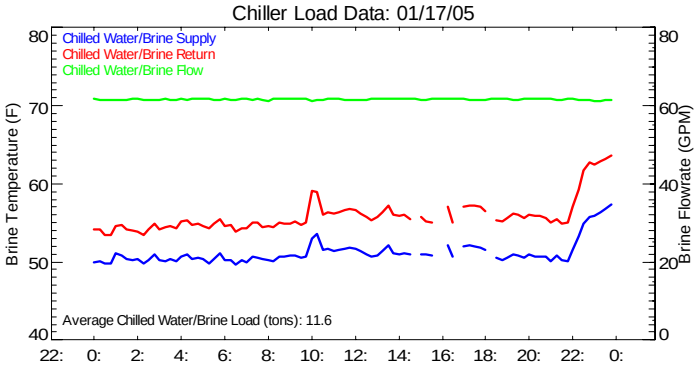
Net Power & Efficiency reflects gas compressor & chiller parasitics

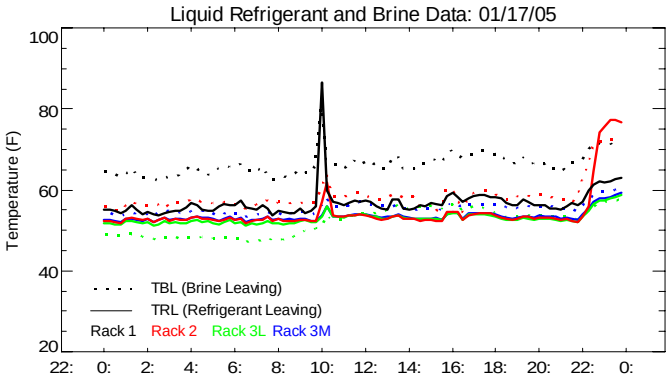


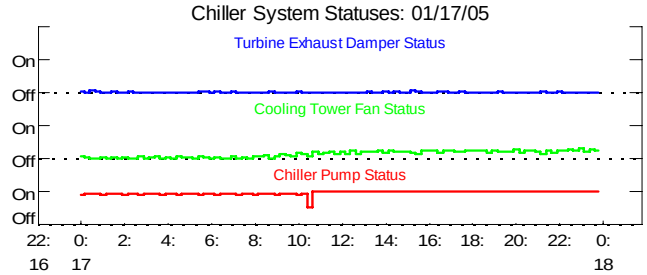
Broad Chiller Performance

Chiller Output: ~12 tons
(at 500-520F Exhaust & 52F CHW setpoint)

Higher exhaust and liquid refrigerant temperatures in spring/summer will increase load

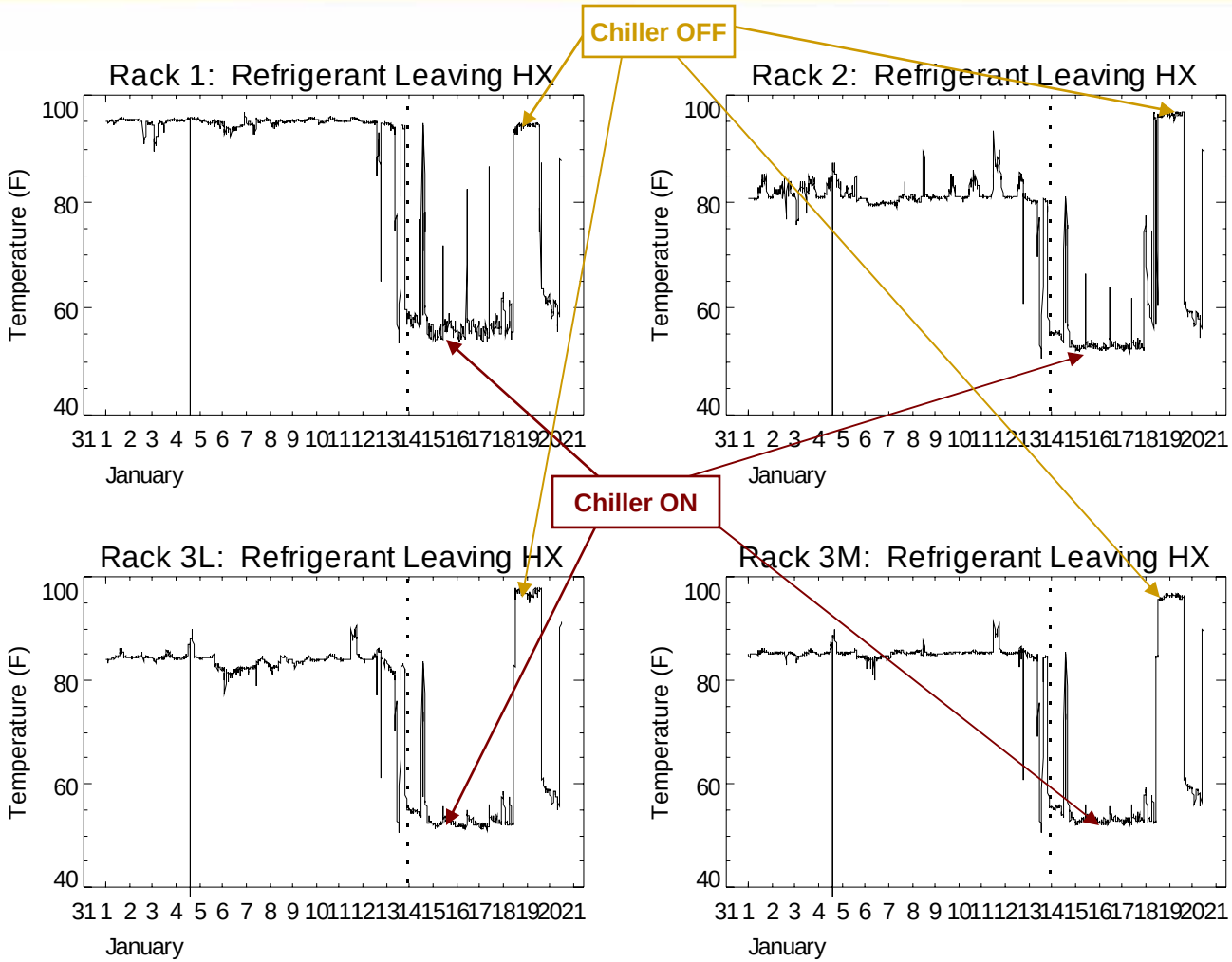




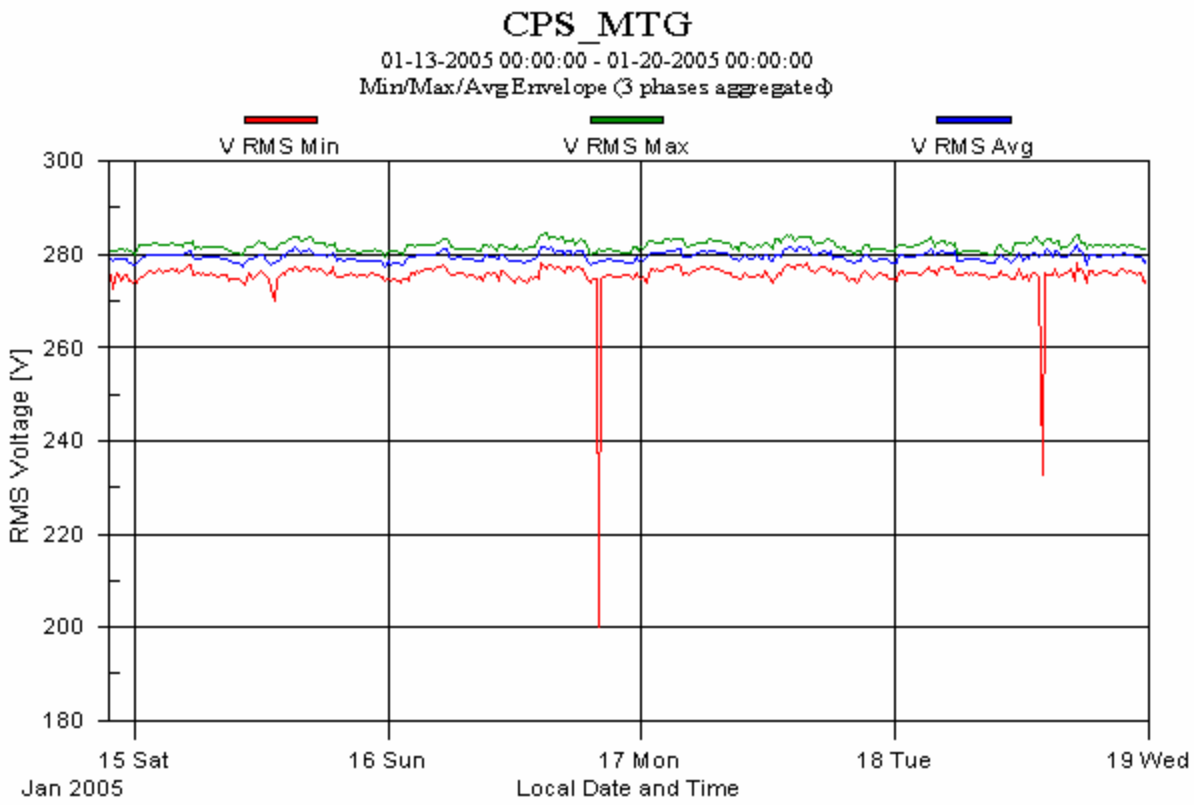


Refrigerant Liquid Temperatures

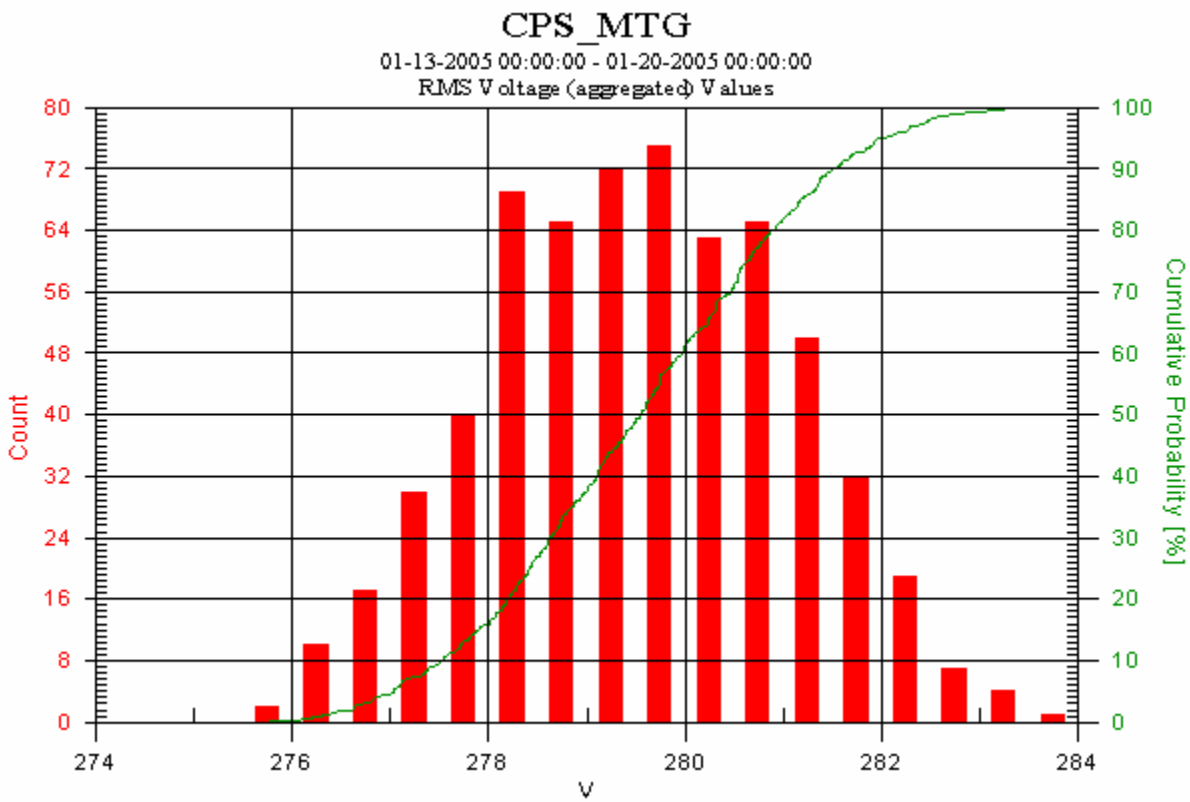
Note: Hussmann expansion valve tune-up started on Jan 14. Now all liquid temperatures are 90-95°F with chiller OFF



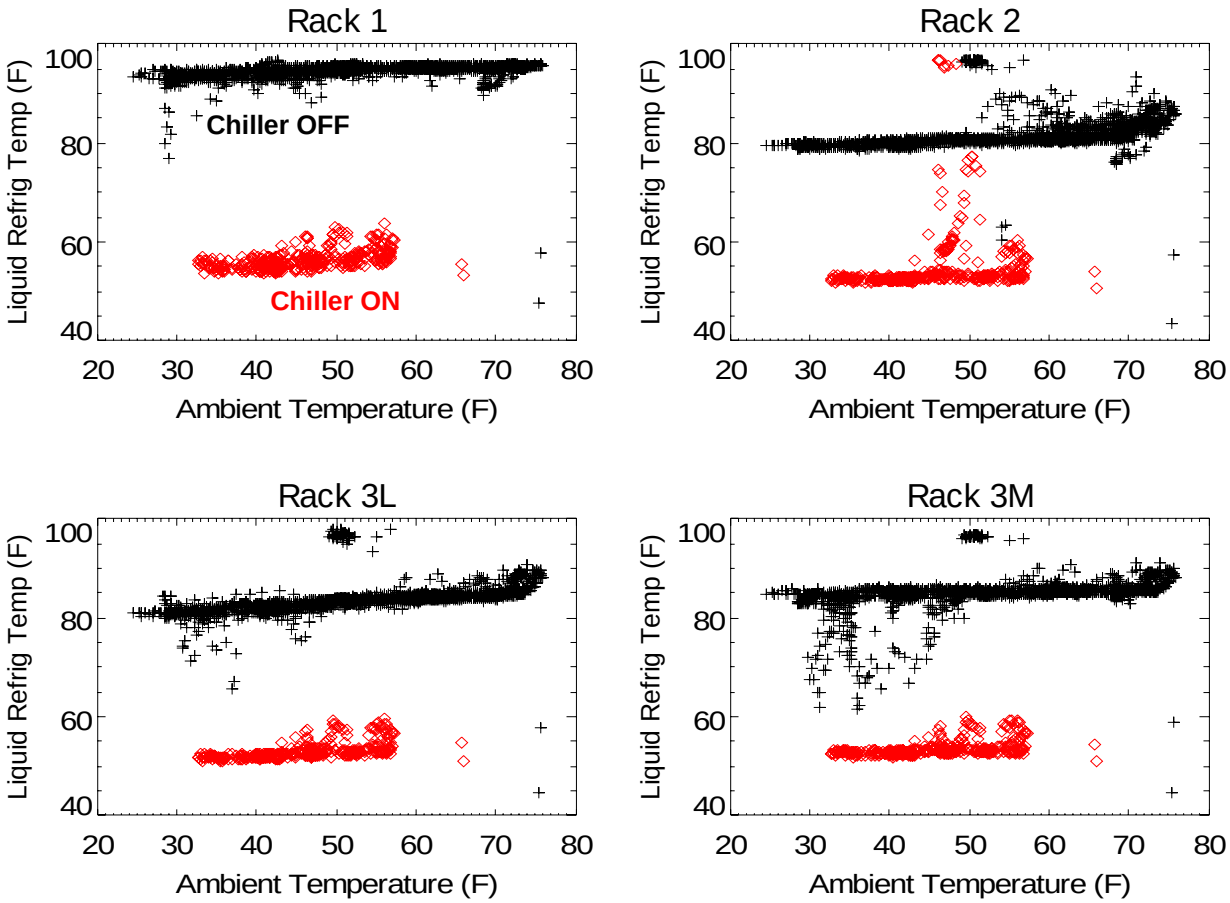
EPRI PQWeb Steady State Report



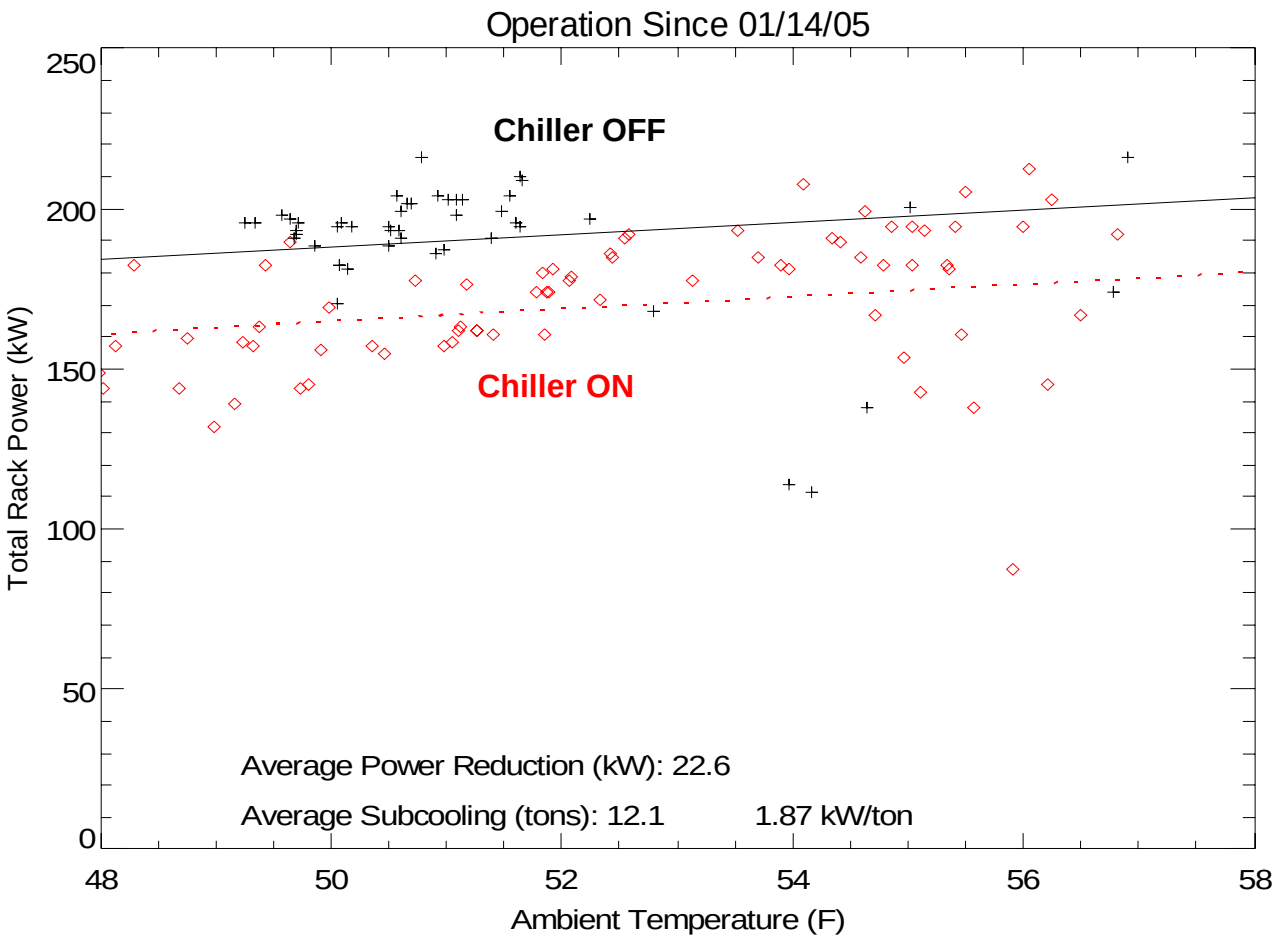
EPRI Historical Voltage Plot



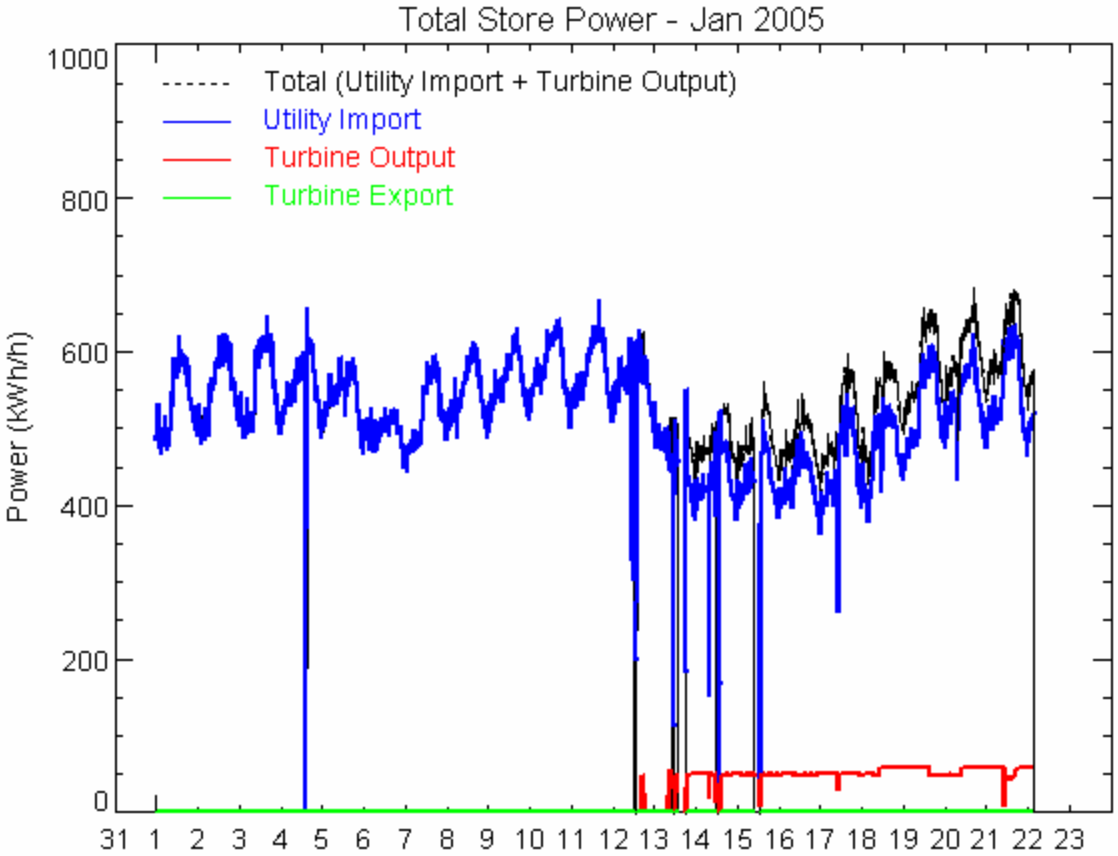
Rack Liquid Refrigerant Temperatures



Impact of Subcooling on Rack Power



Total Store Power



Further Information

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