

Trump Tower

Generators Provide Building HVAC

COMBINED HEAT AND POWER FOR: Office Building

Overview

Trump Tower in White Plains, NY, is one of many Trump buildings nationwide. This Trump Tower, built in 2005, is 35 stories tall and contains 212 condominium units. Two, 75 kW generators were installed to provide Domestic Hot Water (DHW).

The Application

The CHP system, operated by Aegis Energy, includes two (2) AEGEN ThermoPower 75, 75 kW engine generator units. Thermal output from the units will be used to meet various space heating and domestic hot water loads in the facility, and run a hot-water absorption chiller during the summer.

Annually the system is anticipated to displace 1,159,658 kWh and displace 63,862 therms of gas through heat recovery. Annual fuel consumption is 163,311 therms. Thermal output from the units will be used to meet domestic hot water loads in the facility and to pre-heat boiler feed water. A dump radiator will reject any unneeded thermal energy.



Quick Facts

Location:

White Plains, NY

CHP Equipment:

(2) Aegis AEGEN-75 generators

Installation Date:

2011

Heat Recovery Application:

Domestic Hot Water

Operating Experience:

Beginning 8/2011

Type of Fuel:

Natural Gas

Generating Capacity:

150 kW

“I strongly believe in clean energy, in conserving energy, all of that – more than anybody.”

- Donald Trump

**Web Links and Further Information:**

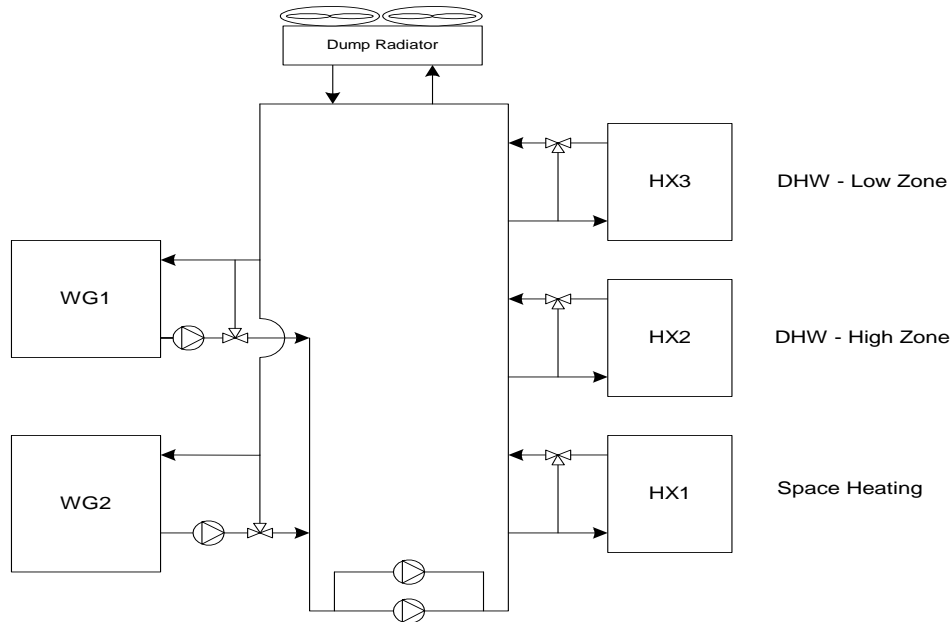
Equipment Manufacturer: www.aegisenergyservices.com

DG/CHP Resources: chp.nyserda.org

Trump Tower's CHP Plant

CHP System and Equipment

The units are located on the 35th floor mechanical room, along with the associated pumps and heat exchangers. The dry-cooler dump radiators are located on the roof outside the mechanical room. Also located in the mechanical room are storage style natural gas water heaters, and the space heating hot water boiler. A dump radiator will reject any unneeded thermal energy.



Economics and Environmental Benefits

The CHP system's greater efficiency compared to the use of conventional utilities should help to substantially reduce emissions of carbon dioxide as well as other pollutants and greenhouse gases. Limited data from the site are available in an hourly format on NYSERDA's DG/CHP website from January 2009.



AEGEN- 75 Generator

Summary of Benefits

- CHP system provides majority of required energy
- Operating schedule designed to maximize savings
- Synchronous generators allow operation independent of utility grid in emergencies.

Prepared for NYSERDA by:
CDH Energy Corp.
Cazenovia, NY 13035
315-655-1063

www.cdhenergy.com
dgchp_data@cdhenergy.com