Tour of the Cornell Combined Heat & Power Plant

Resulting from a rigorous energy master plan initiated in 2001, the Cornell Combined Heat & Power Project (CCHPP) was approved by University Trustees in December, 2005, and went into commercial operation in December 2009. The CCHPP added two Solar Titan 130 combustion turbine generators, totaling 30 Megawatts of electrical output with Rentech heat recovery steam generators, totaling 300,000 lbs/hr of steam generation, at the current CHP. This system produces ~ 80% of campus electrical power. This project included a major renewal of the plant electrical system and includes two 1,000 kw emergency diesel generators. A dedicated 3.2 mile high pressure gas line was constructed to provide fuel.

The CCHPP is part of the Central Energy Plant (CEP) at Cornell University which provides all the centrally produced power and district energy services such as steam and chilled water. The CEP reliably serves approximately 150 buildings (14 million sqft) of the central campus and annually produces 215,000,000 kilowatt-hrs of electricity, 1,200,000 thousand pounds of steam, and 45,000,000 ton-hrs of chilled water.

The tour will be guided by Tim Peer, P.E., Energy Plant Manager. Tim has worked at Cornell over 20 years and has extensive process engineering and project management experience in support of Cornell University’s world class district heating and cooling systems. Tim served as Project Manager for the Cornell Combined Heat & Power Project, which is being highlighted today, and also for Cornell’s award winning deep lakewater cooling system known as Lake Source Cooling. Tim is a registered professional engineer, received a B.S. degree in Agricultural and Biological Engineering from Cornell University, and is a member of the International District Energy Association (IDEA).