☐ POWER INDUSTRIAL

University of Florida
Gainesville, FL
Utilities Master Plan & 3rd Party Energy Provider Analysis

CONSTRUCTION COST:
$30 Million

YEAR COMPLETED:
2016

ABOUT THE CLIENT

University of Florida is the second largest university in Florida by student population, and is the seventh largest single-campus university in the United States. The University of Florida is home to sixteen academic colleges and more than 150 research centers and institutes. UF is an American public land-grant, sea-grant, and space-grant research university on a 2,000-acre campus in Gainesville, Florida.

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UTILITIES/INFRASTRUCTURE MASTER PLAN
An existing utility Combined Heat and Power contract was coming to the end of its 22 year term. This required an analysis of contract extension, University ownership and third party redevelopment. The objective was to minimize energy costs through optimization of on-site CHP and implementation of energy conservation measures. Concord evaluated the existing third party energy service provider's 45 MW combined cycle power plant for end of contract fair market value and options for continued service. This included examining technical and financial options for continued services of the existing plant under a contract extension, sale of assets to another party or purchase of the plant by UF.

Using an 8760 Lifecycle Cost Analysis approach, multiple CHP configurations were evaluated including University and third party ownership of assets. A critical factor was detailed review of regulatory issues that included coordination with the Florida Public Service Commission precedents, rules and regulations.

DESIGN OF ONSITE POWER PLANT
In addition, Concord provided preliminary design drawings for several options for a new on-site 15 MW to 62 MW combined heat and power plant. Design options include a range of combustion turbine generator units with heat recovery steam generators serving the campus steam load, new absorption chillers and new steam turbines. A new campus electrical substation is also included in the design. The preliminary design is based on the University of Florida's current and future campus loads and a condition assessment of existing campus generation equipment.