

University of Florida
Central Energy Plant Project

Industry Day

September 2021

UF
UNIVERSITY of FLORIDA




Today's Speakers

Chris Cowen	*Chief Financial Officer,* ***University of Florida***
Curtis Reynolds	*Vice President, Business Affairs,* ***University of Florida***
Colt Little	*Attorney / General Counsel's Office,* ***University of Florida***

Overview of the University

Background

- ***State-Supported Land-Grant Research University***
  Founded in 1853
- Located on a contiguous 2,000 acre main campus in ***Gainesville, Florida***
- Member of the State University System
- Recognized by the Carnegie Commission on Higher Education as ***one of the Nation's leading research universities***
- Enrollment exceeding ***57,800 students***
- Academically most highly ranked student body in the State of Florida

Offerings

- ***16 Colleges*** and more than 190 interdisciplinary research and education centers, bureaus and institutes
- Almost ***100 Undergraduate and over 200 Graduate degrees***
- Professional post-baccalaureate degrees in law, dentistry, medicine, pharmacy, and veterinary medicine

Overview of the University (Cont.)

University Ratings[1]

Credit	Moody's	S&P	Fitch
Issuer	*Aa1*	-	*AA+*
Student Activity	*Aa2*	*AA+*	*AA*
Parking Facility	*Aa2*	*AA-*	*AA-*
Dormitory	*Aa2*	*AA-*	*AA*

Accolades

- ***Ranked #5 among Public Universities*** in the U.S. (US News and World Report 2021)
- The University's Sid Martin Biotechnology Incubator was ranked ***"World's Best University Biotechnology Incubator"*** (UBI 2013)
- Received a record ***$838 million in research awards*** last fiscal year
- ***Ranked 16th among public universities in research expenditures*** (2019)
- #2 among ***Best Value Public Colleges*** (Forbes 2016)

[1]*As of September 28, 2021*

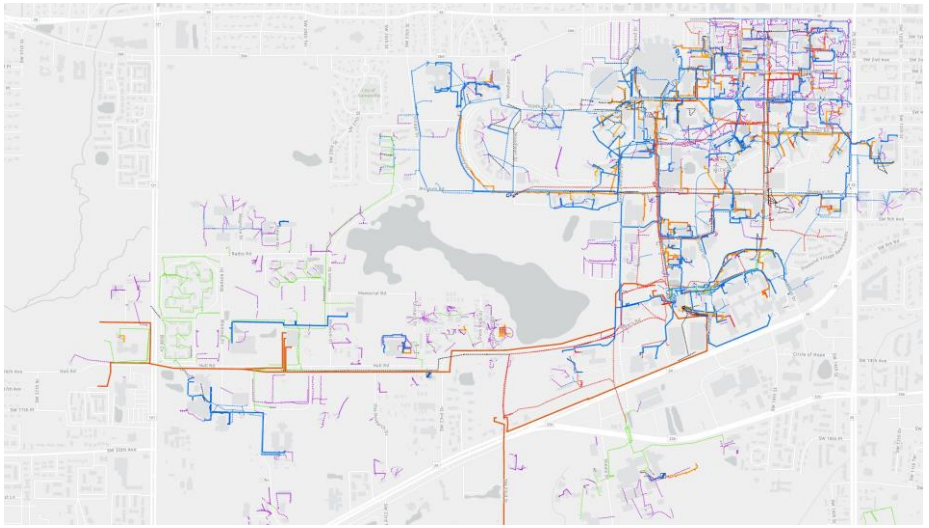
Existing Energy System

Duke Energy Facility

- Currently, the ***University's central cogeneration facility*** is owned and operated by Duke Energy Florida, LLC and is referred to as the "Duke Energy Facility"
- The Duke Energy Facility has been in operation for 25 years and is the ***primary source of steam for the campus***
- The Facility is not directly connected to the University's electrical distribution system
- ***The University is a retail electricity customer of Duke Energy*** and takes delivery for all electricity to the campus via grid-connected substations

Utility System

The University's education, research, agricultural, medical, athletic and business-related functions all rely on an intricate arrangement of energy generation, chillers, boilers, and utility distribution



Map above includes all delivery and return lines (piping or wires) for Electrical, Chilled Water, and Steam on campus

Central Energy Plant Project

Background

- The Duke Energy Facility, the University's central cogeneration facility, is approaching the ***end of its service life and subsequent contract expiration***
- The infrastructure systems that produce chilled water and deliver thermal energy and electricity to the campus ***require upgrade and expansion***
- The overall existing utility system distribution capacity is becoming ***insufficient to meet the needs*** of the growing campus
- The campus has ***no source of islandable power generation*** to support critical operations in the event of a grid outage failure

In response, the University has invested the past three years exploring numerous infrastructure alternatives and formulating a strategy to develop the next generation of campus utilities to meet the needs of the University

Project Overview

Scope of Work

DBFOM: *Central Energy Plant*

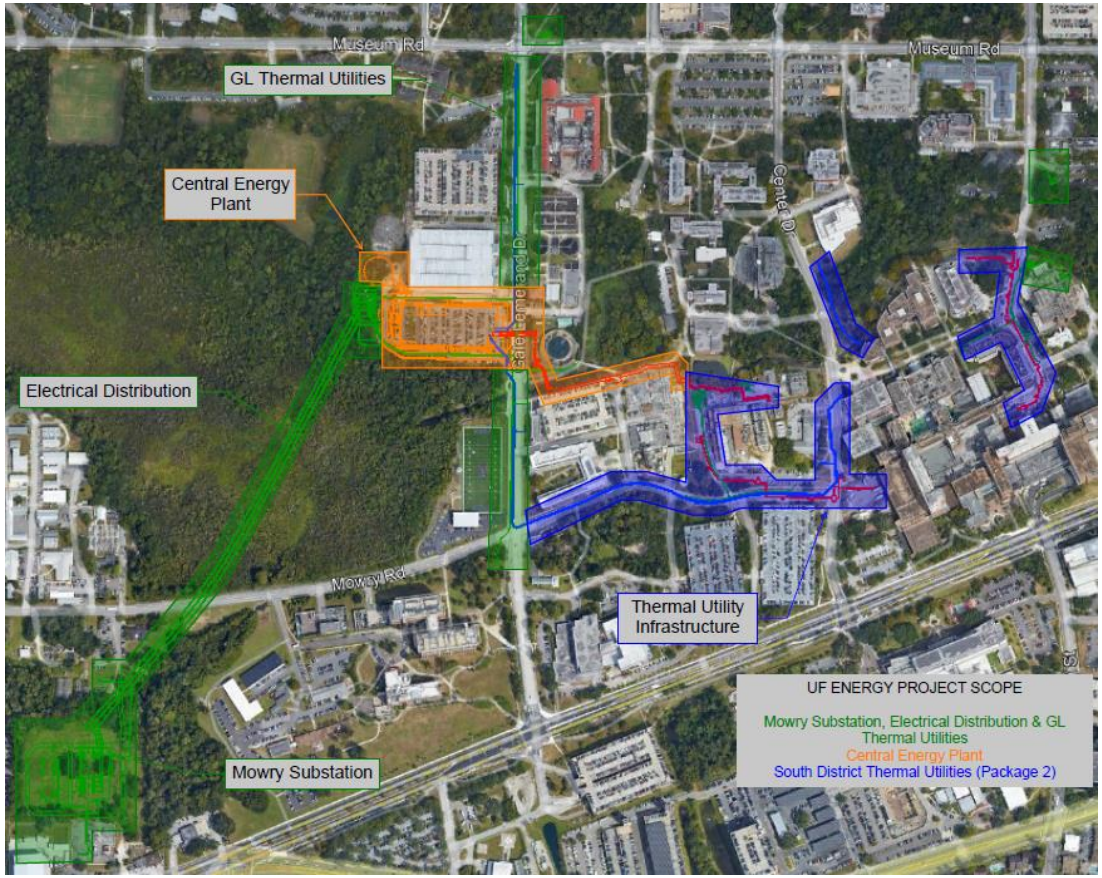
- Steam (230,000 PPH)
- Combined Cycle CHP (50 MW)
- Chilled Water (25,000 tons)
- Connection to main campus steam and chilled water piping
- New Energy Plant Building

B&F: *Thermal Piping Distribution Loop ("Thermal Utility Infrastructure")*

- New direct bury chilled water distribution piping
- Steam and condensate return distribution pipes

B&F: *Mowry Road Substation ("Electrical Distribution")*

- Three new 69kV stepdown transformers and switchyard
- Electrical and communications distribution feeders
- Chilled water distribution piping



Strategic Objectives

The Project design should ensure energy resilience for the campus while advancing strategic priorities of the University

Achieving Steam Independence

Provide Steam for all of campus by 2027

Achieving Sustainability Goals

Project will further reduce the University's overall carbon footprint by 25%

Balancing Affordability with Future Innovation

Efficient pricing and ongoing operational synergies while allowing for future technological innovation

Academic Collaboration

Interactive and dynamic programs to provide a living laboratory for all students

Inclusive Culture

Supports the University's commitment to diversity, equity and inclusion

Cutting Edge Technology

Inclusion of AI and state-of-the-art diagnostic tools to maximize efficiency

Sustainability Goals

Carbon and Sustainability Goals

- Presidential-level goal to be a carbon neutral campus since 2006
- The UF Climate Action Plan 2.0 will be released in Fall 2021
- The University completes annual UF Greenhouse Gas Inventory for the University's main campus operations

Immediate Carbon Reduction

25% Reduction in the University's Overall Carbon Footprint

- On an annual basis, the ***reduction of carbon footprint*** from the CEP is the equivalent of shifting 18,000 US homes to zero-emission electricity
- Emissions reductions come from ***improving efficiency*** with the University's steam supply, ***shifting ~60% of campus electricity*** from the electricity grid, generating electricity using a highly efficient CHP system, and ***reducing the distance*** electricity will need to travel to arrive where needed

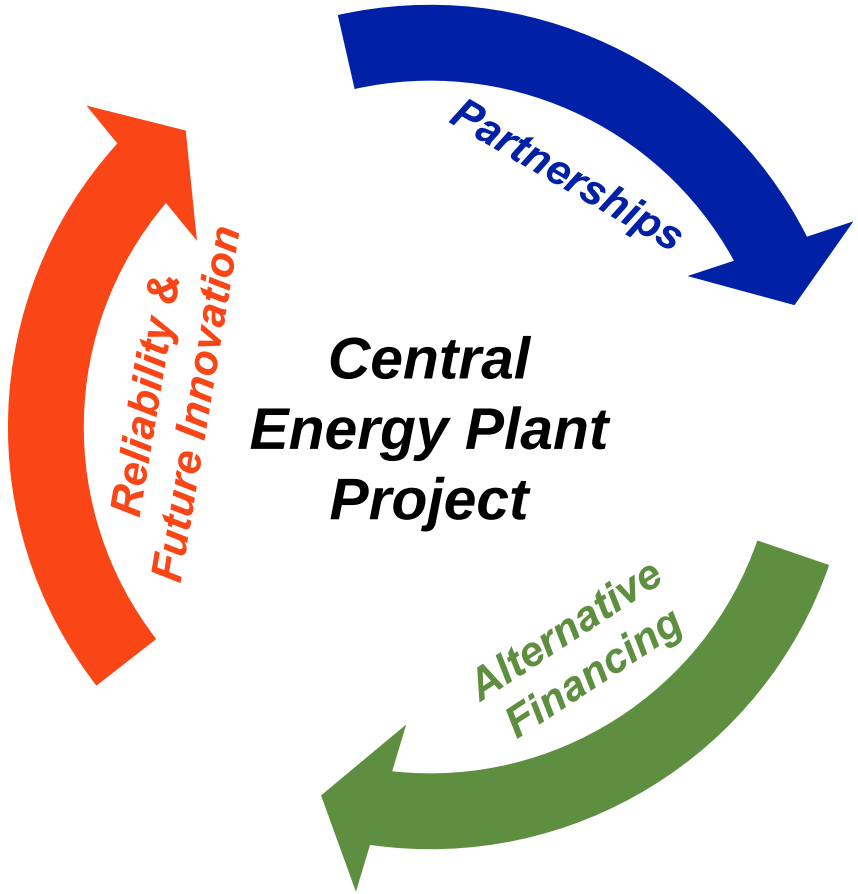
Mitigating Long-Term Implications

- The University has made a commitment to develop the CEP for present and future campus needs
- The gas turbines may have the potential to ***adapt to burn more environmentally friendly fuel sources in the future***

Key Drivers for Utilizing a P3 Delivery Model

After extensive diligence and review, the University has elected to pursue a P3 delivery model vs. self-delivery

- P3 Partner to help the University meet Strategic Objectives
- Turn-key solution ensuring on-time delivery and ongoing operational reliability
- Cutting edge technology with ability to adapt to future technological innovations
- Single point of contact and streamlined operations to drive future synergies



- Further enhance academic collaboration on campus
- Full living laboratory on campus for the University's students
- Project serves as a model in industry

- State law limitations on the University's direct debt financing
- Leverage third party expertise to reduce total project cost

The University's Staff has been, and will continue to be, in active dialogue with the Trustees and Board of Governors

Anticipated P3 Structure

- The Developer will be responsible for ***designing, building, financing, operating and maintaining*** ("DBFOM") the Central Energy Plant
- The Developer will be responsible for ***building and financing*** the thermal distribution piping loop and Mowry Road Substation
- The Developer is expected to be compensated via an ***Availability Payment-like mechanism*** from the University
  - ***Central Energy Plant scope will include performance based deductions and KPI compliance requirements throughout the term of the agreement***

Overview of Procurement Process

ITN Phase I

- Issuance of ITN Phase I
- Evaluation of SOQs
- Development of a short list of 3-4 firms

ITN Phase II

- Issuance of initial draft ITN Phase II
- Evaluation of comments from shortlisted firms
- Issuance of final ITN Phase II
- Proposal submissions and evaluation
- Negotiation of Final Agreement

Approval of Final Agreement

Please reach out to the following email address with any questions:

UFCEP-Project@ufl.edu

Anticipated Project Timeline

Item	Date
Issuance ITN Phase I	September 9, 2021
Industry Day	September 28, 2021 at 1:30 p.m.
ITN Questions Deadline	October 1, 2021
ITN Questions Response Date	October 15, 2021
SOQ Submission Deadline and Opening of SOQs	November 10, 2021 at 2:00 p.m.
Announcement of Shortlisted Proposers	December 2021
Issue Initial Draft ITN Phase II	January 2022
Issue Final ITN Phase II	June 2022
Proposal Submission Deadline	September 2022
Selection of Developer	October 2022
Financial Close	Early 2023

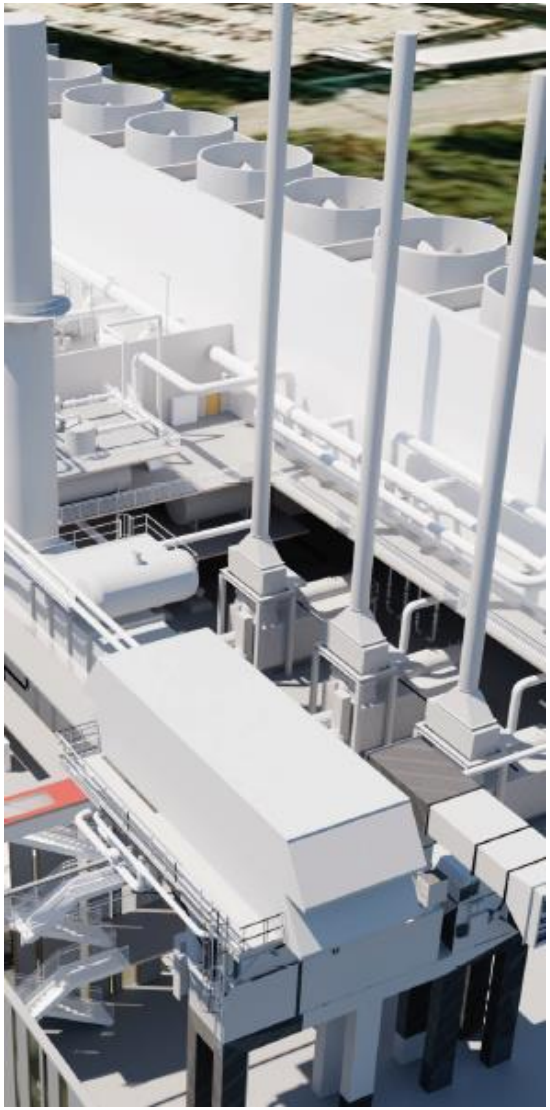
The University will not be bound by, and Respondents shall not rely on, any oral communication or representation regarding this ITN Phase I or any written communication except to the extent that it is contained in this ITN Phase I or in an addendum to this ITN Phase I

Procurement Follow-Ups

- An addendum to the ITN will be issued by October 15th, that will include:
  - Responses to questions received
  - List of registered attendees, including email addresses
- Any written ITN questions (using Form E) are due October 1st to UFCEP-Project@ufl.edu
- Responses will be posted to UF's Procurement.ufl.edu website by October 15th

The University's Cross-Department Internal Project Team

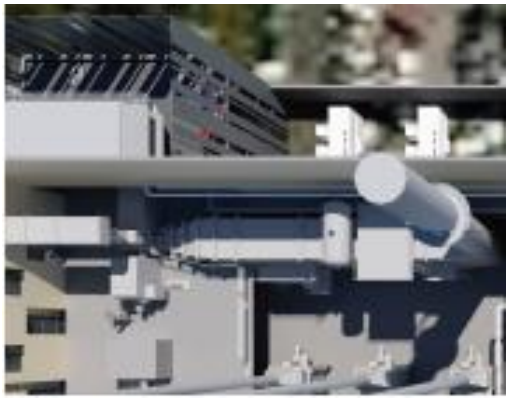
Chris Cowen	*Chief Financial Officer*
Alan West	*Assistant Vice President and Treasurer*
Curtis Reynolds	*Vice President, Business Affairs*
Mark Helms	*Assistance Vice President, Facilities Services*
Colt Little	*Attorney / General Counsel's Office*
Marilena Ceobanu	*Director, Finance*
Chris Whitehurst	*Assistant Director, Finance*
Jennifer Meisenhelder	*Director of Utilities, Thermal Systems*
Gregg Clarke	*Senior Director, Operations*
Dante Reyes	*Senior Project Controls Manager*
Charles Kammin	*Assistant Director, Electric Systems*



Advisory Team

Financial Advisor
Goldman Sachs

Technical Advisor
Jacobs



Legal Advisors
Ballard Spahr
GBW Legal
Bryant Miller Olive