



UNIVERSITY OF CENTRAL FLORIDA

**Office of the President**

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| <b>SUBJECT:</b><br>Energy and Water Efficiency | <b>Effective Date:</b><br>7/1/2022   | <b>Policy Number:</b><br>3-111.3 |           |
|  | <b>Supersedes:</b><br>3-111.2  | <b>Page</b>                      | <b>Of</b> |
|  | <b>Responsible Authority:</b><br>Assistant Vice President, Utilities and<br>Engineering Services |                                  |           |

**DATE(S) OF INITIAL ADOPTION AND EFFECTIVE DATE 5/21/2008**

**APPLICABILITY/ACCOUNTABILITY**

This policy applies to all personnel, departments, and units on University of Central Florida campuses, including, Direct Support Organizations, auxiliaries and private entities.

**BACKGROUND INFORMATION**

As one of over 250 signatories to the American College & University Presidents' Climate Commitment (ACUPCC), the university is committed to environmental stewardship and carbon neutrality. As energy and water demands and costs continue to rise, efficient use of these resources has become increasingly important to the university's mission. As a result, UCF requires the support of its community, including leadership, administrators, researchers, students, faculty, and staff members.

Water is a precious and limited commodity for the Central Florida region. UCF embraces a culture of smart growth and seeks aggressive water conservation and efficiency strategies to address the water demands of a growing campus population. Appropriate policies, strategic plans, and procedures, along with strict adherence to the commissioning process, shall continue to guide UCF towards becoming a national leader in energy and water conservation research, education, and stewardship.

## **POLICY STATEMENT**

Energy and water conservation practices must be followed by all members of the university community. All proposed initiatives and projects must comply with applicable Florida Statutes regarding energy and sustainability building requirements, Florida Building Codes, Florida Administrative Codes, UCF's Green Building Construction and Renovation Requirements, and UCF's Design, Construction, and Renovation Standards.

Facilities & Business Operations (F&BO) is the clearinghouse for all water and energy efficiency matters, including replacements, renovations, and new construction on university-owned or leased property. The Assistant Vice President, Utilities and Engineering Services (AVP UES) or designee, is the authority to approve, revise, prohibit, or restrict building programs, project designs, equipment selections, and utility services that do not meet these requirements. Proposed initiatives and projects must be reviewed and approved by the AVP UES, or designee, prior to commencing.

## **DEFINITIONS**

**Commissioning.** A quality-focused process for enhancing the delivery of a project, which verifies and documents that all of the commissioned systems and assemblies are planned, designed, installed, tested, operated, and maintained to meet the Owner's project requirements in strict adherence to the latest version of ANSI/ASHRAE Standard 202.

**Concurrency.** The availability of public facilities and services in an equitable manner and the guarantee of a specific level of service, ensuring that new development will not deplete those levels of utility service. Florida Statute 163.3180 requires Concurrency Management Systems for monitoring and ensuring adherence to the adopted level-of-service utility standards, including the schedule of capital improvements and the availability of public facility capacity.

**Leadership in Energy and Environmental Design (LEED).** A green building rating system that provides a framework for creating healthy, highly efficient, and cost-saving buildings. LEED impact categories include reversing contributions to climate change; enhancing individual human health and well-being; protecting and restoring water resources; protecting, enhancing, and restoring biodiversity and ecosystem services; promoting sustainable and regenerative material resource cycles; building a greener economy; and enhancing social equity, environmental justice, and community quality of life; all of which provide grounds to facilitate advanced teaching and research.

## **POLICY**

### **1. New Building Construction and Renovations**

All new construction and facility renovations must adhere to the UCF Green Building Construction & Renovation Requirements at the time of the development permit, which represents the minimum program requirements.

From the initial conceptual and schematic design to completion, F&BO will serve as the principal advisor and approval authority for ensuring that energy and water efficiency standards and practices meet all specifications and statutory requirements for the design, construction, and operation of all UCF facilities. F&BO must review all matters relating to:

- mechanical, electrical, and plumbing design, renovation, and commissioning
- building environmental life-cycle cost analyses
- high-performance building requirements
- energy models
- demand-response initiatives
- building additions
- HVAC and building automation operations and maintenance
- utility concurrency management systems and capacity subscriptions
- alterations impacting water or energy use on any UCF campus
- utility and related conservation elements in the University Campus Master Plan
- smart infrastructure
- source water and/or fuel switching
- wetlands determination and watershed
- utility procurement
- utility generation
- utility interconnection

UCF follows the LEED rating system to guide best practices, including assessing life cycle costs and achieving positive results in LEED's social, environmental, and economic impact categories. UCF must meet LEED Gold certification for all new construction and strive for LEED certification on renovation projects.

### **2. Building Operation**

As directed by Florida Statutes, Chapter 255, Public Property and Publicly Owned Buildings, university buildings will be operated in the most energy-efficient manner possible, regardless of funding source(s). Major energy-use systems in existing facilities will be upgraded and/or renovated, where possible, to qualify for LEED Operations & Maintenance (O+M) certification, operate efficiently, and cultivate healthy spaces for occupant productivity. Similar space types or functions will be grouped together to realize the most efficient building utility usage. Scheduling of

instruction and research space outside of normal hours of operation will be grouped using the most optimal configuration.

### **3. Building Commissioning**

UCF supports a quality-focused process for enhancing the delivery of a project. Commissioning activities begin at the programming phase for each project and must, at a minimum, include design development and review, construction, and functional testing. Commissioning may be performed in-house by UES or outsourced to a third-party entity reporting directly to UES.

### **4. New Initiatives**

UCF encourages a culture of innovation and change as it pursues energy efficiency improvements. The university community is encouraged to recommend any energy efficiency concepts that could improve campus operations to F&BO.

UCF will transition towards more sustainable, resilient, and reliable energy sources to reduce the delivered cost of purchased energy and negative impacts on the built environment.

UCF will continue to seek holistic approaches for more efficient use of water. Water resource planning is a key component of water conservation. As a condition of the campus consumptive use permit for potable water withdraw from the upper Floridan Aquifer, UCF shall adhere to conservation programs in accordance with the American Water Works Association's M52 Standard to account for the ongoing development of short- and long-range strategies for the efficient utilization of available sources for water supply, public recognition and participation, and to improve support for water price adjustments given the finite regional supply. UCF will be mindful of its limited water capacity agreement with the St. Johns River Water Management District as it develops and approves Campus Master Plans and Capital Improvement Requests. The Concurrency Management System will ensure that campus facilities and services remain available when new development is proposed.

## **PROCEDURE**

Proposed initiatives and projects, whether internal or external, must be sent either: a) as a Work Request to FO at [fo.ucf.edu/customer-request-form](https://fo.ucf.edu/customer-request-form); or b) as a Minor Project Request to Facilities Planning and Construction (FPC) at [fp.ucf.edu/minor-projects](https://fp.ucf.edu/minor-projects). For questions on whether to submit a Work Request or Minor Project Request please contact the Director, FPC.

## RELATED INFORMATION

Florida Statute 163.3180 Concurrency

[http://www.leg.state.fl.us/statutes/index.cfm?App\\_mode=Display\\_Statute&Search\\_String=&URL=0100-0199/0163/Sections/0163.3180.html](http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=0100-0199/0163/Sections/0163.3180.html)

Florida Statute 255.252 Findings and intent

[http://www.leg.state.fl.us/statutes/index.cfm?App\\_mode=Display\\_Statute&Search\\_String=&URL=0200-0299/0255/Sections/0255.252.html](http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=0200-0299/0255/Sections/0255.252.html)

Florida Statute 255.254 No facility constructed or leased without life cycle costs

[http://www.leg.state.fl.us/statutes/index.cfm?App\\_mode=Display\\_Statute&Search\\_String=&URL=0200-0299/0255/Sections/0255.254.html](http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=0200-0299/0255/Sections/0255.254.html)

Florida Statute 255.255 Life-cycle costs

[http://www.leg.state.fl.us/statutes/index.cfm?App\\_mode=Display\\_Statute&Search\\_String=&URL=0200-0299/0255/Sections/0255.255.html](http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=0200-0299/0255/Sections/0255.255.html)

Florida Statute 255.2575 Energy-efficient and sustainable buildings

[http://www.leg.state.fl.us/statutes/index.cfm?App\\_mode=Display\\_Statute&Search\\_String=&URL=0200-0299/0255/Sections/0255.2575.html](http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=0200-0299/0255/Sections/0255.2575.html)

Florida Statute 553.994 Applicability

[http://www.leg.state.fl.us/statutes/index.cfm?App\\_mode=Display\\_Statute&Search\\_String=&URL=0500-0599/0553/Sections/0553.994.html](http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=0500-0599/0553/Sections/0553.994.html)

Florida Statute 553.995 Energy-efficiency ratings for buildings

[http://www.leg.state.fl.us/statutes/index.cfm?App\\_mode=Display\\_Statute&Search\\_String=&URL=0500-0599/0553/Sections/0553.995.html](http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=0500-0599/0553/Sections/0553.995.html)

Green Building Construction & Renovation Requirements

<https://fp.ucf.edu/resources/standards-and-requirements/>

International Organization of Standardization (ISO) 50001 Energy management systems

<https://www.iso.org/iso-50001-energy-management.html>

Maintenance & Operation Requirements

<https://energy.ucf.edu/maintenance-and-operations-requirements/>

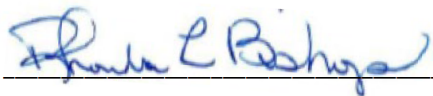
Professional Services Guide for Design, Construction, and Renovation

[http://fp.ucf.edu/wp-content/uploads/resources/Standards\\_and\\_Requirements/UCF\\_Professional\\_Services\\_Guide\\_with\\_Exhibits\\_-\\_3-19-2013.pdf](http://fp.ucf.edu/wp-content/uploads/resources/Standards_and_Requirements/UCF_Professional_Services_Guide_with_Exhibits_-_3-19-2013.pdf)

UCF Design, Construction, and Renovation Standards

<https://fp.ucf.edu/wp-content/uploads/resources/Standards%20and%20Requirements/Design%20Construction%20and%20Renovation%20Standards%20v2019-3.pdf>

**INITIATING AUTHORITY:** Vice President for Facilities and Business Operations

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|---|---|-----------------|
| <b>POLICY APPROVAL</b><br><b>(For use by the Office of the President)</b> |   |                 |
| Policy Number: 3-111.3  |   |                 |
| Initiating Authority:   | Jonathan Varnell<br><small>Digitally signed by Jonathan Varnell<br/>Date: 2022.06.29 22:50:28 -04'00'</small>         | Date: 6/29/2022 |
| University Policies and Procedures Committee Chair:                       |                                     | Date: 6/22/2022 |
| President or Designee:  | Alexander Cartwright<br><small>Digitally signed by Alexander Cartwright<br/>Date: 2022.07.01 10:21:56 -04'00'</small> | Date: 7/1/2022  |

History: 3-111 5/21/2008; 3-111.1 6/2/2015; 3-111.2 7/17/2020