

2.10 Utilities Element
Goals, Objectives and Policies
2010-2020 Campus Master Plan Update

CHILLED WATER SUB-ELEMENT

GOAL 1: Ensure that the future development of UCF is based on the provision of an on-campus chilled water generation and distribution system, which adequately serves the future campus population needs.

OBJECTIVE 1.1: To base future development on the UCF campus on a determination that there is an adequate chilled water generation and distribution system capacity to accommodate the proposed demand.

POLICY 1.1.1: Future development on the UCF campus which increases the demand for chilled water generation and distribution capacity shall be approved under the provision of a system which serves the future development under the following level of service standards:

1. Under the existing campus-wide average service conditions, one (1) ton of plant capacity per 250 square of building floor area, or
2. A finding that future additional building design loads might be accommodated under the available generation and distribution system parameters.

POLICY 1.1.2: The University shall establish as overall implementation priorities the following: (1) continued servicing of the existing campus built areas; (2) the maintenance of 1,000 tons of residual plant capacity for emergency back-up purposes; (3) expansion of the existing plant generation and distribution system capacity in order to serve more efficiently the existing demand; (4) maintenance of sufficient capacity to provide for the orderly and balanced equipment maintenance; and (5) expansion of a plant and distribution system capacity to serve new development areas/buildings.

POLICY 1.1.3: UCF shall be solely responsible for the provision, maintenance and continued operation of a chilled water system to serve the campus building needs.

POLICY 1.1.4: The University shall rely upon the land use and building programs identified in the Comprehensive Master Plan and in Capital Plans/Programs to stage the construction of an expanded chilled water system, such that the expanded system is on-line at the time of the projected increased demand. This process shall be the responsibility of

the Facilities & Safety, AVP Office. It shall be the responsibility of the Physical Plant Chilled Water Production Unit to determine that sufficient plant and distribution system capacity is/will be available at such time any new building is proposed for construction.

POLICY 1.1.6: The University shall implement improvements to the chilled water distribution system as Capital Improvements and additional facilities are added.

POLICY 1.1.7: Based on a balancing of other competing objectives, the University shall continue to subscribe to a variety of active and passive energy management/conservation strategies. As currently practiced, such strategies may include building site orientation design, stringent building insulation standards and, as appropriate, variable air volume systems within buildings. The responsibility for administering these strategies shall fall to the Facilities & Safety departments of Sustainability & Energy Management, Facilities Planning and Physical Plant.

POLICY 1.1.8: The University is maintaining utilities CAD drawings and load spreadsheets in order to track existing loads and understand impacts of future building projects.

ELECTRICAL POWER AND OTHER FUELS SUB-ELEMENT

GOAL 2: Ensure that the future development of UCF is based on the provision of an on-campus electrical power and natural gas distribution system which adequately serves the future campus population needs.

OBJECTIVE 2.1: To identify and resolve any deficiencies in the servicing of electrical and natural gas power distribution systems through ongoing inspection and coordination efforts with service providers.

POLICY 2.1.1: The University shall coordinate with Progress Energy and Tampa Electric Company (TECO) Gas for the replacement of outmoded or deteriorating service lines and equipment.

OBJECTIVE 2.2: To ensure the provision of adequate electrical and natural gas services through the continued internal funding and coordination with external service providers.

POLICY 2.2.1: Facilities Planning and Physical Plant shall be responsible for the continued coordination of power supply services with Progress Energy and TECO Gas. To the extent feasible, it shall be the responsibility of these offices to determine that adequate plant and distribution system capacity is available to serve expanded needs and to avail promptly the

University funding officer of any needs for UCF funds for maintenance, expansion or replacement.

POLICY 2.2.2: Future development on the UCF campus which increases the demand for electrical power and/or natural gas or other fuels shall be monitored for maximum efficiency.

POLICY 2.2.3: The University shall establish as overall implementation priorities the following: (1) continued servicing of the existing campus built areas; (2) maintenance of UCF owned power manhole and conduit system; and (3) expansion of the existing line distribution system capacity in order to serve existing demand more efficiently.

POLICY 2.2.4: The University shall rely upon the land use and building programs identified in the Comprehensive Master Plan, and on Capital Plans/Programs, to coordinate a staged expanded electrical system such as the expanded system on-line at the time of the projected increased demand. This process shall be the responsibility of the Associate Vice President for Administration and Finance (Facilities & Safety). It shall be the responsibility of the Physical Plant office to determine that sufficient plant and distribution system capacity is/will be available at such time any new building is proposed for construction.

POLICY 2.2.5: The University shall implement improvements to the electrical power and natural gas distribution system as additional facilities are added. The timing and phasing requirements and priorities for the provision of future electrical power and natural gas distribution system improvements are driven by elements identified in the Capital Improvements Element.

POLICY 2.2.6: Based on a balancing of other competing objectives and policies, the University shall, to the maximum extent feasible, continue to administer a variety of active and passive energy conservation strategies. As currently practiced, these strategies include appropriate building site design techniques, stringent building insulation standards and, as appropriate, zonal airflow and lighting systems. The responsibility for administering these strategies shall fall to Facilities Planning and Sustainability & Energy Management.

POLICY 2.2.7: The University shall install energy efficient equipment (i.e., electronic ballasts for fluorescent lighting fixtures, T-8 or T-5 lamps, etc.) in new buildings and when retrofitting existing buildings.

TELECOMMUNICATIONS SUB-ELEMENT

GOAL 3: Ensure that the future development of UCF is based on the provision of an on campus telecommunications system which adequately serves the future campus population needs.

OBJECTIVE 3.1: To continue to identify and resolve any deficiencies in the servicing of telecommunications systems through ongoing inspection and coordination efforts with service providers..

POLICY 3.1.1: The University shall continue to identify, upgrade, repair, and/or replace existing encased duct banks and telecommunications copper and fiber cables as additional facilities are added.

POLICY 3.1.2: The timing and phasing requirements and priorities for the provision of future telecommunication system improvements are driven by the Capital Improvements Element.

OBJECTIVE 3.2: To ensure the provision of adequate telecommunications facility services through continued internal funding of improvements and coordination with external service providers.

POLICY 3.2.1: The University's Offices of Computer Services and Telecommunications shall be responsible for the continued coordination of telecommunications infrastructure and services with off-site vendors and user groups. To the extent feasible, it shall be the responsibility of this office, the Facilities Planning Office and the Physical Plant to determine jointly that service capacity is available to serve expanded needs and to avail promptly the University funding officer of any needs for UCF funds for maintenance, expansion or replacement of such systems.

POLICY 3.2.2: The University shall establish as overall implementation priorities the following: (1) continued servicing of the existing campus built areas; (2) maintenance of the UCF owned Telecommunications Utility Vault (TUV) and duct bank system; (3) expansion of the existing telecommunications distribution system capacity in order to more efficiently serve existing demand; and (4) expansion of the telecommunications distribution system capacity, including the designation of future demarcation sites to link new development areas/buildings with on- and off-campus systems.

POLICY 3.2.3: The University shall rely upon the land use and building programs identified in the Comprehensive Master Plan, and on Capital Plans/Programs, to coordinate a staged expanded telecommunications system such the expanded system is on-line at the time of the projected increased demand. This process shall be the responsibility of the

Associate Vice President for Administration and Finance (Facilities & Safety).