CHILLED WATER SUB-ELEMENT

GOAL 1: To develop an on-campus chilled water generation and distribution system that adequately serves the future campus population needs.

OBJECTIVE 1.1: To ensure 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 feet 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 2,000 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 existing demand more efficiently; (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 ongoing implementing 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 shared responsibility of the Facilities Planning and Construction Department, Sustainability and Energy Management Department, and the University's Associate Vice President Administration and Finance (Facilities and Safety. It shall be the responsibility of the Facilities and Safety Chilled Water Production Unit to determine that sufficient plant and distribution system capacity is/will be available at the time any new building is proposed for construction.

POLICY 1.1.6: The University shall implement improvements to the chilled water distribution system based on the timing and phasing requirements and priorities of Capital Improvements and additional facilities.

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 and Safety Departments of Sustainability and Energy Management and Facilities Planning and Construction.

POLICY 1.1.8: The Department of Sustainability and Energy Management shall be responsible for the oversight and maintenance of all utility distribution infrastructures rented or owned as well as the corresponding peak loads.

ELECTRICAL POWER AND OTHER FUELS SUB-ELEMENT

GOAL 2: To provide an on-campus electrical power and natural gas distribution system which adequately serves the future campus population needs.

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

POLICY 2.1.1: The University shall coordinate with Duke Energy (DE) and TECO People's Gas for the replacement of outmoded or deteriorating service lines and equipment. It will be the department of Sustainability and Energy Managements' responsibility to maintain adequate residual pressures on all UCF houseline natural gas distribution infrastructures and to require changes as required and/or necessary.

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: The departments of Facilities Planning and Construction and Sustainability and Energy Management shall be responsible for the continued coordination of power supply services with Duke Energy and TECO People's Gas. To the extent feasible, it shall be the responsibility of these departments to determine whether adequate plant and distribution system capacity is available to serve expanded needs and to promptly inform 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 those ongoing implementing 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 shared responsibility of the Office of Facilities Planning and Construction, and the University's Associate Vice President of Administration and Finance (Facilities and Safety) programs. It shall be the responsibility of Facilities and Safety to determine that sufficient plant and distribution system capacity is/will be available at the 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 systems 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 energy-efficient lighting systems. The responsibility for administering these strategies shall fall to Facilities Planning and Construction and Sustainability and Energy Management Departments.

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: To provide an on- campus telecommunications system, which adequately serves the future campus population needs.

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

POLICY 3.1.1: The University shall continue to identify, upgrade, repair, and/or replace existing Encased Duct Banks and telecommunications copper, fiber, and Coaxial cables as additional facilities are added or renovated.

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

OBJECTIVE 3.2: The University shall 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 and the Facilities Planning and Construction department to determine jointly that service capacity is available to serve expanded needs and to inform the University funding officer promptly 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 Maintenance Holes 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 ongoing implementing Capital Plans/Programs, to coordinate a staged expanded telecommunications system such that the expanded system is on-line at the time of the projected increased demand. This process shall be the shared responsibility of the office of Computer Services and Telecommunications, the Facilities Planning and Construction department, and the University's Administrator of Capital Funding Programs.

All information or Policies on telecommunications infrastructure systems shall comply with the University of Central Florida Presidential Policies. These policies are located: <u>http://policies.ucf.edu/</u> Section 4-001.1 through 4-012.