Case Study

Higher Education Facility

Background

OUC District Cooling offers centralized chilled water solutions for a wide range of commercial cooling applications as an efficient and reliable alternative to traditional building owned HVAC chilled water systems. By connecting to OUC District Cooling, building owners and managers may avoid the capital expenditures and the operational complexities associated with maintaining on-site cooling equipment.

A higher education facility in Downtown Orlando leveraged this innovative solution to address the unique challenges posed by its remote graduate school location from its main campus, which is located approximately 250 miles away.

Challenge

The higher education facility faced significant logistical and operational challenges in designing its cooling infrastructure. Establishing and maintaining on-site equipment presented a major hurdle, given the distance from the facility's main campus and its operational staff. Administrators were concerned about their ability to provide adequate facilities support for maintaining a complex on-site cooling system in another city.

Additionally, the need to preserve sensitive indoor air environments, such as text storage areas, required a system capable of providing colder chilled water which has enhanced dehumidification capabilities.

Solution

To meet their needs, the University chose to connect to OUC District Cooling. This decision allowed the facility to forgo the $1 million capital investment required for on-site chilled water generation equipment.

OUC's looped district design ensured high reliability, providing uninterrupted cooling service and minimizing operational risks. The system's ability to supply 39°F chilled water enabled increased dehumidification, making it ideal for preserving sensitive materials and maintaining low-humidity environments.

By relying on OUC's centralized infrastructure, the facility was also able to significantly reduce the need for on-site facilities staff, alleviating concerns about maintenance support given its remote location from its main campus and the operational staff.

Implementation

From the outset, the higher education facility planned to integrate OUC District Cooling into its infrastructure, recognizing the advantages of OUC's district solution. The project came online in 2004 and involved connecting the facility to OUC's chilled water main lines, which are buried beneath the streets of Downtown Orlando. The proximity of the facility to OUC's main service line facilitated a seamless connection, ensuring a smooth and efficient implementation process.

Results

By utilizing OUC District Cooling, the higher education facility achieved significant capital cost savings and gained operational efficiencies. The elimination of the need for on-site chilled water generation equipment reduced capital investment by approximately $1 million. The system's centralized design minimized the need for on-site facilities staff, easing logistical challenges associated with the facility's distance from its main campus.

OUC's reliable looped district design ensured consistent cooling service, providing peace of mind for administrators concerned about service uptime. Additionally, the delivery of 39°F chilled water allowed for better dehumidification capabilities, meeting the facility's requirements for preserving sensitive environments.

Learn more about
OUC District Cooling