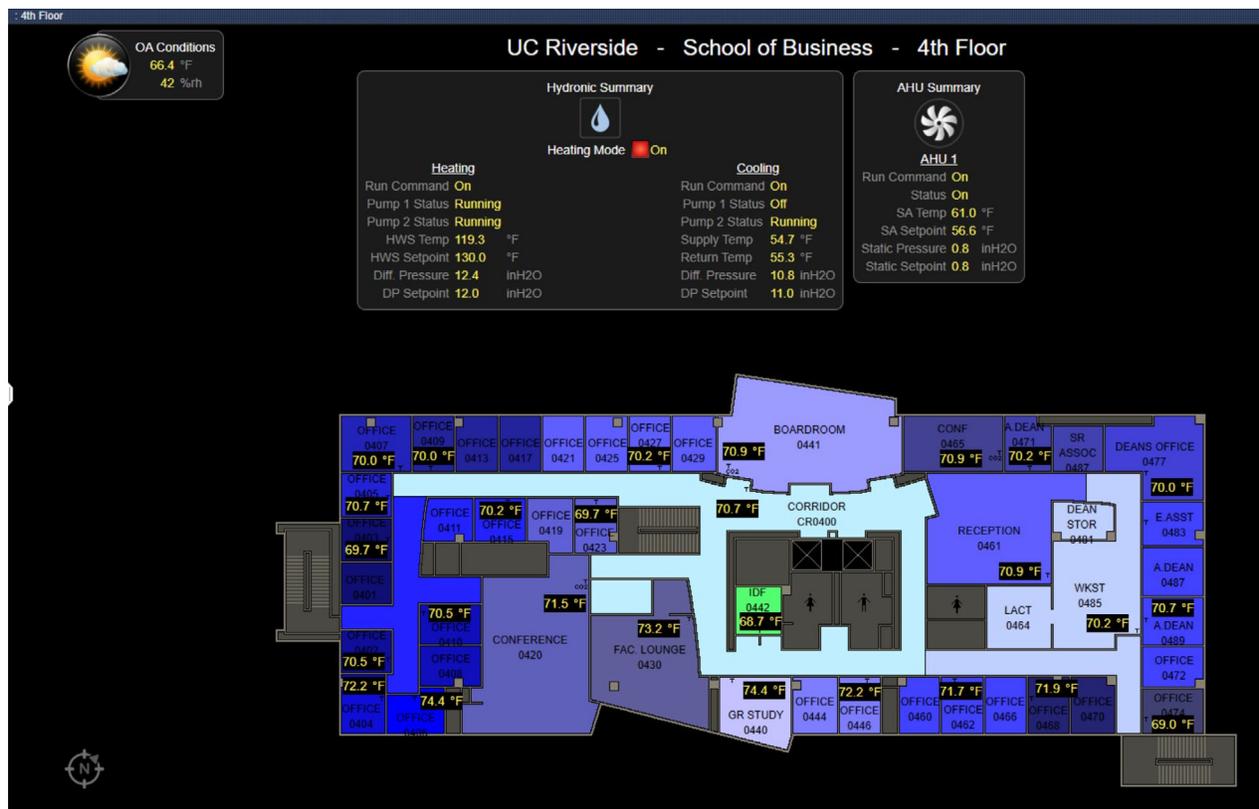# University of California, Riverside Facilities Services Implements Cutting-edge Energy Efficiency Project with SkySpark

The new School of Business Building is equipped with a heat pump system for year-round energy efficiency. Modern digital controls adjust the indoor environment when occupied, and reduce energy usage in empty rooms. Operators can adjust comfort controls in real time.

The Energy & Engineering team is piloting a new energy efficiency project using SkySpark®, an advanced analytic software, to support the **School of Business Building**. Leading the initiative are Chad Sisco, interim energy manager, Chris Flanders, building controls superintendent, and Alejandro Gonzalez, associate energy engineer.
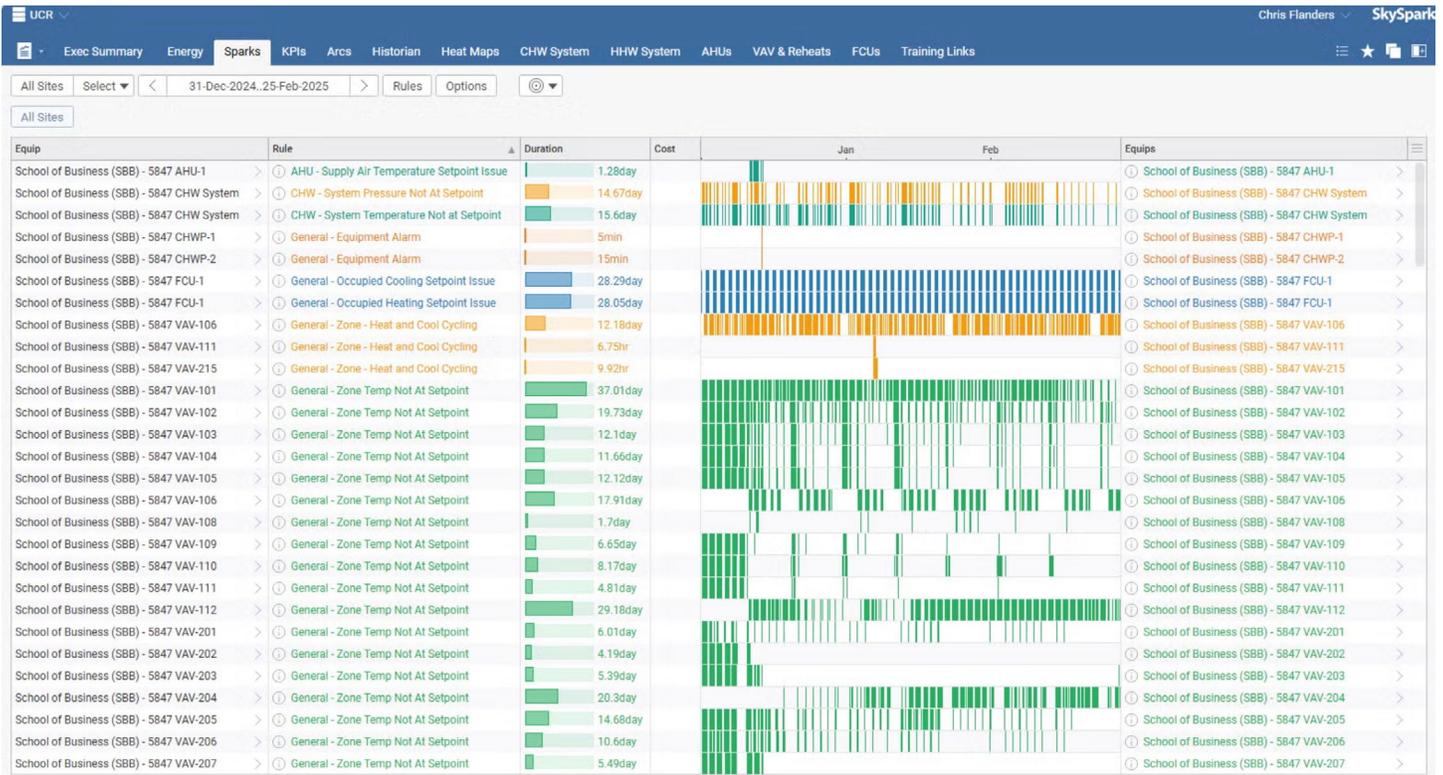
The School of Business's digital building controls by Sunbelt Controls are coupled with SkySpark analytic software, which proactively aims to enhance building system performance, reduce operating costs, and improve indoor air quality and comfort.

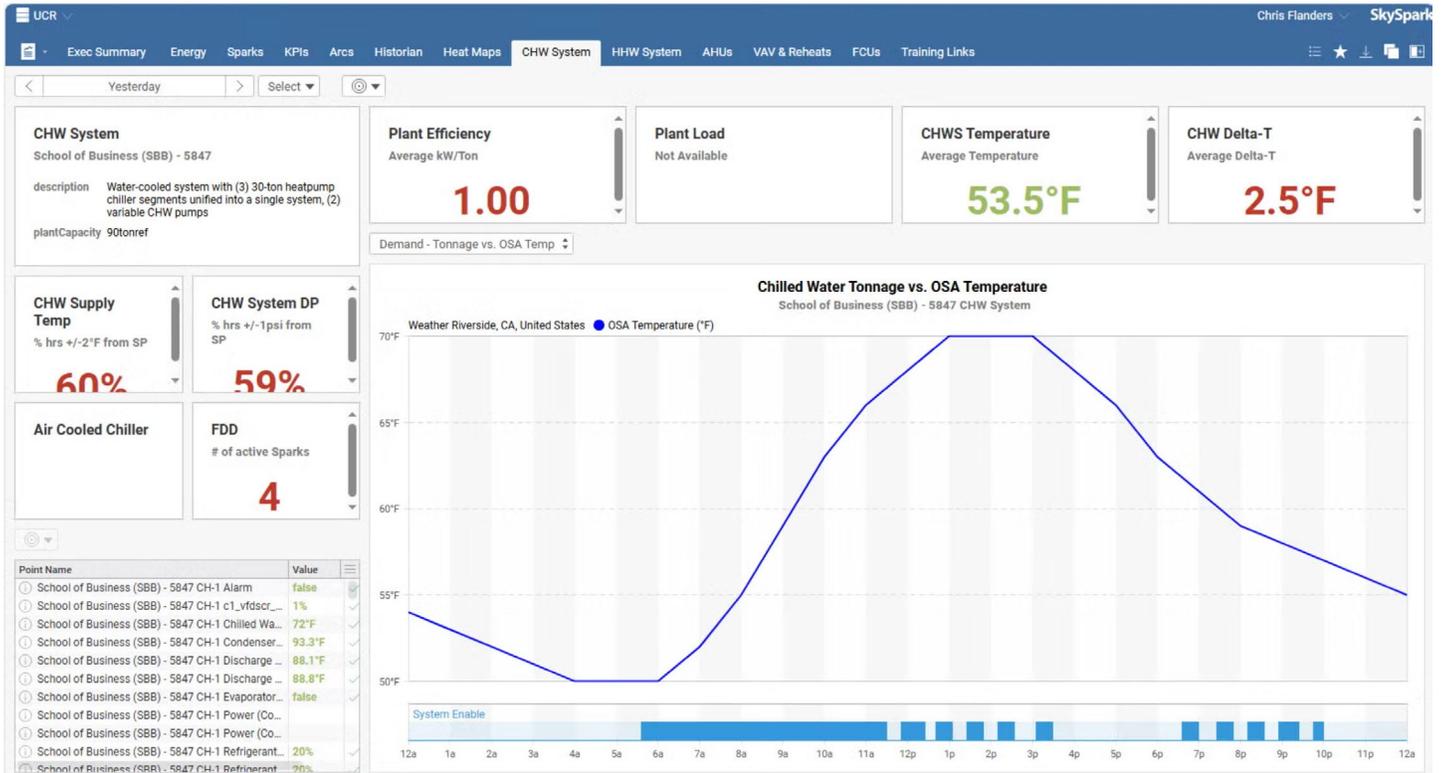The software identifies what are known as "sparks," which are anomalies detected using algorithms. This data is reported monthly, allowing Facilities Services to create work orders and actionable items based on the analysis. Over the last month, the software has already generated a list of action items related to air flow, heat recovery, chilled water valves, and dampers, some of which fall under warranty and require manufacturer assistance.

With plans to expand to additional buildings in the future, energy consumption across campus can be optimized by analyzing historical trends in the software to pinpoint necessary maintenance or repairs. UCR's School of Business Building exemplifies the potential of state-of-the-art controls and diligent management of resources.

This innovative project is one of many supporting UCR's commitment to operational sustainability.
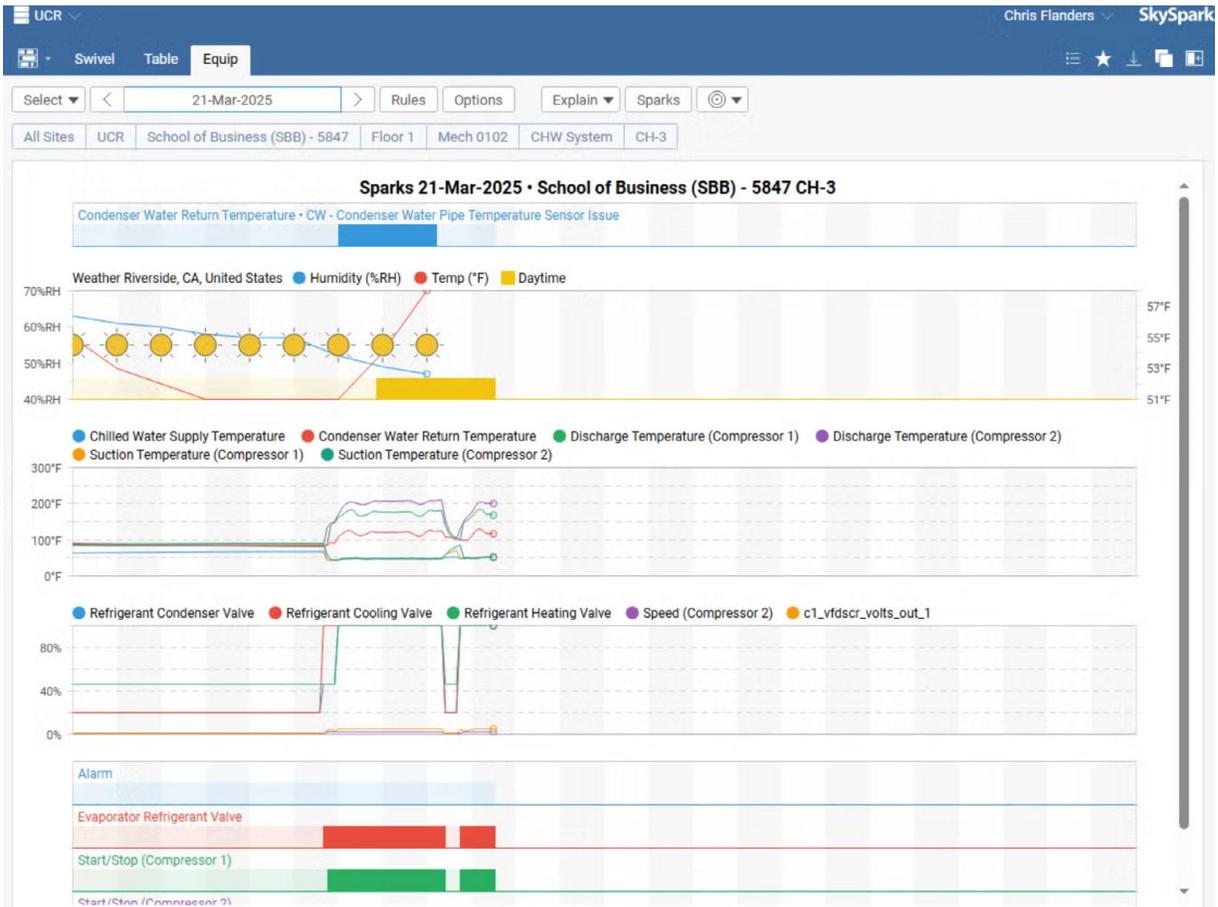
SkySpark software generates a list of "sparks" for FS to investigate.

An analysis of the cooling system aims to enhance building efficiency.

Heat map software helps identify zone temperatures and effective setpoints for the building.

SkySpark analytic software offers powerful tools for building operators to proactively identify issues, evaluate performance, and make seasonal adjustments.

The new frontier is to efficiently manage and analyze data to find what matters™.

The University of California, Riverside Facilities Services provides services to the UCR campus community consisting of approximately 27,000 students, 1,100 institutional faculty, and 6,000 staff. We are able to support the campus through the commitment, dedication and hard work by each of our employees every day. As experts in our fields, we also maintain buildings, facilities, and landscapes totaling over: 3 million square feet of space, 400 acres of campus landscape, and 6 miles of utility tunnels beneath campus. **https://facilities.ucr.edu/**

SkySpark® – Analytics for a World of Smart Device Data

The past decade has seen dramatic advances in automation systems and smart devices. From IP connected systems using a variety of standard protocols, to support for web services and xml data schemas, it is now possible to get the data produced by the wide range of devices found in today's buildings and equipment systems.

Access to this data opens up new opportunities for the creation of value-added services to help businesses reduce energy consumption and cost, and to identify opportunities to enhance operations through improved control, and replacement or repair of capital equipment. Access to the data is just the first step in that journey, however. The new challenge is how to manage and derive value from the exploding amount of data available from these smart and connected devices. SkyFoundry's SkySpark directly addresses this challenge.

SkyFoundry

About SkyFoundry

SkyFoundry's mission is to provide software solutions for the "Internet of Things". Areas of focus include:

- Building automation and facility management
- Energy management, utility data analytics
- Remote device and equipment monitoring
- Asset management

SkyFoundry's software helps customers derive value from their investments in smart systems. Learn more and request a demonstration at **www.skyfoundry.com**.