ARIZONA STATE UNIVERSITY / MISSION-CRITICAL CENTRAL PLANTS

HOW DO YOU UPGRADE A PLANT THE CAMPUS STILL NEEDS?

Mike Valdez and Streamline wrote the control software that runs ASU's central plants. For nearly a decade, ASU has turned to our team to maintain those systems across its campuses, from the pump in the field to the operator's screen.



HOW OPERATORS CHECK STORED COOLING / ILLUSTRATIVE EXAMPLE

2,000 tons sustained for 3 hours = 6,000 ton-hours delivered

Flow and temperature difference tell operators the cooling rate. Tracking that rate over time gives ton-hours.

TEMPE & POLYTECHNIC

Plant controls, SCADA and metering

Mike leads plant metering and controls. His team upgraded Tempe Central Plant SCADA, connects meters to ASU's energy information system (EIS), and supports the North Plant, the existing thermal storage system and Polytechnic's chiller plants in Mesa.

TEMPE DISTRICT UTILITY PLANT

Controls, QA/QC and readiness

Mike leads SLA's controls work at TDUP. Marcus helps operators, trades and vendors coordinate. Before a mode change, we ask what must already be running, what depends on it and who needs to be there to see the response.

CENTRAL PLANT / 104129

Electrical commissioning

Marcus Myers leads SLA's electrical Cx for ASU's Central Plant transformer and switchgear replacement. He coordinates cutover readiness, reviews NETA acceptance-test records and defines how the team will verify breaker status, alarms and metering. Authorized electrical crews perform switching.

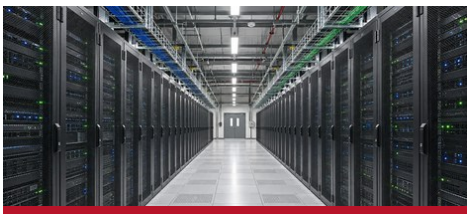
ASU is home. We care about the people who run it.

Mike.Valdez@streamline-automation.com

MISSION-CRITICAL FACILITIES / COMMISSIONING & CONTROLS

WHEN POWER TRANSFERS, WHAT HAS TO RECOVER?

Power is back. Can the facility resume work? In a data hall, cooling must recover. In a fab, a tool needs stable utilities. In a lab, exhaust must restore the pressure relationship at the door. Our Cx and controls technicians work through those handoffs with your operators.



Data centers

Did critical cooling recover in time?



Semiconductor fabs

Did the tool receive its utility-ready signal?



Laboratories

Did exhaust restore the required room pressure?

COMMISSIONING & TRAINING

Marcus Myers

For five years, Marcus led commissioning and energy auditing at a global A/E firm. He oversaw Cx teams serving data centers, semiconductor facilities and labs. He led energy audits of data centers and offices nationwide and worked on HVAC and controls Cx at Vancouver Clinic's laboratory.

INDUSTRIAL CONTROLS

Mike Valdez

Mike brings 35+ years in controls, including chemical delivery, slurry and waste dilution. At Microchip Technology in Tempe, SLA services and programs fab and sub-fab equipment. Mike traces startup interlocks from the field instrument through the PLC to the tool.

ASHRAE

Marcus is a voting member of the group developing Guideline 1.6P for data centers and chairs the group developing Guideline 1.7P for semiconductor fabs.

ON YOUR PROJECT

Before the witness test

Marcus coordinates test windows, trades and operators. Mike traces signals and interlocks. In an illustrative test, power returns at 0:15 and cooling stabilizes at 2:15. That is two minutes of recovery after power returns. The owner's criteria determine whether it passes.

Send your next test window and staffing needs.

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INDUSTRIAL AUTOMATION / METERING, ANALYTICS & DIGITAL TWINS

WHICH METER IS BEHIND THAT ALARM?

Mike and Marcus each bring more than a decade of digital twin experience. Their starting point is the operator's question. Which pump ran overnight? Did it draw power? The meter, the controls and the dashboard have to tell the same story.



VIEW MIKE'S SESSION / SIEMENS REALIZE LIVE

Can a cooling-tower model reproduce what the plant does?

Mike and Marcus presented how to prepare plant controls and data for a digital twin. We compare the model against field measurements before using it to evaluate a change.

DIVISION 25 & MSI

Follow the point

Division 25 defines the interfaces and what each vendor must demonstrate. As master systems integrator (MSI), SLA checks point identity, units, scaling and timestamps. At ASU's ISTB12, SLA coordinated metering and fault detection and diagnostics (FDD) integration.

ASU / WILSON HALL

Metering, dashboards and MBCx

SLA coordinated the building controls, metering and energy information system (EIS). The team is performing monitoring-based commissioning (MBCx) and developing a dashboard. ASU asked for chilled-water and electrical meter trends along with the underlying readings.

FDD IN PRACTICE

Investigate the alert

Illustrative case. A pump averages 12 kW for eight hours scheduled off. That is 96 kWh to investigate. Mike checks the circuit and local override. Marcus confirms the intended schedule with the owner. After a correction, the team compares the same hours on the meter to see what changed.

Which reading does your team need to trust?

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