

START UP FASTER. SAVE MORE.

What If Commissioning Problems Were Solved Before Arriving Onsite?

For decades, controls projects have followed a familiar path: build the control strategy, deploy to site, and troubleshoot issues on live equipment. While effective, this approach often creates costly delays as teams work through configuration issues, root cause investigations, and last-minute fixes during commissioning.

For one large-scale data center project, the customer wanted a different outcome. Their goal was simple: reduce startup risk, accelerate time to operation, and ensure their team was prepared before the first piece of equipment came online.

TURNING UNCERTAINTY INTO CONFIDENCE

The customer partnered with R.E. Mason to bring the operating environment to life before anyone stepped onsite.

Using Emerson's MIMIC simulation software, inclusive of the integrated PLC emulation, the team created a realistic digital representation of the data center process and I/O environment. Engineers were able to validate control strategies, identify configuration issues, and optimize performance under real-world operating conditions.

By simulating actual process dynamics and equipment behavior, the project team was able to:

- Verify control logic before deployment
- Identify and correct issues early
- Reduce commissioning surprises and delays
- Fine-tune system performance in advance
- Train operations personnel in a realistic environment

A BETTER-PREPARED OPERATIONS TEAM

The benefits extended beyond engineering. Operations personnel had the opportunity to experience the system before taking control of the live facility. By seeing process responses, equipment interactions, and operational scenarios ahead of startup, the team gained confidence and familiarity that would normally take weeks to

RESULTS THAT IMPACT THE BOTTOM LINE

The combination of simulation, testing, and operator readiness delivered measurable business value.

- **20% reduction in startup time**
- **\$375,000 saved per day of accelerated startup**

By resolving issues before deployment, the customer significantly shortened commissioning, reduced project risk, and brought the facility online faster.

FROM REACTIVE COMMISSIONING TO PROACTIVE SUCCESS

Instead of discovering problems during startup, the customer solved them beforehand, turning commissioning into a validation exercise rather than a troubleshooting effort.

With support from R.E. Mason and Emerson MIMIC simulation technology, the customer achieved a faster, more predictable path to operation while realizing substantial financial benefits.

SIMULATE FIRST. START UP FASTER.

How much time, risk, and cost could your next project eliminate by validating performance before arriving onsite?