

Ensuring Operational Excellence at Data Center in Texas



System Study,
Maintenance &
Testing Delivers
Crucial Reliability

Project

Ensuring Data Center Reliability

Location

Texas

Scope of Work

Studies, Testing & Preventative Maintenance

Services

Engineering, NETA-Testing Field
Services & Emergency Services

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Challenge

At a 200,000 square-foot data center in the Dallas-Fort Worth area, several issues were identified, which had to be addressed to ensure system reliability:

- The equipment at the data center did not have arc flash hazard labels, and an arc flash risk assessment was needed.
- The existing single-line diagrams were not accurate, and there was confusion regarding equipment labeling as different vendors had used multiple naming conventions in the past.
- There were concerns regarding the dependability of some equipment, as preventive maintenance had not been performed for some time.
- No one was familiar with the switchgear for emergency responses.

Solution

Working collaboratively, the IPS engineering and NETA-testing field service teams performed a comprehensive arc flash study and applied arc flash hazard labels to all equipment, from distribution switchboards to PDU/RPPs. IPS also gathered accurate data to design standardized naming conventions and update diagrams and arc flash hazard labels with these new names.

Next, IPS created a Sequence of Operations (SOO) and Method of Procedures (MOP) for performing preventative maintenance (PM) and testing, with localized shutdowns spanning over several weeks.

All MV and LV distribution switchgear were tested per NETA standards. The IPS PowerServe team responded during several emergency power restoration instances, including Generator CB failure and MV cable failure.

Results

By working together closely – a crucial component of the success of the project – the IPS engineering team and the NETA field service team increased overall reliability and safety at the data center.

In addition to performing studies, testing and preventative maintenance, IPS ensured that the data center was in compliance with NFPA 70E, designed to protect workers from electrical hazards. IPS also provided a well-rounded equipment maintenance plan and schedule for use moving forward.