



RagingWire VA4

Client
Holder
Construction
Company



Installation of Electrical Rooms and Infrastructure

RagingWire is one of the global leaders and innovators in the data center colocation industry so for the construction of their new 32 MW project in Ashburn, Virginia they turned to two of the most experienced and accomplished data center construction companies in the world. With Holder Construction serving as general contractor and Power Solutions performing the electrical installation, the RagingWire VA4 project featured a team with an unrivaled track record of success in the field of mission critical facility construction.

Drawing on the vast experience of its management team, Power Solutions played an integral role in value engineering the project which involved reviewing specifications to find opportunities to increase efficiencies and reduce costs. Nine additional packages of drawing revisions were incorporated into the already aggressive schedule. With the sophisticated scope of work and tight schedule, coordination between the owner, engineers, designers, and other trades was essential in delivering this project on time. Building Information Modeling by all trades had to be completed and reviewed, and all conflicts resolved, before materials could be pre-fabricated and construction could begin.

During the 14-month project schedule, Power Solutions built 20 critical electrical rooms to serve eight data halls housed in a 284,000 square foot two-story building. This involved the installation of more than 88 miles of EMT conduit for interior power and fiber/telecom and over 35 miles of PVC conduit for site power and telecom. Despite weather delays that hindered initial progress, outdoor MV equipment was energized just 12 weeks after the building was erected. Power Solutions ran two 12-hour shifts to maximize efficiency in a highly productive multi-trade environment and met the aggressive deadlines while maintaining quality craftsmanship.

The RagingWire VA4 project was awarded a 2020 Craftsmanship Award from the Washington Building Congress in the category of Power Generation, Distribution and Switchgear.

By the Numbers

- 20** 2750KVA UTILITY TRANSFORMERS
- 20** 3250KW GENERATORS AND ENCLOSURES
- 20** 4000A DISTRIBUTION SWITCHBOARDS
- 40** 1MW UPS MODULES AND 240 BATTERY CABINETS
- 64** 800A STATIC TRANSFER SWITCHES
- 128** 800A POWER DISTRIBUTION UNITS
- 88+** MILES OF 3-1/2" AND 4" EMT CONDUIT
- 35+** MILES OF 4" AND 8" PVC CONDUIT