

## New Head-End Data Center

Conway Corporation, Conway, Arkansas

Conway Corp's existing cable plant head-end facility was completely full: no room for growth or expansion. To support modern server electronics and the critical mission of the head-end facility, a new data center with more modern infrastructure was required.

Brown Engineers led the design team for a Tier II 3,600 sq. ft. single-story, hardened data center for this city-owned utility and cable service provider. Brown performed the mechanical, electrical and automation design, and coordinated design with the Owner, project architect, civil and structural engineers, surveyor, geotechnical engineer, and contractor. Notable features and design considerations include:

- **Cooling Load: Approximately 56 tons**
- 60 Server Racks (approx. 3.3kW/Rack)
- 20 Fiber Optic Cable Rail Racks
- Critical Load: 200kW, served by redundant UPS with battery backup
- Facility Redundancy: Uptime Institute Tier II configuration
- Generators: two 750kW generators with parallel switchgear
- Fire Suppression: Dry Chemical Agent
- Hardening: Standard precast construction with FEMA rating of 250 mph gusts

