



## PowerSouth Energy Cooperative New Construction Commissioning Services

### About the Facility:

PowerSouth Energy Cooperative was formed in 1941 to provide the power supply needs of its distribution members across Alabama and northwest Florida. Today, PowerSouth continues to safely deliver reliable, competitively priced wholesale energy to promote development of the communities its members serve. PowerSouth has been expanding its corporate headquarters in Andalusia, AL, including a new Energy Control Center (ECC). The ECC is a two-story, 47,000 square foot data center housing offices, computer systems and associated equipment involved in the utility distribution to all PowerSouth customers. In addition, PowerSouth wanted to construct a “Bunker” to ensure resiliency of the systems due to a natural disaster or human threat.

### SEA is Commissioning Authority

Time was of the essence; therefore, the project was delivered using a design/build delivery method. Because the project team was already engaged in the process when the decision to hire a commissioning authority occurred, Sain Engineering Associates, Inc. (SEA) interfaced seamlessly into the project conducting design review, construction observations and developing a commissioning plan with zero impact to the existing schedule.

The nature of the facility required in-depth testing of all complex electrical systems consisting of a Power Distribution Unit, automatic transfer switch, static transfer and UPS system. In addition, load testing of the fire suppression, HVAC systems and generators occurred.

SEA was able to resolve the following challenges:

- Fire Suppression Systems: Proposed alternative testing simulation of tanks to avoid \$36,000 refill costs and ensure NFPA code requirements were met
- Load Bank Testing: SEA completed a 1.1-megawatt load test on each generator as well as the UPS system and power distribution units, resolving problems prior to owner occupancy
- Electrical Switchgear: Coordinated efforts between the DB team and switchgear manufacturer to resolve gear transfer sequence issues



Expense Saved  
During Testing



Square Feet



Year Completed

