

New Johnsonville 161/25:13kV Substation Meriwether Lewis Electric Cooperative



FISHER ARNOLD

PROJECT LOCATION: 1625 Highway 100, Centerville, TN 37033
PROJECT SIZE: \$5M

COMPLETION DATE: November 30, 2019
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Fisher Arnold was engaged by Meriwether Lewis Electric Cooperative in Centerville, TN to prepare construction plans and specifications, provide construction management, and testing/commissioning for a complete rebuild of the New Johnsonville substation.

We were charged with converting an existing 69/13KV two-transformer substation to a 161KV two-transformer substation to provide 13KV with a future conversion to 25KV.

The station design included station yard expansion, two new 25MVA transformers, four current and two future distribution bays with feeder regulation, and a self-contained control house. Using SEL relays a unique cross-tripping scheme was developed and programmed in each protection devices.

Fisher Arnold provided all construction management and the complete testing/commissioning for the station. The unique nature of this design required an unusual construction schedule.

Initially, half of the existing station was removed so that the first half of the new station could be built. The load from the remaining old station was then transferred to the new portion of the substation. The process was then repeated for the other half. We successfully maintained load throughout this process.

