

PROJECT CASE STUDY

MARCELLUS SHALE COMPRESSOR STATION NATURAL GAS PROJECT

Lectrus recently completed a prefabricated electrical equipment center for CNX's McQuary Compressor Station in Center Township, Pennsylvania, a facility which supports Consol's Marcellus shale gas business. The 2-piece, prefabricated electrical enclosure – also called an IPA or Integrated Power Assembly – measured 16 feet wide and 66 feet long and contained two, 40-foot-long SC 9000, 4160V drives from Eaton. Also housed within the IPA was non-seg busway, motor starters (MCCs), output contactors and breakers.

Eaton selected Lectrus to design, build, integrate and install the IPA on site at the end of last year. The walk-in, electrical equipment center was engineered and built at the Lectrus Chattanooga Operation in two sections, each containing a drive and a line-up of MCCs. One section measured 8.5 feet wide by 66 feet long and the other 7.5 feet wide by 66 feet long. Equipment doors were installed along the outside walls and personnel doors at the ends to allow for maintenance access. Two, 25-ton pad-mounted HVAC units from Trane provided cooling during operation.

“Each drive will start three motors in sequence,” stated Jim Yoho, Eaton's Atlanta-based regional sales manager. “Once a motor reaches full operating speed, the drive will transfer it to the main power line and begin bringing the second motor up to speed. In addition, the tie breaker allows the customer to run each drive from two different electrical power sources. “Each motor will run from the drive, run in bypass across the line or the drive can synchronize the motor to the line and transfer power from the drive to the line with the power originating from two different sources.

According to Eaton's sales engineer Mike Mancuso, “The McQuary compressor station, which serves as a collection point for several transmission lines, is undergoing a complete modernization in order to increase capacity through the main CNX pipeline.” CNX, owned by CONSOL Energy, is one of the largest independent gas companies in the U.S. involved in exploration, development, production and gathering. CONSOL Energy is a leading eastern U.S. gas producer with the rights to 750,000 acres in the Marcellus Shale. They have drilled nearly 4,000 coal bed methane wells and 9,000 conventional wells in the region. Because their Marcellus acreage is located in areas with pipeline-grade gas, it can be directed right to the market without processing.



PROJECT PROFILE

// PROJECT //

CNX McQuary Compressor Station

// LOCATION //

Center Township, Pennsylvania

// MARKET SEGMENT //

Oil & Gas

// EQUIPMENT PROTECTED //

Low and medium voltage power equipment

// PRODUCT //

Prefabricated electrical building

// ENCLOSURE SIZE //

16 ft x 66 ft

// DATE COMMISSIONED //

January 2011

// CUSTOMER //

Eaton

// OWNER //

CNX

lectrus®

ENGINEERED TO SPEC. BUILT TO LAST.

2215-C Olan Mills Drive
Chattanooga, TN 37421
lectrus.com

