

## FEED GAS FOR NATURAL GAS GENERATION FACILITY

### CLIENT:

A leading underground utility business

### LOCATION:

Mid-Atlantic Region

### INDUSTRY:

- Power
- Natural Gas

### SYSTEMS:

- Engineering
- Fabrication
- Dekatherm Building
- System Integration
- Site Service



### THE BACKGROUND

A leading underground utility business contracted with one of Valtronics's customers within the Mid-Atlantic Region to provide natural gas infrastructure for the St. Charles Energy Center in Charles County, MD. The energy center provides more than 650,000 homes in the the Maryland and Washington D.C. area with energy generated through a facility with highly efficient technology and state-of-the-art emissions controls.

### THE CHALLENGE

Valtronics Solutions was tasked with providing measurement, control and natural gas analysis solutions to accommodate up to 132 MMSCFD of gas with a Maximum Allowable Operating Pressure of 1250 psig at the St. Charles Energy Center's Measurement & Regulation station. Expansion capabilities needed to accommodate 259 MMSCFD of gas from multiple Dominion Transmission lines.

### OUR SOLUTION

Valtronics Solutions provided a complete package including engineering, fabrication, building construction and site services.

After designs were approved, Valtronics fabricated a 10" unidirectional ultrasonic meter run with 10" inlet and outlet block valves and a 10" bypass for future expansion. The measurement system includes a 2" Coriolis meter run for fuel gas and

# PROJECT PROFILE

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a 16" x 8" control valve run complete with temperature and differential pressure transmission and monitoring.

Valtronics integrated an existing gas chromatograph and flow computer within a pre-fabricated 8' x 10'-8" deka-therm building. The modular building includes climate control and a galvanized structural steel skid.

Fabrication was completed in October of 2016 and the units were shipped to the St. Charles measurement and regulation site. In addition to Gas Field Specialists' site work, the Valtronics' service team provided electrical and instrumentation installation as well as analyzer calibration for system commissioning.

The St. Charles Energy Center is now fueled with quality controlled natural gas for its combined cycle generation facility to provide electricity to more than 700,000 homes near Waldorf, MD.



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