

PROJECT PROFILE / **GAS COMPRESSOR PIPING INSTALLATION**

CONNECTING INCREASED CAPACITY TO POWER COMMUNITIES

As the need for reliable natural gas increased, Consumers Energy sought a way to increase capacity at its Freedom Station in Michigan.

With a three-phase approach, five new gas compressors and tens of thousands of feet of prefabricated piping, the resulting facility will be equipped to safely supply fuel to customers.



PREFABRICATION REDUCES ON-SITE MAN-HOURS DURING A GAS COMPRESSOR FLEET EXPANSION

The combination of piping prefabrication and detailed planning for installation is boosting a facility's natural gas capacity safely and efficiently.

To address the rising demand for natural gas in its region, Consumers Energy needed to increase the capacity of its Freedom Gas Compressor Station. The existing facility housed two aging gas compressors and two newer compressors installed in 2016.

Divided into three phases for execution, the project will significantly boost capacity. Phase 1 will include installation of three new Neuman & Esser 3,750-horsepower (HP) gas compressors and associated piping while the existing on-site compressors continue to run. Once complete, Phase 2 will give the plant full capacity due to the relocation of two existing compressors and associated equipment and piping from elsewhere on-site into the new building. And finally, Phase 3 will demolish the decommissioned facilities on-site.

In support of this work, the team from AZCO, a Burns & McDonnell company, is providing mechanical services for the project in partnership with Barton Malow Co., the general contractor hired by Consumers Energy. Involved throughout Phase 1 and 2 of the project, we are prefabricating and installing 9,000 feet of underground piping and 33,000 feet of aboveground piping. We are also setting approximately 39 pieces of miscellaneous equipment.

Maintaining safety on-site required extensive planning to mitigate

hazards and interferences; this was especially critical during Phase 1 when underground piping was installed within a live gas facility. With the project deemed essential by the state of Michigan, the teams maintained productivity on-site while social distancing with staggered breaks and lunches, meeting additional cleaning parameters and conducting screenings daily.

Backed by effective collaboration and detailed planning, Phase 1 is anticipated to conclude in the second quarter of 2020, with full project completion expected by August 2022. When complete, the Freedom Station — with its large-horsepower gas compressors and brand-new piping — will be able to fully support Michigan customers with reliable natural gas.

ABOUT AZCO



AZCO is a 100% employee-owned heavy industrial construction and fabrication solutions provider that builds the critical infrastructure needed to keep communities and industries thriving. Part of the Burns & McDonnell family of companies, we work with more than 750 union craft personnel across the country using an integrated approach to deliver more advanced controls and predictable outcomes. Learn how we are designed to build at azco-inc.com.

PROJECT STATS

CLIENT

Consumers Energy/
Barton Malow Co.

LOCATION

Manchester, Michigan

ANTICIPATED COMPLETION

August 2022

9K

FEET OF
UNDERGROUND PIPING

33K

FEET OF
ABOVEGROUND PIPING

5

NEW GAS
COMPRESSORS