



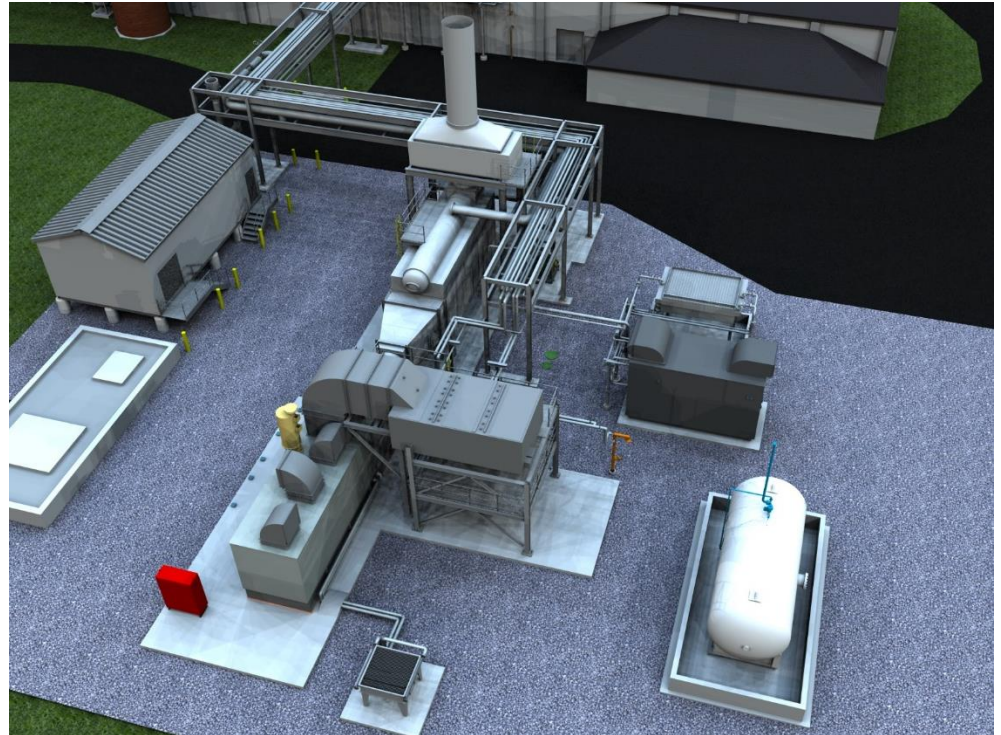
# Aberdeen Proving Ground Dual Fuel Combined Heat and Power

## SERVICES

MEP Engineer of Record

## PROJECT SNAPSHOT

Concord provided engineer of record, construction administration, and startup services for a new Combined Heat and Power Plant at the U.S. Army's Aberdeen Proving Ground Edgewood Area in Gunpowder, MD.



## PROJECT BACKGROUND

**Aberdeen Proving Ground** suffered from an aging energy infrastructure. Seeking a modern electricity and thermal energy solution, the ESPC contract vehicle was used to support a modern Combined Heat and Power project significantly reducing energy expenses and upgrading onsite energy infrastructure.

## OBJECTIVES & CHALLENGES

- Optimize CHP size and steam output to match Aberdeen process requirements.
- High reliability and dual fuel for resiliency
- Fast track design+build schedule
- Integrate into existing boiler plant and electrical distribution system

## THE CONCORD DIFFERENCE

- ✓ Expertise in multi-fuel combined heat and power
- ✓ Design for simplicity and low installed cost
- ✓ Specialty electrical engineering for load flow analysis, short circuit analysis and protective relay schemes.

## THE OUTCOME

- Concord provided extensive up-front design and optimization of microgrid operations that provided both resiliency and reductions in energy expenses.
- CHP system was fully integrated into existing boiler plant, significant improvements within the existing boiler plant were required including upgrades to boiler feed, water pumps, water treatment, fuel oil storage and conditioning systems.