



Middlesex County Utilities Authority Standby Power Plant Engineering Design

PROJECT INFORMATION

CONCORD DIVISION
Power & Infrastructure

PROJECT LOCATION
Sayreville, NJ

MARKET
Government

SERVICES
Engineering Design

CONSTRUCTION COST
\$67.4 Million

ABOUT THE CLIENT

The MCUA was established to manage the county's wastewater and solid waste services. The MCUA's Wastewater Division is committed to maintaining the pristine beauty of the Raritan Bay by providing wastewater treatment services for industrial, commercial and residential users in Middlesex County, as well as several municipalities in Union and Somerset counties.



PROJECT SUMMARY

Concord designed a new 10MW stand-by power plant capable of black start and extended 10-day island mode operation to support NJ's largest municipal pump station. The upgrades included a new electrical utility substation with redundant services and a new Standby Generator Facility.

PROJECT HIGHLIGHTS

- 100% design and construction administration
- Designed new 10MW stand-by power plant capable of black start and extended 10-day island mode operation.
- Analyzed data from all previous worst-case storms for impact to utility power outages and coincident rainfall to the pump station.
- Based on evaluation, stand-by plant included both diesel and natural gas generators
- Facility can operate in Storm Anticipation mode which allows for disconnection from the utility ahead of a power outage.
- Substantial acoustic attenuation to permit operation outside of an emergency event to comply with noise ordinances.