



Canal Road Water Treatment Plant

Client: New Jersey American Water

Location: Franklin Township, NJ



System Features

- Redundant PLCs
- Ethernet
- Data Warehousing

New Jersey American Water (NJAW) is the largest investor-owned water utility in the state, providing high-quality and reliable water and/or wastewater services to more than 2.6 million people. In addition to its regulated operations, American Water provides operation and maintenance contract services to municipalities including North Brunswick, Edison, Liberty, Elizabeth and Avalon, serving an additional 207,000 people.

Transdyn was selected by NJAW to provide a SCADA system upgrade for the Canal Road water treatment plant 80 MGD expansion project. The upgraded SCADA system will enable NJAW to deliver safe drinking water to its growing customer base in Franklin Township, NJ.

Transdyn is providing new PLCs, modifications to existing PLCs, field instrumentation, HMI software configuration, testing, and on-site training.

The system consists of redundant distributed controllers providing process monitoring and automatic control for the entire plant, including constant rate, single bay filters with automatic backwash and ozone disinfection processes.

The controllers communicate with the servers and workstations via dual, redundant, self-healing fiber optic Ethernet rings. Remote workstations at the Ozone Building and the adjacent Raritan-Millstone plant provide convenient access to the system for maintenance and management personnel.

A redundant controller configured as a test bed permits maintenance personnel to develop and test new control strategies before field deployment.