



Proctors Creek and Falling Creek Wastewater Treatment Plants SCADA Systems

Client: Chesterfield County, VA Department of Utilities

Location: Chesterfield, VA



System Features

- DYNAC® SCADA Software
- Fully Redundant Host Servers
- PLCs
- Fiber Optic Ethernet Switches
- 900 MHz Unlicensed
- Spread Spectrum Radio



The Chesterfield County Department of Utilities operates two wastewater treatment facilities, Proctors Creek and Falling Creek, which treat roughly twenty-four million gallons of wastewater per day and provides service to nearly 76,000 customers via 3,200 miles of water and wastewater lines throughout the county.

Maintaining water quality in the James River and the Chesapeake Bay area is important to the social and economic well-being of the County and the State of Virginia. The Proctors Creek and Falling Creek Wastewater Treatment Plants play a significant role in achieving this goal by consistently meeting all environmental regulations.

The Department selected Transdyn as their system integrator responsible for commissioning new facility-wide SCADA systems that help meet operational and regulatory demands for the coming decade. The new SCADA systems utilize the latest technology to improve operational efficiency and reduce O&M costs.

Transdyn provided project management and engineering, configuration, testing, training and start-up services to ensure a seamless, turnkey integration of existing plant equipment and new control systems.

The new control systems are based upon Transdyn's DYNAC® host system platform and industry standard PLC based technology for field controllers. Each facility incorporates fully redundant SCADA servers that perform data acquisition, control, event log, historian, trending and reporting functions.

Each server communicates with workstations and PLC field controllers over fiber optic Ethernet LANs and spread spectrum radios. The application programs reside in the DYNAC® host system and thirty-four PLCs provide complete monitoring and control capabilities for various plant processes including aeration, chemical feed and filtration.