

With the age of the PATCO system approaching 40 years, the Delaware River Port Authority (DRPA) and PATCO have undertaken a major replacement of the PATCO infrastructure in order to maintain highly reliable commuter train service.

This project replaced the existing 11-mile-long wood pole line in New Jersey with a new pole line of class 1 fiberglass poles, 26.4KV DC traction power cables and 2.4KV signal power cables. Existing signals, communications and 3rd party optical fiber cables were transferred from the old pole line to the new.

Burns was the prime engineering consultant for design and construction management services for the replacement project.

While keeping within the existing \$30 million construction budget, Burns exceeded the project goals through creative engineering and close cooperation with DRPA/PATCO staff to provide the following:

Replacement of:

- 113,000 ft. of 26.4KV cable
- 113,000 ft. of 2.4KV cable
- 36,000 ft. of 27C signal cable
- 12,000 ft. of communications cable between Broadway Station and Ferry Avenue Station
- 59,000 ft. of fiber optic cable
- 825 fiberglass poles

In addition, the construction phasing of the project was developed to minimize the impact on PATCO operations, while providing contractors with adequate construction windows.

Project received American Council of Engineering Companies of New Jersey 2013 Distinguished Project Award

