YALE CORDAGE GLIDELINE

E-J ELECTRIC CASE STUDY

E-J Electric Outsmarts Risk With a Line Purpose-Built for Underground Transmission.



How GlideLine helped keep one of New York's most important underground transmission projects moving.

The Champlain Hudson Power Express is a major high-voltage direct-current transmission project designed to bring hydroelectric power into New York. Near the end of that journey, E-J Electric was responsible for critical terrestrial cable pulls near Astoria.

The work was underground. The environment was New York City. And there wasn't much room for things to go wrong. After a conventional single-braid rope failed after just seven pulls, E-J needed a pulling line better suited to the demands of the job.

Yale Cordage brought them GlideLine.

42	~84K FT	0	6X	90%
UNDERGROUND PULLS	NEARLY 16 MILES PULLED	ROPE FAILURES	SERVICE LIFE VS SINGLE BRAID	STRENGTH RETAINED*

*Excluding samples with identified localized damage. Average residual strength across all tested samples was 86.8% of MBS.

THE PROJECT

The Last Mile of a Massive Undertaking

PROJECT
Champlain Hudson Power Express

LOCATION
Astoria, New York

APPLICATION
Underground high-voltage transmission

PULL TENSION
~5,000–35,000 lbs.

AVG. PULL
~2,000 ft.

LONGEST PULL
~2,250 ft.

CONDUCTOR WEIGHT
~27 lbs./ft.

EQUIPMENT
Condux Tesmec PL1750 puller



THE CHALLENGE

One More Variable E-J Didn't Need

A conventional single-braid rope previously used on the project failed after seven underground pulls—roughly 1,000 feet into a 2,000-foot pull in Queens.

Underground, there is no simple reset button. A failure can mean excavation, new permitting, emergency splicing, replacement rope and delays to crews and equipment already coordinated around the pull. E-J didn't simply need a stronger rope. They needed to remove one unpredictable variable from an already complicated job.

THE SOLUTION

Purpose-Built for the Underground

Yale supplied E-J with a 1-1/8-inch, 4,000-foot GlideLine engineered for repeated underground pulling.

Its double-braid HMPE construction combines a high-strength core with a tightly braided protective jacket designed to withstand underground wear while reducing damaging sawing action against conduit.

REDLIGHT™ Technology also gives crews a highly visible warning as they approach the end of the line.

THE PROOF

The Project Ended. The Rope Didn't.

E-J completed 42 high-voltage underground pulls on the same GlideLine reel—approximately 84,000 cumulative feet of pulling with zero rope failures. After the project, Yale brought field-used samples back to its Saco, Maine facility for break testing.

That's more than longer rope life. It's reliability a contractor can plan around.

> **"When you consider the consequences of a rope failure on a project like this, reliability matters a lot more than the upfront cost. GlideLine gave us that reliability."**
>
> — E-J Electric

What Could 6X More Service Life Mean for Your Next Pull? See The Full Case Study.

● FEWER REELS + ● FEWER CHANGEOUTS + ● LESS DOWNTIME = LOWER COST PER PULL

PULL SMARTER, NOT HARDER.

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