

TOP STARTS

ENRNewYork Ranks The Largest Projects Started In The Last Year

TRANSPORTATION, INSTITUTIONAL WORK DOMINATE RANKINGS

Combined contract values of the 25 projects on the list declined as construction activity in the region remains sluggish **BY ESTHER D'AMICO**

TOP STARTS
NUMBER 2
HUDSON
TRANSMISSION LINE

A Power Cable Runs Through It

When completed in 2013, an eight-mile-long power cable running from a Ridgefield, N.J., converter station into midtown Manhattan will provide New York Power Authority customers with access to more diverse sources of power, including renewable energy and natural gas. The plan has been hailed by officials on both sides of the Hudson as a way to provide lower electricity costs, improve reliability and create jobs. Even so, the project took



six years to wind its way through the approval process of federal, state and local government authorities and to finally begin construction last May.

“This has been in the works and under development for a while,” says Christopher Hocker, vice president of planning at Fairfield, Conn.-based Powerbridge, which established the project’s owner Hudson Transmission Partners. But the scope of the work—an \$850-million, 660-MW underground transmission line that runs four miles under the Hudson River—had to be carefully vetted by numerous regulators and stakeholders before it could be signed off on, he says.

“From our perspective, the project was able to be a go-ahead now because of the importance at this

ADRIFT WITH THE CURRENT Prysman Power’s cable-laying ship, the Giulio Verne, floats cable in the Hudson River.

point of bringing power into New York,” says Patrick Reager, senior vice president of Joseph Jingoli & Son, Lawrenceville, N.J., which has a separate contract for site preparation at the Ridgefield converter station. The city is expected to eventually run into a power shortage as the energy load increases, he says.

The project will also include significant upgrades and reinforcements to northern New Jersey’s transmission system as part of an agreement with PJM Interconnection, the region’s electric grid operator.

The power line begins in Ridgefield, where a new converter station is being built on an old industrial site, requiring the demolition of a 100,000-sq-ft warehouse, Reager says. Work included removing the underground concrete foundations of the warehouse to make way for the

new piling installation, he says.

“We were [initially] contracted for 150 days for the entire site,” Reager says. But that schedule was later shortened to 120 days. “We brought the project in 30 days ahead of schedule for the owner,” he adds.

A joint venture of Germany’s Siemens Energy, Erlangen, and Italy’s Prysmian Power Cables & Systems, Milan, is the engineering, procurement and construction contractor on the job. Siemens’ technology and equipment is being used at the Ridgefield station to convert alternating current (AC) from the PJM Interconnection system to direct current, and then back to AC at the same site, Hocker says.

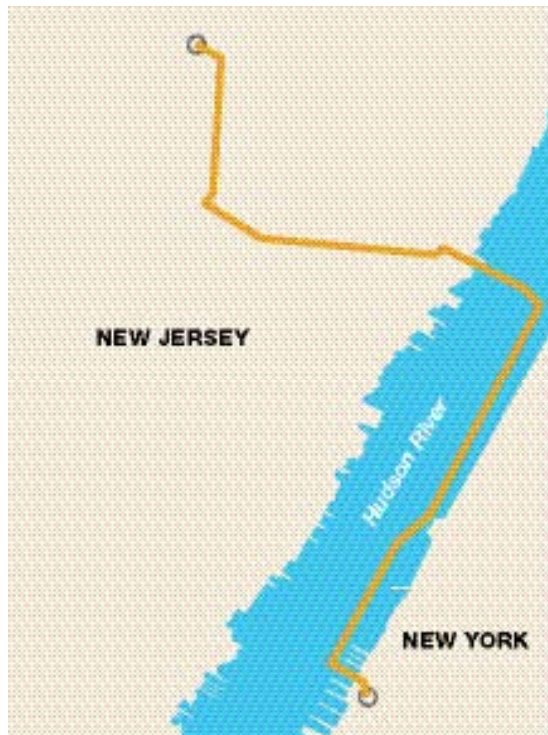
Burns & Roe, Oradell, N.J., is providing engineering and architecture services on the project, and Birdsall Services Group, Sea Girt, N.J., is the engineer for the land-based portion of the cable.

Prysmian is responsible for the design, supply and installation of the 345-kilovolt, high-voltage AC land and submarine line. In New Jersey, the power line will run about three miles from the converter station to the river in Edgewater.

The submarine cable, which will be buried a minimum of 10 ft below the Hudson’s bottom, traverses under the river for about four miles until it reaches Manhattan. Prysmian is using its cable-laying ship, the *Giulio Verne*, to install a bundle of three high-voltage submarine cables and two optical fiber data transmission cables under a portion of the river. The company says it will install this cable system using its own designed hydro-plow machine.

The transmission line will exit the river between Piers 92 and 94 in Manhattan and run beneath the West Side Highway. It will end up at Con Edison’s substation at West 49th Street.

—*Esther D’Amico*



NEW DIRECTION The transmission line will provide access to more diverse sources of power.

TOP STARTS IN THE TRISTATE REGION

RANK	PROJECT LOCATION	PROJECT COST	START DATE/ END DATE	OWNER	PROJECT TEAM
1	Delta/JFK IAT Redevelopment Terminal 4, Concourse B Queens, N.Y.	\$1.2 billion	April 2011/ May 2013	Delta Airlines	GC Turner Construction Architect JV of Skidmore Owings & Merrill and Arup
2	Hudson Transmission Line Ridgefield, N.J.-New York, N.Y.	\$850 million	May 2011/ July 2013	Hudson Transmission Partners	EPC Contractor JV of Siemens and Prysmian Cables & Systems Engineering/Architecture Burns & Roe
3	No. 7 Subway Line Extension — Systems, Finishes, Core and Shell of Site A New York, N.Y.	\$542 million	Aug. 2011/ June 2014	MTA Capital Construction	CM JV of Hill International, LiRo Engineers, and Henningson Durham & Richardson Architecture and Engineering GC JV of Skanska and Railworks Designer Dattner Architects
4	Resorts World Queens, N.Y.	\$510 million	Jan. 2011/ Feb. 2012	New York State Division of Lottery	Developer Genting New York CM Tutor Perini Architect JCJ Architecture
5	NanoFab Xtension & Expansion, Albany University Albany, N.Y.	\$366 million	Sept. 2011/ Dec. 2012	Fuller Road Management Corp.	CM/Architect M+W Group
6	Gotham West New York, N.Y.	\$362 million	June 2011/ June 2014	The Gotham Organization	CM Gotham Construction Architect SLCE Architects
7	I-95/I-91/Route 34 Interchange Reconstruction, Contract E New Haven, Conn.	\$357 million	April 2011/ Nov. 2016	Conn. DOT	GC JV of O&G Industries and Tutor Perini Design Engineer HW Lochner Consulting Engineer Ammann & Whitney
8	86th Street Station Structure (2nd Avenue Subway) New York, N.Y.	\$332 million	Sept. 2011/ Sept. 2014	MTA Capital Construction	CM Parsons Brinckerhoff GC JV of Skanska and Traylor Designer JV of AECOM and Arup
9	Whitney Museum of American Art New York, N.Y.	\$300 million	July 2011/ Dec. 2014	Whitney Museum of American Art	CM Turner Construction Architect Cooper Robertson & Partners
10	Long Island Solar Farm Upton, N.Y.	\$298 million	Feb. 2011/ Nov. 2011	BP Solar International and Met Life	Builder/Developer/Designer BP Solar Contractor Hawkeye