



Success Story Success Story: The First Cable Project

Our customers are connected to the regional electric transmission grid by a 26-mile, buried submarine cable. This cable was put into service in 1996 to improve the reliability of our electric supply and stabilize rates. It was engineered to assure high reliability and minimize potential environmental impacts. It was constructed with public input and was completed on schedule and within budget.

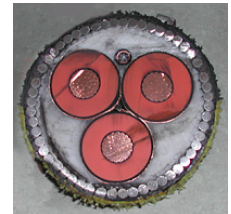
It has performed as designed. With the cable in place, power outages are a rare occurrence on Nantucket. The connection with the grid also made it possible to shut down and dismantle a generating plant located in Nantucket's Candle Street historic area. The cable provides access to electricity sold on the regional power grid.

Cape Cod Connection to the Regional Transmission Grid

The actual point of interconnection with the power grid is located in Harwich, where a substation transforms the 115,000 volt power from the transmission grid to the 46,000 volt power that travels through Harwich on a 1.5-mile underground cable. This land-based underground cable links the substation to the undersea cable.

The Undersea Cable

The undersea cable contains three rubber-insulated copper conductors and a multi-core fiber optic cable. The cable is in one piece and was buried approximately eight feet below the sandy seabed using a low-impact, high water pressure tool called a "jet plow."

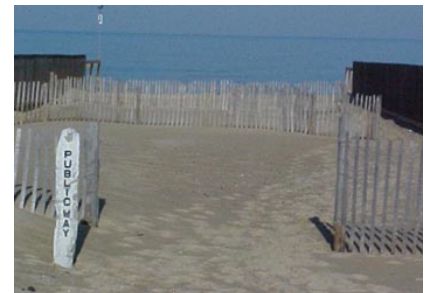


The presence of the first cable was imperceptible almost immediately after it was buried beneath the ocean floor—all normal marine activity resumed the following day. Today, the cable continues to be non-invasive and non-intrusive to the seabed.



The Nantucket Land Portion of the Cable

The land portion of the cable in Nantucket is identical to the Harwich land portion and links the submarine cable to the Candle Street substation. The Candle Street substation is a new indoor facility that was built to further transform, or "step-down" the voltage to 13,200 volts for delivery on the island's electric distribution system. It is a brick structure that was designed to complement its historic surroundings.



Today, nothing is visible or changed at the Nantucket landfall for the first cable.

Cable Backup

Backup for this first cable is provided by diesel generating units and associated equipment, including fuel storage at our Bunker Road facility.