HVDC MODERNIZATION PROJECT

PROJECT OVERVIEW

Minnesota Power plans to modernize and upgrade its existing High-Voltage Direct-Current (HVDC) Terminal, the eastern endpoint of a 465-mile direct-current transmission line from North Dakota.

The terminal has served Minnesota Power well, but it is now 45 years old and has exceeded its 30-year design life. This project includes modernizing and upgrading the terminal with new technology to meet the need for safe and reliable energy today and into the future.

As we and other energy companies across the nation add more renewable energy sources to our energy mix, the value of this transmission line and its terminals will only grow. This project is critical to ensure a reliable grid that can expand to deliver renewable energy to where it’s needed by our customers. It also continues the safe delivery of electricity across an existing corridor to meet the growing demand for energy in an increasingly electrified economy.

The project will increase the size of the terminal’s footprint in Midway Township and require about one-half mile of additional transmission line in the area, most of it on company land.

PROJECT BENEFITS

Modern energy control and conversion equipment will improve the reliability of the transmission line and prepare for the renewable energy future.

The operating capacity of the terminal will increase substantially to allow the future transfer of additional renewable energy.

The upgrade will create a bi-directional line allowing energy to flow in either direction to where it is needed.
The new voltage source converter station will look similar to this one when completed.

-Photos Courtesy of Siemens