

DOE Awards \$50 Million to Minnesota Power to Increase Reliability and Resilience of Region's Transmission Grid in Support of a Clean-Energy Future

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DULUTH, Minn.--(BUSINESS WIRE)--Oct. 18, 2023-- The U.S. Department of Energy today awarded a <u>\$50 million grant to Minnesota Power</u> to modernize its high-voltage direct current (HVDC) transmission system so it is ready to expand to meet future energy needs while increasing the reliability and resilience of the regional grid.

Minnesota Power, an operating division of ALLETE (NYSE: ALE), was selected in a competitive process from among hundreds of applicants nationwide to receive the grant for its <u>HVDC Terminal Expansion Capability Project</u> from the Grid Resilience and Innovation Partnerships Program, part of the federal Bipartisan Infrastructure Law.

"Investments in transmission are critical to the reliability and resiliency of the grid as we continue to build a carbon-free energy future and advance Minnesota Power's EnergyForward strategy," said Bethany Owen, ALLETE CEO. "This federal grant will help reduce costs to customers for upgrades to Minnesota Power's strategically located HVDC transmission system, support federal and state energy policy goals—including Minnesota's recently passed carbon-free by 2040 legislation—and help prepare the regional grid for the efficient transfer of more energy from a variety of generation sources."

Minnesota Power will use the funding to prepare its HVDC system for future expansion by including certain additional design features in its current plan for replacing aging infrastructure and modernizing the terminal stations of its 465-mile transmission line that runs from Center, North Dakota, to Hermantown, Minnesota.

Commissioned in 1977, the HVDC transmission system has served Minnesota Power well in its more than four decades of operation. Minnesota Power acquired the HVDC line in 2009 to reliably deliver nearly 500 megawatts of wind energy from its North Dakota wind sites to its customers in Minnesota.

Minnesota Power's HVDC transmission line is one of only a handful of existing long-distance HVDC lines in the country. HVDC lines transmit electricity more efficiently over long distances than alternating current (AC) lines and more strongly link together disparate parts of the electrical grid. Specialized stations, like the ones proposed for this project, convert the HVDC power to AC so it can flow on the existing electric grid.

On June 1, Minnesota Power filed a Certificate of Need and Route Permit with the Minnesota Public Utilities Commission to replace converter facilities at the Arrowhead Substation in Hermantown with new buildings and electrical infrastructure near the existing terminal. Similar upgrades are planned for the converter facilities at the Square Butte East Substation in Center, North Dakota.

"Timing of the DOE grant is ideal for investing in a larger, expandable design of the terminal stations to better support the long-term needs of the regional grid, improve reliability and resiliency, and reduce transmission congestion," said Minnesota Power Chief Operating Officer Josh Skelton. "Utilizing our existing infrastructure in combination with the DOE funding will help mitigate rate impacts on our customers as we modernize our grid for the clean energy transition."

Minnesota Power is actively seeking other federal and state funding to help keep impacts on rates as affordable as possible, both for this project and other projects that will support the clean-energy transition. In May, \$15 million in state funding was secured as part of the energy and climate budget bill passed by the Minnesota Legislature.

A recent study by the Brattle Group and DNV affirmed the need for investing in HVDC transmission as an integral part of a reliable, clean-energy future. The study noted that HVDC technology is well-suited to address the growing needs of an aging grid but that the U.S. trails the rest of the world in deploying valuable HVDC solutions.

DOE news release: https://www.energy.gov/articles/biden-harris-administration-announces-35-billion-largest-ever-investment-americas-electric

DOE project fact sheet: https://www.energy.gov/sites/default/files/2023-10/DOE-GRIP-Allete-Inc.pdf

Minnesota Power provides electric service within a 26,000-square-mile area in northeastern Minnesota, supporting comfort, security and quality of life for 150,000 customers, 14 municipalities and some of the largest industrial customers in the United States. More information can be found at www.mnpower.com.

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The statements contained in this release and statements that ALLETE may make orally in connection with this release that are not historical facts, are forward-looking statements. Actual results may differ materially from those projected in the forward-looking statements. These forward-looking statements involve risks and uncertainties and investors are directed to the risks discussed in documents filed by ALLETE with the Securities and Exchange Commission.

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