

Proceeding No. 21M-0005E
Black Hills Colorado Electric, LLC d/b/a Black Hills Energy (BHCE)
2021 Rule 3206 Report – Appendix A – Project Sheets

Boone-South Fowler 69 kV to 115 kV Conversion

Project Sponsor:	Black Hills Colorado Electric
Additional Project Participants:	
Project Description:	Rebuild the existing 69 kV line from Boone to S. Fowler Tap west of Rocky Ford, CO.
Voltage Class:	115 kV
Facility Rating:	221
Point of Origin/Location:	Boone 115 kV
Point of Termination:	South Fowler 115 kV (new)
Intermediate Points:	
Length of Line (in Miles):	19
Type of Project:	Transmission Line Rebuild
Development Status:	Planned
Routing:	
Subregional Planning Group:	CCPG
Purpose of Project:	Asset integrity
Estimated Cost (in 2021 Dollars):	\$11.8 Million
Schedule:	
Construction Date:	2021
Planned Completion/In-Service Date:	January 2022
Regulatory Info:	Approved – Colorado PUC Decision No. C19-0638
Regulatory Date:	July 25, 2019
Permitting Info:	
Permitting Date:	
Contact Information:	Lindsay Briggs, Supervisor Transmission Planning
Email	Lindsay.briggs @blackhillscorp.com
Phone	605-721-2240

Proceeding No. 21M-0005E
Black Hills Colorado Electric, LLC d/b/a Black Hills Energy (BHCE)
2021 Rule 3206 Report – Appendix A – Project Sheets

Boone-South Fowler 69 kV to 115 kV Conversion

Description. This project is to rebuild the existing 69 kV line between Boone and South Fowler Tap substations. The initial portion of line from Boone to Boone Tap will be constructed using 795 ACSR on double circuit structures to maintain a connection from Boone to Huerfano on the existing 69 kV line while accommodating the new Boone-South Fowler 115 kV line. From the Boone Tap location, the new line will continue on single circuit steel monopole structures to the South Fowler Tap location. The rebuild of the existing 19-mile Boone-S. Fowler Tap 69 kV line is needed to improve reliability on the line. When considering the length of the line and the interest in additional capacity between Boone and the La Junta/Rocky Ford local network for load and generation interconnections, it was decided to construct and operate the line at 115 kV. In order to accommodate the voltage upgrade, a new 115/69 kV substation at South Fowler is planned and described elsewhere in this report.

Noise and EMF analysis was performed for various typical transmission project design configurations, including the same line design as the planned Boone-South Fowler 69 kV to 115 kV Conversion project. This was done to determine the anticipated noise and magnetic field levels of the project for comparison against the standards specified in Rule 3206 (f) and Rule 3206 (e), respectively. That analysis was referenced for this project. See Appendix B, page B-20 for summary details on the noise and field study.

Consideration of project alternatives including energy storage systems (Rule 3206(d)(I)(D)). Not applicable. The project was designed and planned prior to the rule requirement effective date of March 2, 2019.

Decision. In Decision C19-0638, the Commission determined that the original project was in the ordinary course of business and that a CPCN was not necessary.

Proceeding No. 21M-0005E
 Black Hills Colorado Electric, LLC d/b/a Black Hills Energy (BHCE)
 2021 Rule 3206 Report – Appendix A – Project Sheets

