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

## West Station-Greenhorn 115 kV Line Rebuild

Project Sponsor: Additional Project Participants:	Black Hills Colorado Electric
Project Description:	Rebuild the 115 kV line from West Station to Greenhorn west and south of Pueblo, CO.
Voltage Class:	115 kV
Facility Rating:	221 MVA
Point of Origin/Location:	West Station 115 kV
Point of Termination:	Greenhorn 115 kV
Intermediate Points:	Burnt Mill and Pueblo Reservoir 115 kV
Length of Line (in Miles):	12.1
Type of Project:	Transmission Line Rebuild
Development Status:	Planned
Routing:	
Subregional Planning Group:	CCPG
Purpose of Project:	Asset integrity
	About muchiny
Estimated Cost (in 2021 Dollars):	\$7 Million
Estimated Cost (in 2021 Dollars):	
Estimated Cost (in 2021 Dollars): Schedule: Construction Date:	\$7 Million
Estimated Cost (in 2021 Dollars): Schedule:	\$7 Million 2021
Estimated Cost (in 2021 Dollars): Schedule: Construction Date: Planned Completion/In-Service Date: Regulatory Info: Regulatory Date:	\$7 Million 2021 January 2023
Estimated Cost (in 2021 Dollars): Schedule: Construction Date: Planned Completion/In-Service Date: Regulatory Info: Regulatory Date: Permitting Info:	\$7 Million 2021 January 2023 Approved – Colorado PUC: Decision No. C18-0843.
Estimated Cost (in 2021 Dollars): Schedule: Construction Date: Planned Completion/In-Service Date: Regulatory Info: Regulatory Date:	\$7 Million 2021 January 2023 Approved – Colorado PUC: Decision No. C18-0843.
Estimated Cost (in 2021 Dollars): Schedule: Construction Date: Planned Completion/In-Service Date: Regulatory Info: Regulatory Date: Permitting Info: Permitting Date: Contact Information:	\$7 Million 2021 January 2023 Approved – Colorado PUC: Decision No. C18-0843. September 19, 2018 Lindsay Briggs, Supervisor Transmission Planning
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**Description.** The West Station-Greenhorn 115 kV line is at a point late in its lifecycle and will be rebuilt to replace the existing 336 ACSR conductor to increase the line's capacity. The project will rebuild the 12.1 mile line with single circuit 115 kV construction utilizing 795 kcmil 26/7 Strand ACSR "Drake" conductor utilizing the existing right-of-way, and will include the intermediate Burnt Mill and Pueblo Reservoir distribution substations. The project construction will begin in 2021 and will be completed in January 2023.

The maximum (summer) continuous rating of the proposed 115 kV facility will be 221 MVA, assuming 795 ACSR conductor and line design rating of 100° C, and a maximum continuous operating voltage of 120.8 kV (105% of nominal). The maximum (winter) continuous rating of the 115 kV line will be 240 MVA. The expected new ratings provide an increase over the current summer/winter rating of 119/153 MVA, respectively.

Noise and EMF analysis was performed for various typical transmission project design configurations, including the same line design as the planned West Station-Greenhorn 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 C18-0843, the Commission determined that the project was in the ordinary course of business and that a CPCN was not necessary.

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