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

Airport Memorial to Nyberg 115 kV Rebuild

Project Sponsor:	Black Hills Colorado Electric
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Additional Project Participants:

Project Description: Rebuild the 115 kV line from Airport Memorial to Nyberg in

Pueblo, CO.

Voltage Class: 115 kV Facility Rating: 221 MVA

Point of Origin/Location: Airport Memorial 115 kV

Point of Termination: Nyberg 115 kV

Intermediate Points:

Length of Line (in Miles): 5

Type of Project: Transmission Line Rebuild

Development Status: In-Service

Routing:

Subregional Planning Group: CCPG

Purpose of Project: Asset integrity

Actual Cost: \$3 Million

Schedule:

Construction Date: 2022

In-Service Date: February 22, 2021

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

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Description. The Airport Memorial-Nyberg 115 kV line currently utilizes 336 ACSR with an operating temperature of 90 degrees C. This line will exceed its thermal rating following the simultaneous loss of the Boone-Comanche 230 kV and Nyberg-Baculite Mesa 115 kV lines during high west-east flows across the BHCE system. Overloads on this line were identified in previous 10-year planning assessments, generation interconnection studies, and the 2015 SB07-100 analysis for resource injections at Nyberg. The total online generation at Baculite Mesa may need to be limited in the operational timescale during periods of high West-East flows and certain outage combinations until the line is upgraded to replace the undersized conductor. This project will rebuild the line with 795 ACSR and replace the limiting breaker CT and line jumpers at Airport Memorial.

Noise and EMF analysis was performed for various typical transmission project design configurations, including the same line design as the planned Airport Memorial-Nyberg 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 project was in the ordinary course of business and that a CPCN was not necessary.

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