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

Rodrigues 115 kV Distribution Substation

Project Sponsor:Black Hills Colorado Electric

Additional Project Participants:

Project Description: Formerly known as Salt Creek. New 115 kV

distribution substation in Pueblo; will intersect the

Reader-Pueblo 115 kV line.

Voltage Class: 115 kV
Facility Rating: 25 MVA
Point of Origin/Location: Pueblo, CO

Point of Termination:

Intermediate Points:

Length of Line (in Miles): 0

Type of Project: Distribution
Development Status: Planned

Routing:

Subregional Planning Group: CCPG

Purpose of Project: Load service

Estimated Cost (in 2021 Dollars): \$7 Million

Schedule:

Construction Date: 2020
Planned Completion/In-Service Date: June 2023

Regulatory Info: Approved – Colorado PUC Decision No. C19-0638

Regulatory Date: July 25, 2019

Permitting Info: Permitting Date:

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Proceeding No. 20M-0005E Black Hills Colorado Electric, LLC d/b/a Black Hills Energy 2019 Rule 3206 Report – Appendix B – Noise and EMF Study Report

Rodrigues 115 kV Distribution Substation

Description. The project is driven by the need to increase transformation capacity at the existing Freemary 69/13.2 kV substation. There is limited space to increase transformation capacity at the Freemary substation, so other options were considered. One option is to construct a new Freemary substation on a new, larger parcel of land to the south. A second identified alternative is to construct a new 115/13.2 kV distribution substation (Rodrigues Substation) to the northwest of Freemary and interconnect to the adjacent Reader-Pueblo 115 kV line. The substation will be built to ultimately accommodate two 115/13.2kV, 25 MVA transformers, but only one bank will be installed initially. In addition to meeting the transformer capacity needs at Freemary, the latter option was selected as the preferred option since it would reduce loading on the 115/69 kV transformers serving the Pueblo subtransmission network. The Rodrigues substation would also provide the benefit of offloading the Blende 69 kV substation, which is anticipated to reach capacity within the 10-year planning horizon. The Rodrigues alternative essentially replaces two 69/13.2 kV projects.

At the time of the 2019 Rule 3206 filing, land availability and corresponding feasibility of connecting to existing distribution feeders to the Rodrigues Distribution Substation is under evaluation. If a viable location is not confirmed, the initial proposal to rebuild the Freemary 69/13.2 kV substation at a new location will be pursued.

The engineering and design work associated with the substation portion of the project will be performed to ensure that the completed project will meet the established noise and magnetic field requirements as stated in Rule 3206 (f) and Rule 3206 (e), respectively. Namely, the noise level of the substation will not exceed 50 db(A) at a distance of 25 feet beyond the property line, and the magnetic field level at the property line, one meter above the ground, will not exceed 150 MilliGauss.

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.