Tri-State Generation and Transmission Association 2014-2023 Transmission Plan

Big Sandy - Calhan 230 kV Project

Project Sponsor: Tri-State Generation and Transmission Association

Additional Project Participants: Mountain View Electric Association

Project Description: New 230 kV transmission line between the existing Big Sandy and

Calhan Substations. Expand existing Calhan substation. Proposed rebuild of the Mountain View 69 line for the Limon to Calhan

Substation section.

Voltage Class: 230 kV Facility Rating: 612 MVA

Point of Origin/Location: Big Sandy (near Limon, Colorado)

Point of Termination: Calhan (West of Limon)

Intermediate Points:

Length of Line (in Miles): 55.0

Type of Project: Transmission Line and Substation

Development Status: Planned

Routing: West from Big Sandy to Calhan along CO highway 24

Subregional Planning Group: CCPG

Purpose of Project: Support Member load between Denver and Colorado Springs

Estimated Cost (in 2013 Dollars): \$52,875,000

Schedule:

Construction Date: 2014 Planned In-Service Date: 2019

Regulatory Info: Regulatory Date: Permitting Info: Permitting Date:

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Figure 1: Big Sandy - Calhan 230 kV Line Project Map

Tri-State has identified certain load-serving deficiencies and constraints associated with its member load located south of Denver, and north and east of Colorado Springs, in the Mountain View Electric Association (MVEA) member service territory. Projected future load growth in this area will result in an overload of an existing facility, should mitigating actions not take place. More importantly, constraints imposed upon Tri-State's ability to serve present and future load in the MVEA service area include the bottleneck caused by the capacity limitation of Tri-State's existing 115 kV Midway-Geesen line (only rated for 80 MVA), along with the lack of any "bulk" (i.e., 115 kV or higher) transmission source on the eastern side of MVEA's system.

To remedy these transmission service constraints, Tri-State proposes to construct a 230 kV line from its Big Sandy 230-115 kV Substation (located northwest of Limon, Colorado) to its recently constructed 115 kV Calhan Substation. The primary purposes of the Big Sandy – Calhan 230 kV project are threefold: mitigate the projected overloads of Tri-State's 100 MVA 230-115 kV Fuller transformer, should other mitigating actions not take place; increase Tri-State's ability to deliver resources to MVEA and its other southeastern Colorado members; and provide a bulk transmission connection (i.e., a "strong" voltage source and increased power transfer capacity) to the eastern side of MVEA's service area. This project is presently planned to be financed and constructed solely by Tri-State.