

Baculite Mesa-Fountain Lake 115 kV Line Rebuild

Project Sponsor:	Black Hills Colorado Electric
Additional Project Participants:	
Project Description:	Rebuild existing 115 kV line between Baculite Mesa and planned new Fountain Lake (previously known as Overton) substation as well as reconfigure the connection to the Northridge 115 kV substation.
Voltage Class:	115 kV
Facility Rating:	221 MVA
Point of Origin/Location:	Baculite Mesa 115 kV
Point of Termination:	Future Fountain Lake 115 kV substation site
Intermediate Points:	
Length of Line (in Miles):	4
Type of Project:	Transmission Line
Development Status:	In-service
Routing:	
Subregional Planning Group:	CCPG
Purpose of Project:	Increased reliability, generation interconnection
Estimated Cost (in 2016 Dollars):	\$2.0 Million
Schedule:	
Construction Date:	2016
Planned Completion/In-Service Date:	January 6, 2017
Regulatory Info:	Approved - Colorado PUC: Decision No. C11-0749
Regulatory Date:	June 29, 2011
Permitting Info:	
Permitting Date:	
Contact Information:	Wes Wingen, Manager of Transmission Planning
Email	wes.wingen@blackhillscorp.com
Phone	605-721-2268

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Three individual line segments comprise the parallel path between Baculite Mesa and West Station/Midway. The Baculite Mesa-Fountain Lake 115 kV line is one of those segments that has reached its maximum utilization in planning assessments. The planned project rebuilt the 4 mile line segment between Baculite Mesa and the planned Fountain Lake substation (previously known as Overton) using 795 kcmil 26/7 Strand ACSR "Drake" conductor. The project utilized the existing line right-of-way. The original scope of this project was expanded to reconfigure the termination into the Northridge substation from the line corridor. The line flow from Baculite Mesa-Midway previously flowed through the Northridge substation and the reconfiguration converted the Northridge substation connection to a single radial tap. This was done to avoid unnecessary reductions in the thermal rating of the rebuilt line between Baculite Mesa and Northridge and to minimize disruption to the short residential corridor feeding Northridge.

The Northridge termination part of the project was completed and placed into operation in December 2016 and the Baculite Mesa-Fountain Lake line rebuild was completed in January 2017. The total estimated cost of the overall project was \$2 million, which was a \$1M reduction from previous estimates. In 2011 the Colorado Public Utilities Commission found that the project was in the ordinary course of business and that a CPCN was not necessary.

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