

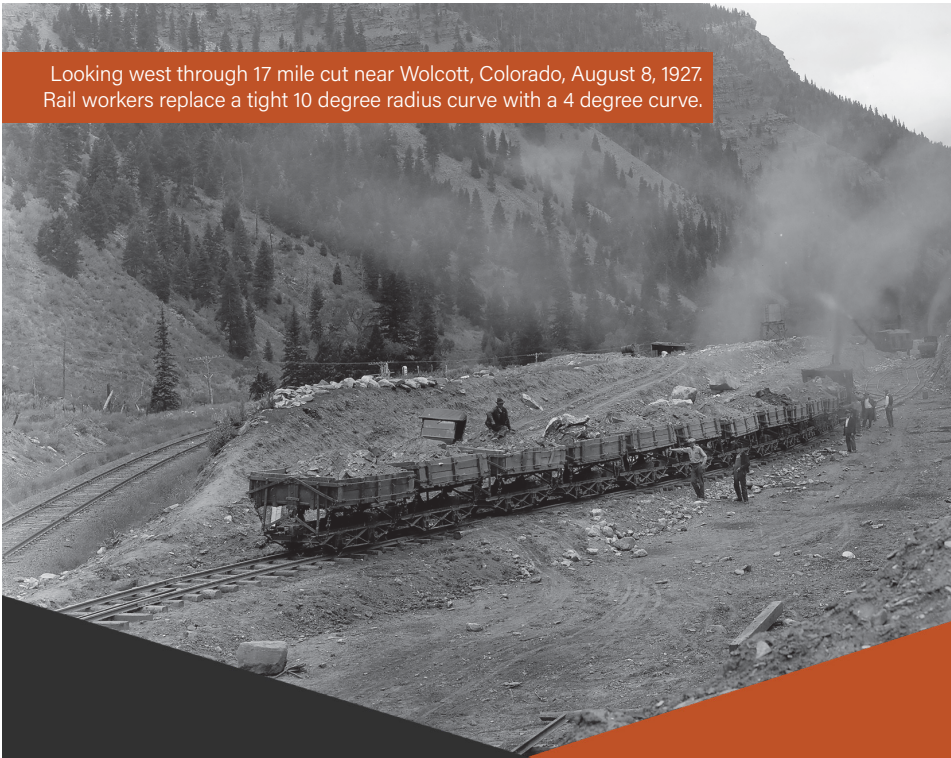
EXPLORING STEEL ENERGY AND THE WEST



NUMBER ONE IN A SERIES OF 10

See the exhibit at www.pueblolibrary.org/exploringsteel

Looking west through 17 mile cut near Wolcott, Colorado, August 8, 1927.
Rail workers replace a tight 10 degree radius curve with a 4 degree curve.



STEEL & ENERGY

COMMONALITY OF COAL: COAL IS A PRIMARY INGREDIENT IN STEELMAKING (COAL COKE) AND GENERATING ELECTRICITY.

Steelmaking and electricity generation have shared one thing in common for well over 100 years: coal. A coal-fired electrical generating plant burns pulverized coal in a boiler to produce steam. The pressurized steam flows through a turbine connected to a generator to produce electricity. The steam is collected and cooled back into water to be used again to alleviate some of the water needs of the process. Coal is used differently in the steelmaking process and needs to be of a higher grade than coal used for electrical generation. Coking coal is baked at over 1,800 degrees Fahrenheit in the absence of air to remove impurities thereby producing coke. The coke is nearly pure carbon and used in a blast furnace to produce iron for steelmaking.