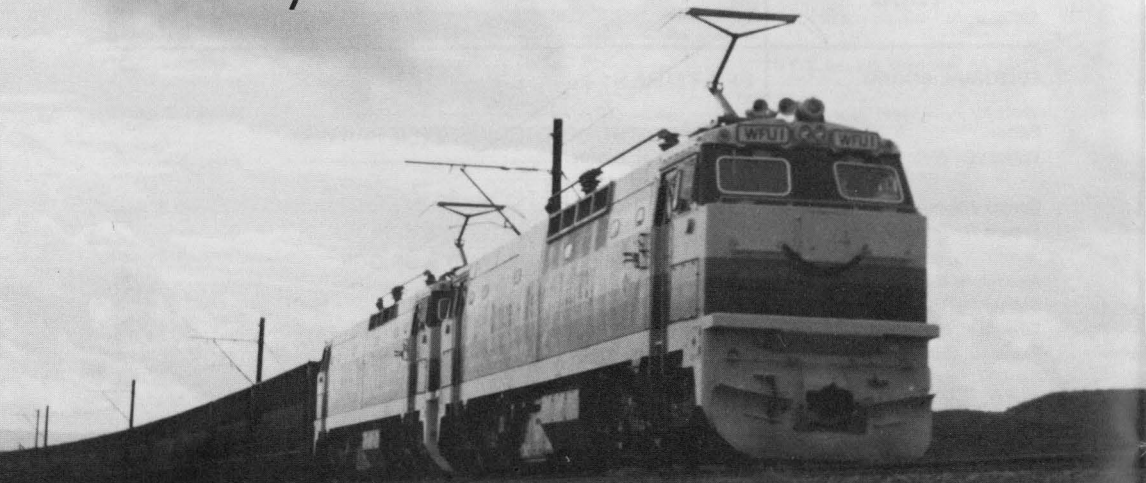


UINTAH II:

THE DESERET WESTERN Railway



WARREN J. KIEFER PHOTOS BY THE AUTHOR

In 1904 the Uintah Railway reached Dragon, Utah from Mack, Colo. where it connected with the Rio Grande Western Railway. In 1939 it ceased operations. The Uintah's basic commodity, gilsonite, was then transported by truck to railheads in Utah and Colorado. Eventually, a gilsonite slurry pipeline was laid from the mines in the Uinta Basin to a refinery near Grand Junction, Colo. In the 1970's the pipeline was converted to crude oil haulage. Today gilsonite still moves by truck to Craig, Colo. where it is shipped around the world.

Currently the transportation needs for the Uinta Basin are met almost entirely by truck. However, a phosphate slurry pipeline is slated to be laid from Vernal, Utah to Rock Springs, Colo.

Railheads, except the one at Craig, are all outside the basin. The Union Pacific main line in

Wyoming is on the northern side of the Uinta Mountains, whose highest peak is Kings Peak, at 13,498 feet. The main line of the Denver and Rio Grande Western lies over the Roan or Brown Cliffs and the Book Cliffs, formidable barriers that are not crossed by super highways. To the west, the Union Pacific and the Rio Grande at Provo, Utah and the Union Pacific at Park City are beyond the Wasatch Mountains.

In 1983, 44 years after the abandonment of the Uintah, a second railroad was constructed into the Uinta Basin. Its western terminus, an electric generating plant, is about 12 miles north of Bonanza, Utah. Its eastern terminus is the coal loadout for the Deserado Mine, 37 miles northeast of Rangely, Colo. There is no physical connection with another railroad.

The nation's newest railroad is an electrified coal hauler, owned and operated by Western

Fuels-Utah. It is designed for the economic movement of 2.7 million tons of coal a year over a rugged 35 mile route from northwest Colorado to northeast Utah.

Western Fuels-Utah is a wholly owned subsidiary of Western Fuels Association with headquarters in Washington, D.C. Western Fuels Association members are located in 21 states and Puerto Rico.

Construction and operation of the Deserado Mine are part of the Deseret Generation and Transmission Cooperative's Bonanza Power Project. Deseret is a wholly owned subsidiary of Western Fuels. The cooperative was conceived and organized for the benefit of rural electric consumers in the intermountain area. Deseret is responsible for the wholesale power supply of six rural electric distribution cooperatives, serving more than 30,000 rural meters in Utah, Wyoming, Nevada, Colorado and Arizona.

"Rugged" aptly describes the route of the Deseret Western Railway, up and down two percent grades on a 35 mile roller coaster. A steep climb begins at the Deserado Mine coal loadout and continues to the summit of Holum Pass, named for Ken Holum, general manager of Western Fuels in Washington, D.C.

The first real problem confronting the railway builders was the movement of supplies, power plant, mining and railway equipment into the area. Almus International of Santa Fe Springs,

Calif. was selected to move heavy equipment, locomotives and coal hoppers from the railheads. The plan at the outset was to use the roadbed of the old Uintah Railway from Mack to the power plant site north of Bonanza, a distance of about 70 miles. By utilizing the Uintah Railway roadbed no highway traffic would have been interfered with. However, the trestles and roadbed were in disrepair, thereby making it impossible to use. Moreover, the Bureau of Land Management required reseeding of mountain slopes along the route, if the Uintah roadbed was to be used.

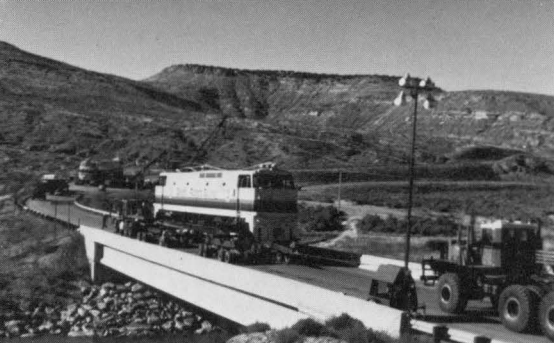
Unable to use the Uintah Railway, Almus was able to gain permission to use Colorado highway 139 from Loma to Rangely. This route extends over Douglas Pass to Colorado highway 64 and Moffat County road 65, a distance of 95 miles to the coal loadout (silo, or 125 miles to the Bonanza Power plant (see map).

Mack and Loma are about 4500 feet in elevation and Baxter Pass is at 8431. Douglas Pass is at 8268 feet in elevation. Almus rebuilt the bridges and constructed traffic turnouts every two miles on highway 139 to allow traffic to move by the heavy equipment, which took up two lanes and moved at four miles per hour.

The heaviest load moved was a 300 ton electrical generator called a stator, which required a tractor ahead and behind the specially built trailer. Two more tractors were required when

Opposite, Deseret Western's lead unit, E60 WFU-1, presents a perfect smile face as it drags upgrade at Holum Pass, five miles from the Deserado Mine. Below, arrow straight and level, at the other end of the line, "the" train is about two miles from the generating plant on its way back to the mine.





Excitement and trouble come to he who tries to run locomotives without tracks. Top left, E60 WFU-1 is eased across a highway bridge with one prime mover in front and another holding back on a cable. Note the portable lighting unit. And note, around the bend, WFU-2 sitting where it nearly came to grief. Center left, WFU-1 approaches the bridge as the nervous operation continues. Below, now on rails, WFU-2 hauls hoppers near the coal loading site.





Not for interchange. A typical Deseret Western Railway hopper finds itself, like a model railroad car, on a layout that loops back onto itself and never flies free to far-away places.

the heavy grades on Douglas Pass, seven and eight per cent, were encountered. These tractors were about double the size of normal highway semi-trailer truck tractors. The trailer itself weighed 110 tons, was 22 feet wide and 140 feet long and had 128 wheels.

Some of the former property of the old Uintah Railway was used in this project. Almus International set up its operations in the area that was once the site of the Uintah Railway yards in Mack.

After moving much of the power plant equipment, but none of the railroad, Douglas Pass was closed by an earth mudslide during the winter of 1982-83. The pass has been closed intermittently ever since. At this writing — September 1984 — it has been re-opened about a month.

It was decided to bring the locomotives and hoppers in from Rifle, Colo., through the Piceance Basin, over a detour around a washed out bridge on Colorado highway 64, then to Moffat County road 65. The locomotives arrived in Rifle in September 1983. One E60 was in normal appearance, but the other was sheathed in black paper. They were placed on a spur adjacent to the D&RGW mainline.

While listening to the evening TV news on September 21, 1983, I learned that one of the locomotives had rolled into a corner of a bridge on Moffat County road 65.

My wife and I traveled to the locomotive's location the next day. When we arrived at the site, the locomotive had been righted and moved up the road; its trailer was being re-constructed under it. The second locomotive still had to cross the bridge. In talking with officials and other observers at the scene, I came up with what happened.

The bridge slopes downward toward the north; the road to the south of the bridge is on a steep grade. North of the bridge the road is level for just a short distance and then begins a steep climb. The two engines were together on the south side of the bridge. It was decided that the bridge was not strong enough for the engine trailer and the truck tractor. The move across the bridge was to consist of a truck tractor with air compressor coupled to the engine trailer. Behind the engine trailer was a truck tractor connected with cables. There were brakes on the lead tractor, the engine trailer and the rear tractor. The move was in progress until the rear tractor was about to move on to the bridge. The grade on the bridge was not as steep as the road to it. The rear tractor was disconnected. It was felt that the lead tractor could control the engine trailer and move it across the bridge to the level portion of road. At this point in time, the air hose to the engine trailer blew off, releasing the brakes on the trailer. It rolled into the guard rail on the north-east corner of the bridge. The engine tilted



Top, loading operations at Deserado. Both E60's pull the unit train under the coal silo as the coal pours aboard for its 37 1/2-mile train ride. The engine-house can be seen at the left. The lower picture shows the sweeping curve of the conveyor to the top of the silo, as the train approaches. The author rode this trip in August 1984.



toward the river and then righted itself. I guess everyone almost had a heart attack. We watched the movement of the second engine across the bridge, which was done without a hitch. There was a longer cable between the rear tractor and the trailer. This allowed the lead tractor to be off the bridge before the rear tractor was disconnected. Also the trailer wheels were blocked.

Railroad Builders, Inc. of Englewood, Colo., laid track and ballasted the roadbed of the Deseret Western. The nearest railhead to the construction was Craig, where most of the track material was brought in. It was then loaded on trucks for transport to the job site.

Ties were brought to Dinosaur, Colo. and were pre-plated with a special jig that was designed and built by Railroad Builders. The pre-plated ties were hauled and distributed on the subgrade in preparation for the rail laying operation.

Rail was rolled in 78 foot lengths and hauled directly to the grade on special trailers that could handle these extra lengths. The rail was then welded into continuous lengths by the utilization of an on-track welding machine. Completed, the rail is essentially one long continuous line running from the coal mine to the power plant.

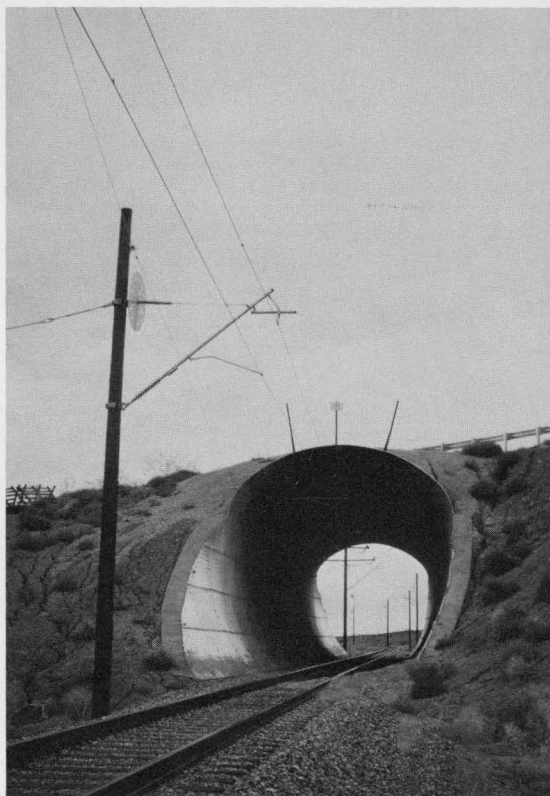
All ballast for the job was crushed near Jensen, Utah and hauled by trucks to various stockpiles along the new route. Once the track was welded, the ballast was loaded into ballast cars and distributed utilizing several small diesel powered locomotives.



Above, if you have two locomotives, sooner or later you will need a passing siding. Deseret Western has one, as the above picture shows, about in the middle of the line. The sweeping emptiness and abrupt hills of the region are also seen. Below, practicality prevailed over esthetics when it came to grade separations, for all are giant culverts similar to the one shown near Bonanza. The catenary pole is equipped with a circular device designed to prevent eagles from being electrocuted. Until they were installed, the lines were not energized in daylight.

Work started from the mine end and progressed toward the power plant at a rate of approximately one-half mile per day. Rail reached the power plant in the middle of the summer of 1983 and all work by Railroad Builders was completed by the end of the summer.

Operation of the railroad commenced in the spring of 1984. There was no regular operation as coal production had just begun. At first operations were limited to nights until special devices were applied to the catenary system. The protective devices were applied in order to prevent eagles from electrocuting themselves when trying to land on the wires. With the protectors in place, daylight operation began. Usually a train will run once a day leaving the Deserado Coal loadout silo around eight or nine in the morning. The 75-mile roundtrip, including unloading the coal at the Bonanza power plant site, takes less than four hours. Occasionally second trips are run and there are days when no trains run. The coal hauled in 1984 was for stockpiling and the power plant started producing power in 1985. With one unit on line, 1,350,000 tons of coal a year will be required. One train a day, five days a week, will move that much. The Deseret Western has 35 hoppers of 100 ton capacity. The two E60's will take a fully loaded train, weighing about 4500 tons, up the slightly less than two percent grade on Holum Pass at 30 mph. Top speed permitted, at present, is 40 mph. When the second unit at the power plant is built, 2,700,000 tons of coal a year will

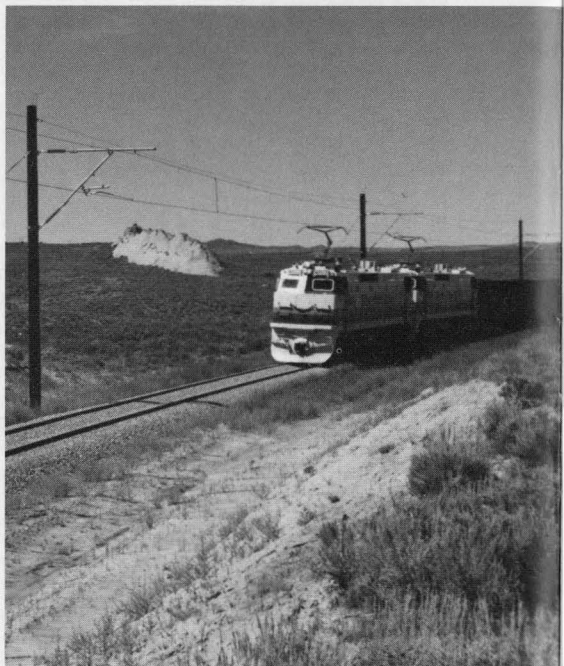


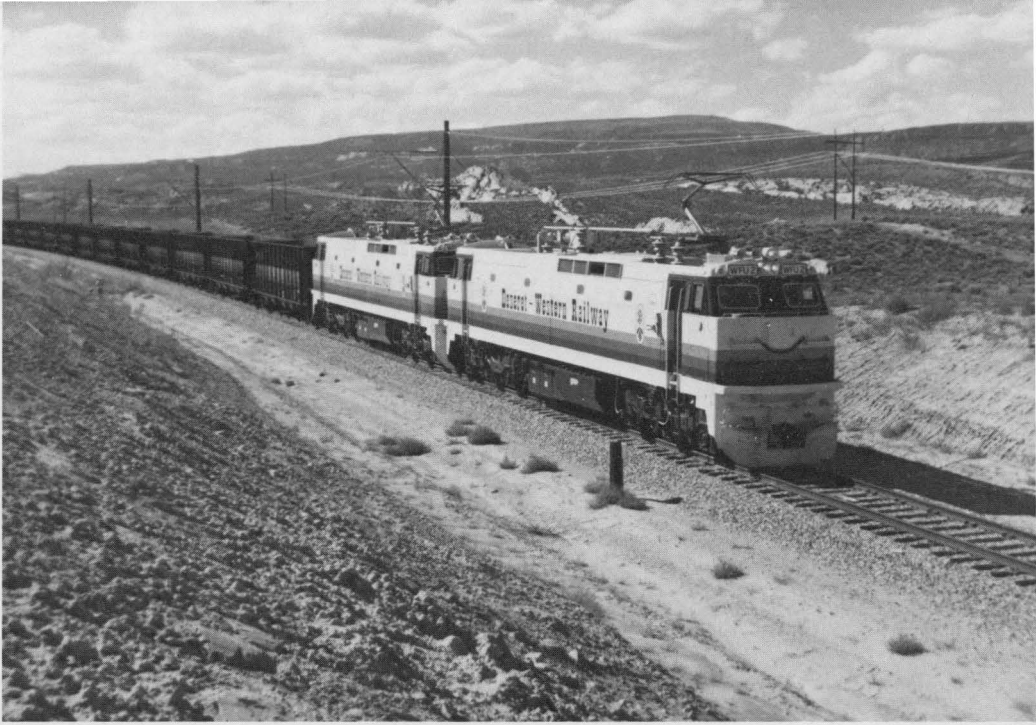


Above, still in Colorado but approaching Utah, the smile face appears again as the train runs downgrade near Bonanza. WFU-2 is in the lead. Right, the train east-bound with empties in the sag just before climbing Holum Pass. Note the interesting geological formation.

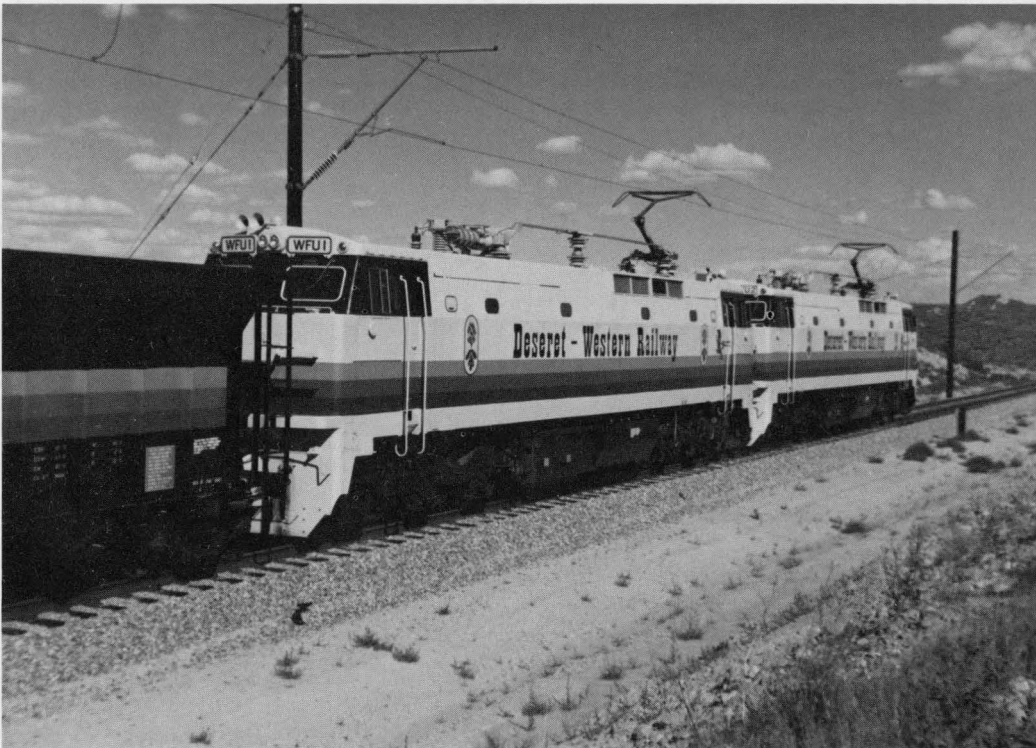
be required. Three trains a day, five days a week, will be necessary, with no equipment increase.

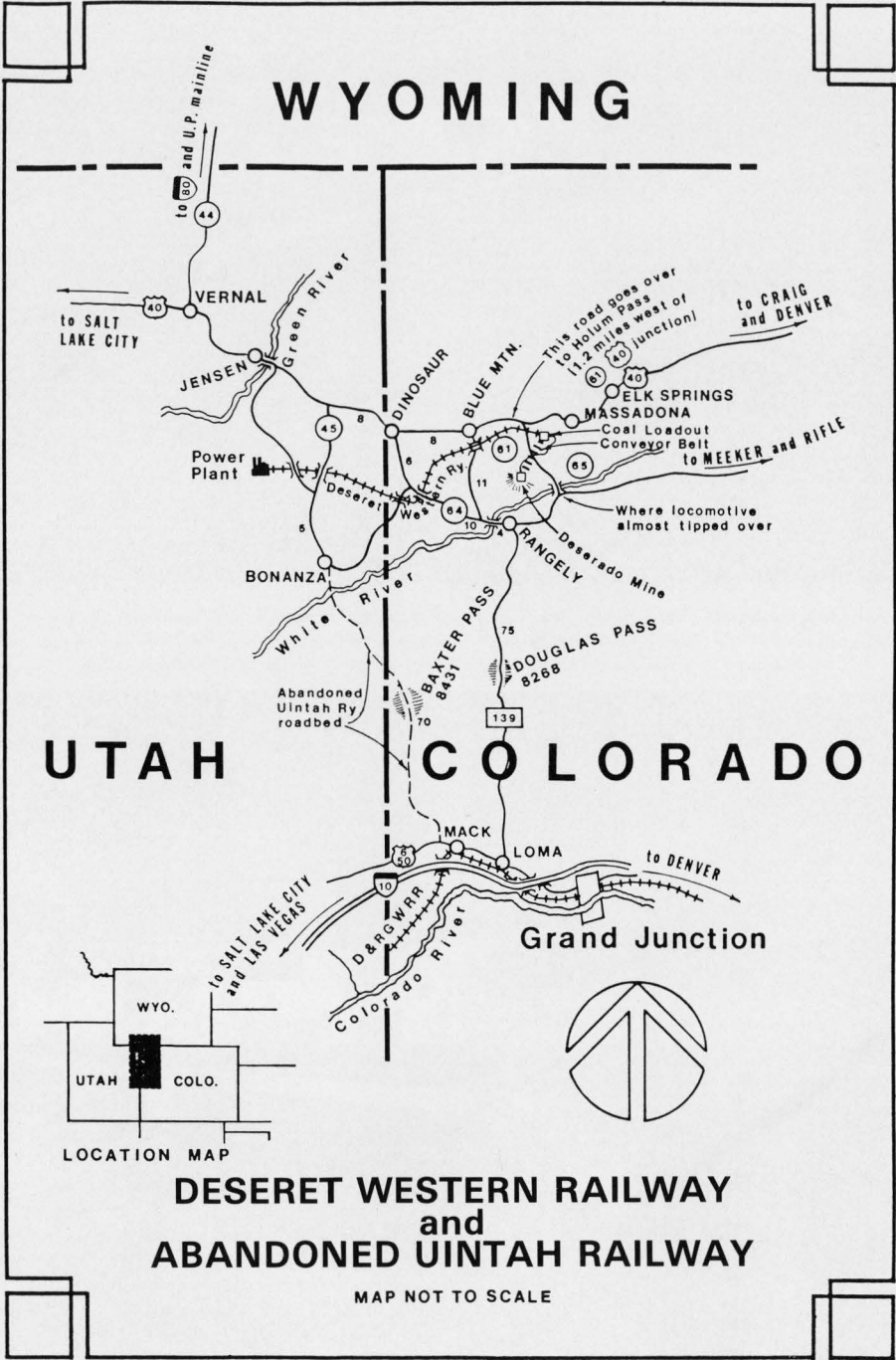
Bill Tuttle, the chief operating officer, is from the Chessie system. Mike Fagan and Jim Hodom are the engine and train crew. Mike's railroad career started with the Santa Fe in Phoenix as a trainman. Then he went to the Black Mesa and Lake Powell Railroad in northern Arizona in engine service. The Black Mesa is the other electrified line that uses E60's. Jim worked for Railroad Builders.





Downgrade on the east side of Holum Pass, the train makes a stop for inspection. This is desert country, with scrub vegetables and sweeping views empty of habitation, but far from flat.







The concept is simplicity itself. At one end of a point-to-point layout is a coal mine, at the other an electrical generating plant. In between, an archtypical unit train. Seen here at the Bonanza end are the coal pile and handling facilities with the essential train ready to shuttle back for more of the same.

