

The Olmsted

This beautiful location hidden at the mouth of Provo Canyon actually has its history in the gold mining days of the 1890's. While high-grade ores were easily mined, low grade ore mines needed a nearby power source to process the ore. Steam engines were used fueled first by wood and then, as wood became scarce, by coal. Because of the difficulty transporting coal over primitive roads, other sources of energy were needed. Fast moving mountain streams could be used to generate electricity, but there was no known way of transmitting that power to the mills.

Lucien L. Nunn had come west in 1880 at the age of 27 to seek his fortune. By 1888 he was manager of the Gold King Mine near Telluride Colorado and had bought interests in other mines. Nunn promoted the idea of using high voltage alternating current to transmit power over long distances. L. L. Nunn used \$50,000 in gold to persuade George Westinghouse to design and build an alternating current system. In 1890 it transmitted 3000 volts of electricity 2000 feet from a streambed up the mountain to the mines. Thomas Edison and scientists all over the world were astonished.

In 1897 Nunn's Station in Provo Canyon was completed. It transmitted electricity 32 miles across Utah Valley to Mercur, carrying 44,000 volts. It was the first such long distance, high voltage line in the United States.



Nunn planned to expand by building an 80-foot high dam across the Provo River. However, because of the fears and objections of Utah Valley residents, only a 16-foot high dam could be built. High water pressure was needed to profitably make electricity.

Fred Olmsted, an engineering student from Michigan designed a system where the water from the small dam was diverted into a twelve-foot square wooden flume. The flume hugged the canyon wall and carried river water to a large cement box more than 300 feet above the generating station. Steel pipes carried the water at a steep angle down the mountain to the generating station. Before the plant was completed, Fred Olmsted died of tuberculosis but the plant was named after him. In 1903 the Olmsted plant opened and replaced the Nunn's Station. It generated power sent to Mercur and the mines in Eureka.

One of the unique features of the Olmsted Power Plant was that it used some of the most knowledgeable engineers in the country to establish on-the-job training programs for its employees. At the time, Olmsted offered one of only two competent training programs in electrical engineering in the entire United States, with the other one offered at Ohio State University.

In 1912, with less than 1,000 residents living on the Orem Bench, poles were erected to carry electric wires which were supplied with power generated at the Olmsted Power Plant. Also in 1912, Utah Power and Light Company purchased the Telluride Power Company, which included the Olmsted Power Plant. This plant is still a fully operational power plant, operated by PacifiCorp, Utah Power's new owners.

What follows is probably the best early postcard of the Olmsted Power Plant, from 1910. The large white building to the left is the dormitory and classroom area of the Telluride Electrical School. The red sandstone building to the right houses the hydro-electrical power generation equipment. The small white concrete building on the hill is where the long green pipe in Provo Canyon ends. The water drop through the descending pipes generates electricity. This area is almost the same today as it was a hundred years ago, but the trees are much bigger and today you can't see the building as well as you can in this old photo.

