

# YHHS NEWSLETTER

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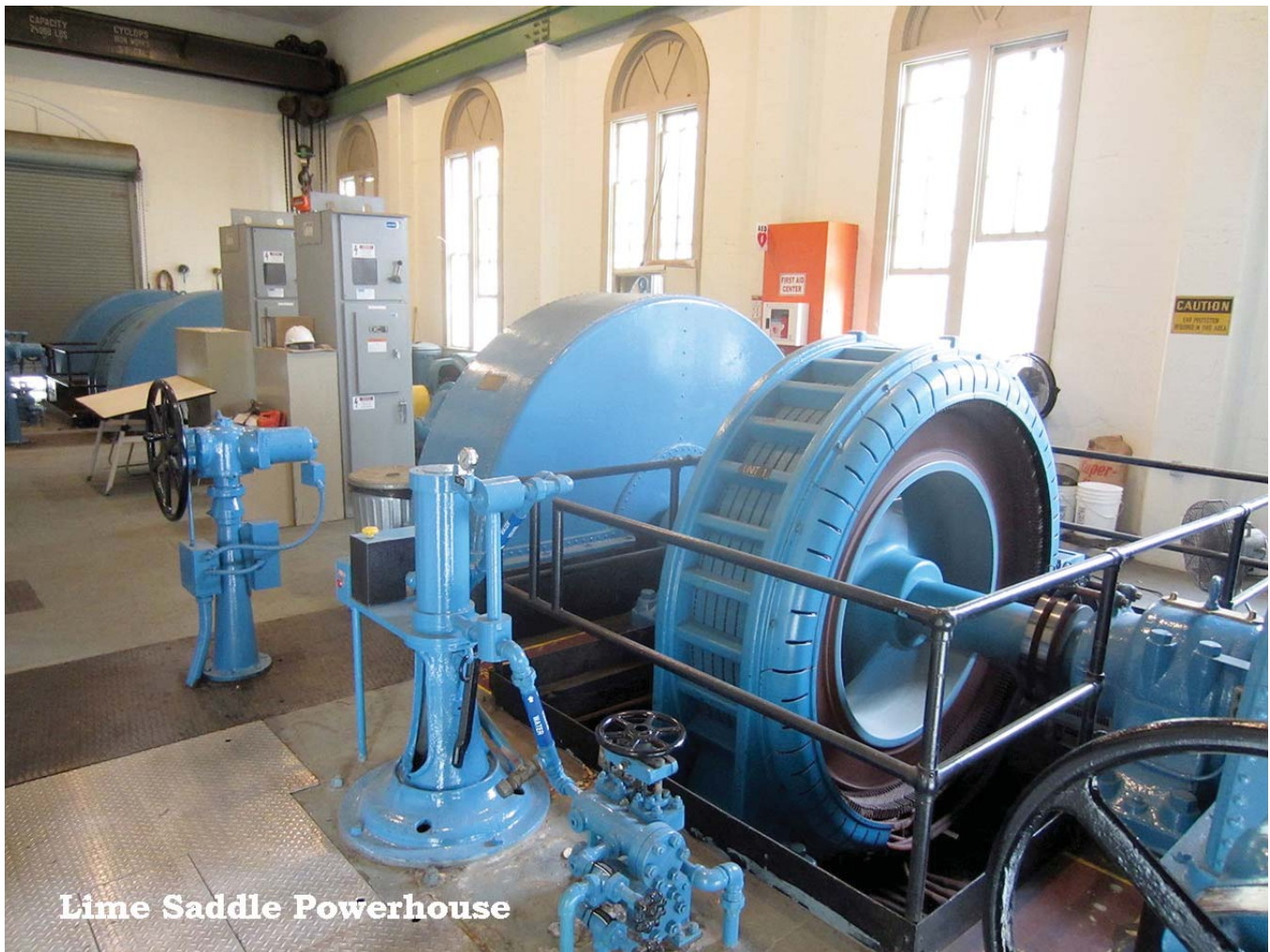
## Quick Snapshot of Lime Saddle Powerhouse



I recently walked to the Lime Saddle Powerhouse operated by P.G. & E. near the Lime Saddle overlook. You reach the plant from Lime Saddle Road, the old Nelson Bar Road. I walked the ditch from the small parking lot near the historical Nelson Bar marker to the plant; it is about  $\frac{1}{4}$  of a mile. You can also walk the gravel road which brings you out where the P.G. & E truck is parked in the picture above. If the gate is open to the gravel road then someone is at the plant. I took pictures along the way some of which are shown here. When I arrived a P.G. & E. employee was at the plant,

they check the site periodically. I asked if I could go inside the plant and take pictures and some video, after stating I was with the historical society, I was told it would be OK.

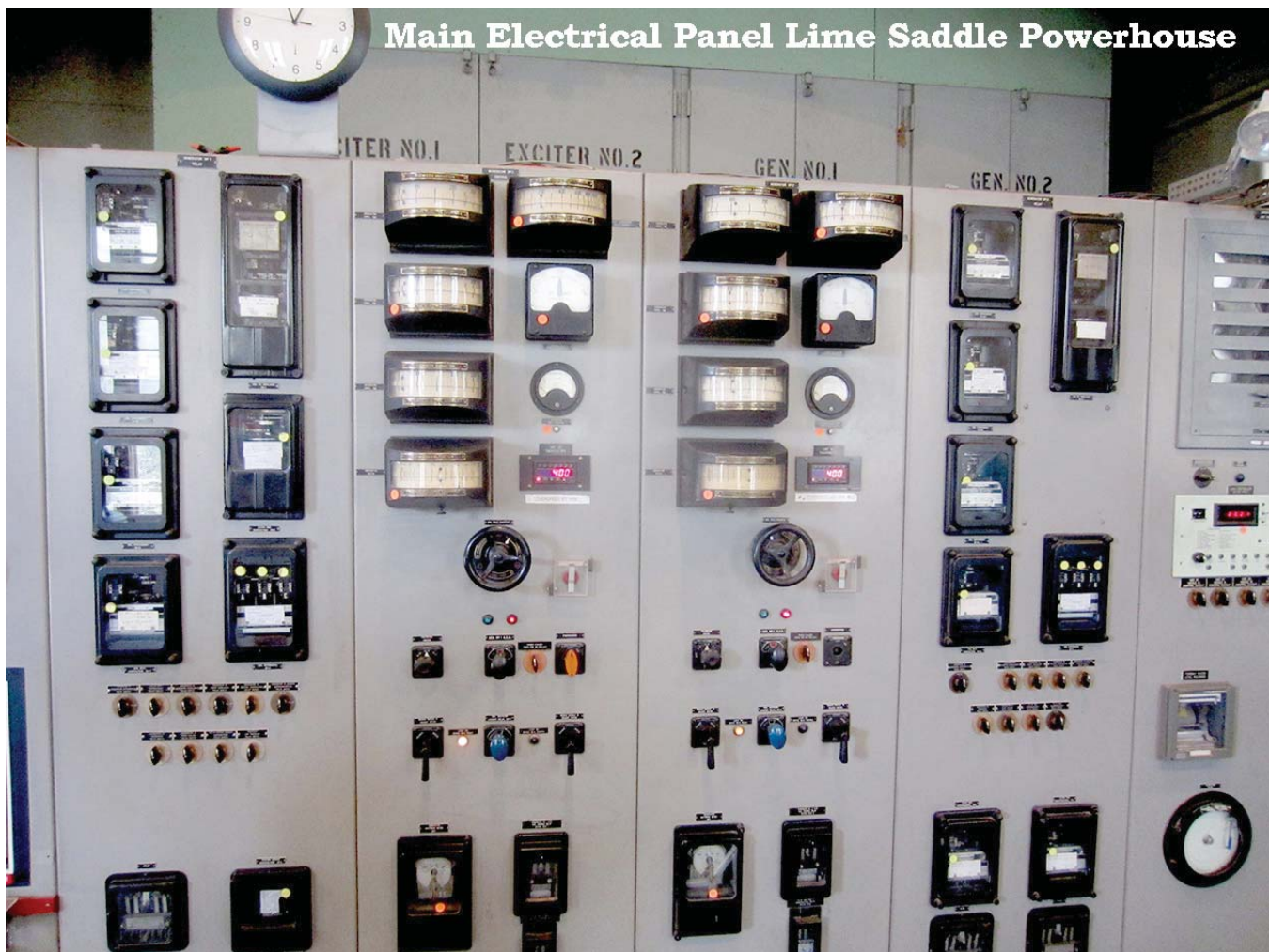
The Lime Saddle Powerhouse has 2 blocks of turbines with a turbine and a water wheel to generate power in each block. The water wheel consists of a series of metal cups about 10" across mounted on a wheel which catch the flowing water below the plant to turn the turbine. Each block can produce 1 MWH; a MWH can service approximately 700-800 homes. Block one is the primary block with block two serving as a backup and in times of maximum power (based on water availability) supplements block 1 reaching the total of 2 MWH.



The turbines are the original turbines installed in 1906. I was told these old powerhouses are built to last and require minimum service. The electrical panels in the powerhouse were replaced in the 1970's. Maintaining the Miocene Ditch is another matter requiring a lot of service.

The Miocene Ditch provides water for the Lime Saddle Powerhouse and in the past for the Coal Canyon Powerhouse. The ditch predates the power houses as it was first built for gold

mining and supplying water to remote areas. In 1875 the upper Miocene Ditch was known as the Davis & Co. Ditch. In 1880 the Miocene Mining Company purchased the ditch and expanded it. The ditch starts above Magalia and ends in Coal Canyon. P.G. & E. is obligated to maintain the ditch and continue to supply water to the various areas dependent on it. Part of the ditch is still of wooden construction, but much has slowly been replaced by metal construction. The ditch is cleaned once a year of rocks and debris and any repairs are also made. Several years ago a large storm dropped a large tree in the foothills which damaged the ditch; it cost nearly \$1,000,000 to repair the damage as well as perform maintenance on the ditch. It is questionable if the Lime Saddle Powerhouse, which is the oldest powerhouse on line in Butte County, supports the cost of maintenance of the entire system.



There is some concern that P.G. & E. wants to shut the powerhouse down because of costs and low power output, but the issue of maintaining the ditch and continuing to supply the water to Coal Canyon would still remain. It should be noted that the water after it leaves the powerhouse is diverted by a gate in two streams, one directly into Lake Oroville near the lookout parking lot above the old Nelson Bar site and the other stream into a ditch running to Coal Canyon. The gate can be seen in the first picture.

**Backside of Lime Saddle Powerhouse Dec 2014**



**Miococene Ditch Near Lime Saddle**



### **Early History**

The Lime Saddle Powerhouse construction started in 1905 and the plant went on line in 1906. The Coal Canyon Powerhouse was built in 1907. Both were built by Oro Light and Power which was acquired by P.G. & E. several years later. Water from Concow Lake at one time was sent to the Miocene Ditch near Kunkle Reservoir and on to the two power houses. Thermalito bought Concow Lake in 1922 from P.G. & E. and was required to continue sending water to Lime Saddle as part of the sale after the current cement dam was completed in 1926. Concow Lake dates back to 1870 when an earthen dam was built primarily to supply water to the Cherokee mining operations.

It took 125 men to build the Lime Saddle Powerhouse, a supplemental work force of Chinese workers was used to repair the old ditch and build the new ditch which had to be rerouted to the power house site. Kunkle Reservoir already existed at the time the powerhouse was built. It is named after Kunkle Ravine which was occupied by



**Lime Saddle Powerhouse circa 1906 when it first operated**

E.F. Kunkle from Prussia in the 1860's. The reservoir was enlarged when the powerhouse was built. The metal pipe at the Kunkle Reservoir that sends water to the powerhouse was laid in 1906. Today the structures shown in the 1906 photo of the Lime Saddle Powerhouse, which included a home for the site manager and accommodations for the construction crew, are all gone except the powerhouse itself and the ditch.

There is very little history of the Lime Saddle Powerhouse in print. I have compiled this information from original newspaper accounts and interviews.

### The Daily Register 10-6-1905

#### NEWSY NOTES FROM THE PENTZ SECTION

A force of seventy-five men in the employ of the Oro Light and Power Company, that had been boarding at the home of Mr. and Mrs. W. J. Lockerman, was transferred yesterday to the new quarters provided by the company. The new cook-house is finished. It is a large frame building, conveniently arranged, fitted up in an elaborate manner, with tables sufficient to accommodate about one hundred men. "Rosie," the Oroville restaurant man, conducts the culinary department. The bunk-houses are also intended to accommodate a hundred men, and will be finished in a few days. Aside from the force of men referred to, quite a number of Chinamen are employed by the company, but will furnish their own board and sleeping accommodations. E. J. Bickford, who has charge of the force, stated to the writer that no more men are wanted at the present time, but that in the course of a week or ten days the force will again be augmented until it reaches the limit, which is from a hundred to a hundred and ten men. The contract for running the 1000-foot tunnel on the J. G. Curtis place was let to Walter McDowell of Paradise, at \$4.25 per foot. He will be on hand in a few days with a crew of men to begin the work.

**Coal Canyon Powerhouse Dec 2014**



**The Coal Canyon Powerhouse built in 1907 was shut down in 2002 and the equipment was removed. The plant produced .9 MWH when it operated. It is representative of a locally owned power plant built between approximately 1890 and 1910 when power was first commercialized.**

**Kunkle Reservoir  
2014**



Pipe from Kunkle Reservoir to Lime Saddle Powerhouse  
2014

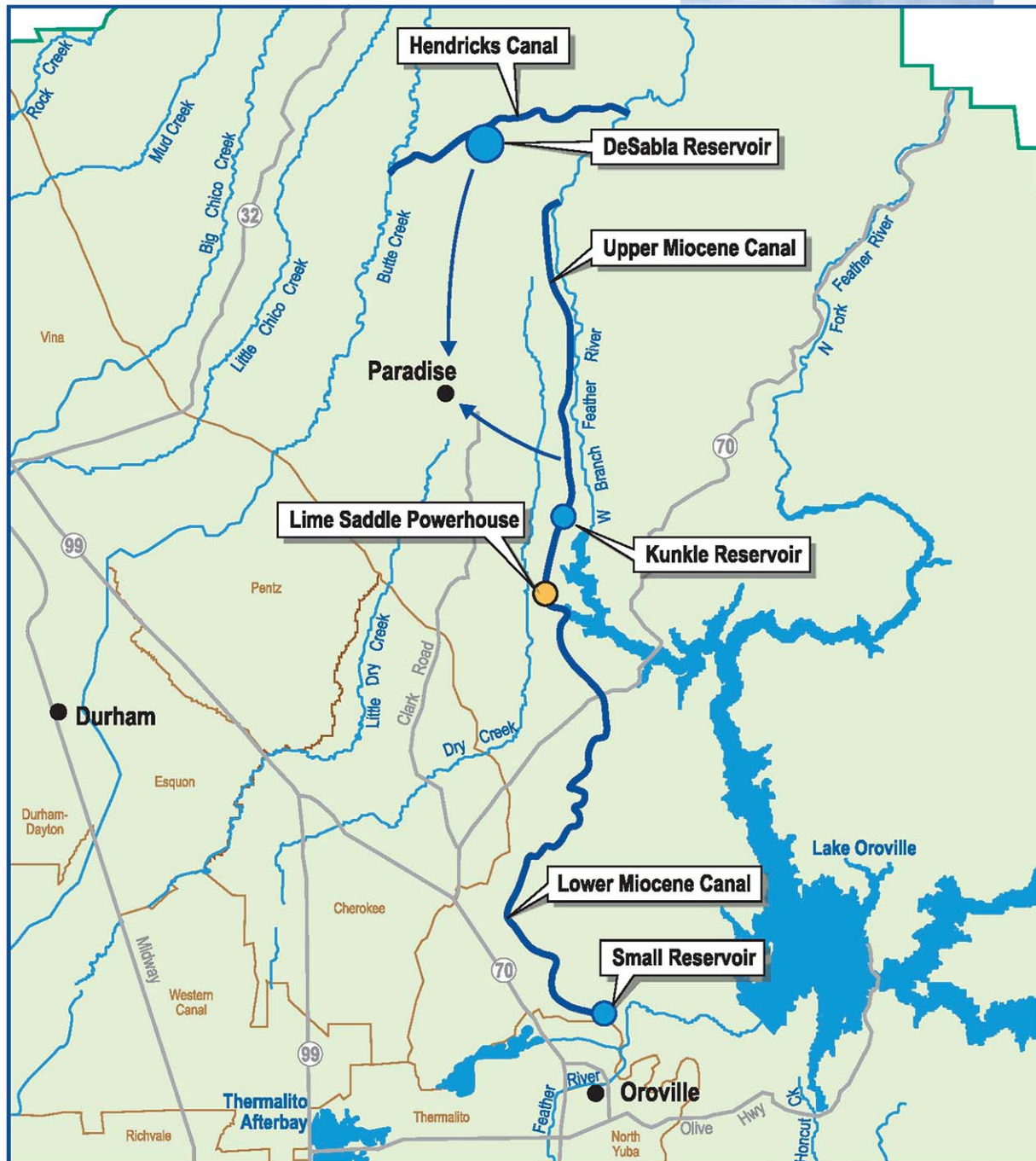


The pipe to Lime Saddle went through the property of Joseph Gould Curtis. His father, Charles Stubbs Curtis, came to Nelson Bar in 1855 and in 1856 operated a toll ferry across the West Branch at Nelson Bar to reach Frenchtown. It was 10 cents to cross the river , 25 cents with a wagon. In 1857 he built a bridge near the same location to cross the river. The family sold the property in the 1930's.



The Miocene Ditch along the Paradise Ridge hillside below Pentz Road runs past the Feather River Hospital to above Magalia. It is the main power source for the Lime Saddle Powerhouse.





**Water Source and Final Destination for Lime Saddle Power Plant**

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