

A History of Yacolt Light & Power System

By C.R. M111er
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In 1909 the Town Council granted J.M. McIntire and Edward McIntosh a franchise to build a light & power system in Yacolt. McIntosh was the promoter in the deal and McIntire furnished the capital.

A steam plant that had been used in Claskanine, Oregon and put out of use by a power line was purchased from the owner a Mr. Reibolt who was also hired to install the same in Yacolt.

This steam plant powered by a 9" X 13", 50 H.P. Russell engine was located in the southeastern part of Yacolt near the R.R. track.

The first electric lights in the town of Yacolt were turned on the last day of Feb, 1910 and this as the day I came to town from Portland, I had been employed there by the Portland Railway, Light & Power Co, soon after graduating in Electrical Engineering from the W.S.C. In 1908, I came at the request of Mr. McIntire who was sole owner, he having bought out the interest of his partner, to help in the plant operation and wiring houses.

Mr. Reibolt having finished his work operated a motion picture show in what is now the Masonic Hall for a short time. Admission 15 cents & 5 cents.

With McIntire's son I worked as alternate night operator and wireman during the day. Lights however were turned off at midnight.

On April 1st, 1910 when the few meters were read and revenue totaled Mr. McIntire realized a cruel joke was his for the total revenue was \$127.00 while his labor cost was \$300.00. His partner had led him to believe he would make a fortune so he was frantic to sell out. Since leaving college, I had traveled much looking for such a business as this and being young was willing for the risk, asked his price.

It was 2 months however before I could close the deal and then with the help of my brother H. T. Miller and A. D. Wexler. (my then prospective father-in-law.) The consideration was \$5,000.00 and we took over June 1st, 1910.

Going back to relate the events prior to my coming to Yacolt I wish to state the 2 weeks before was a most hectic and trying time. Previous to my meeting with Mr. McIntire and his offer of a job I had teamed up with a friend to obtain a franchise to operate an electric system in the town of Drain, Oregon.

While negotiations were in progress my friend went East and left me to complete the deal. While I was investigating the district about Drain for a suitable Waterpower site with poor luck, competition for a franchise developed which I would not have met had I acted on my own. Due to no good power sites nearby. Since my partner was unavailable, I was forced to meet with the Drain Council to seek a franchise and won out over our competition.

This all had happened while the job at Yacolt, was much in my mind. However, to hold the job at Yacolt I sent out in my place until a suitable disposal of the Drain deal my brother W.A. Miller also a 1908 graduate in Electrical Engineering at W.S.C.

It is doubtful if we would have pressed for a franchise at Drain had not the events come up as previously given. The better prospect at Yacolt decided me at least to abandon the Drain affair and regret the expense I caused the town.

Now Let us go back to March 1st, 1910 my first daylight view of Yacolt. The passenger train made a daily trip from Yacolt to Portland leaving at 6:00 AM and returning at 6:00 P.M. At that time the only road, if it could be called such into Yacolt was by way of Amboy. There was a summer road over Kelly Hill or Yacolt Mt. open during winter to horseback travel only.

Logging operations were in town, that is across the street from the Yacolt City Hall and out north or the machine shop and commissary. The loggers were bedded in the 4 hotels, namely The Yacolt, South of the firs, The Lewis across the street NW and the Park across the street south of the Western. Of the 4 only the Western Hotel still stands. It was built in 1913.

The happy event of June 1st, 1910, being an owner of a lighting system was soon brought to a realization of a serious job for electric lights had competition and many critics who felt such a business was only half honest.

At that time the town was installing a water system taking water from above Nysanger Falls, the power site I had selected and negotiated for with the Clarke County Timber Co. As the town had prior rights to the water, I could get only that 10ft from the town's needs.

After many stormy council meetings, a deal was made whereby I could use the city dam placing my 16" pipe one foot below the spillway with privilege of blocking the spill-way for low water storage which gave 2½ ft. of storage during low water periods. The consideration for this use of the dam was to furnish free 8 streetlights at current prices which was \$11.84 per month.

My two brothers and I operated the plant (nights only), wired houses, saloons of which there were 5 and worked the power site which was ready by June 1, 1911. The 48" impulse wheel with 675' of 15" pipe operating under 148' head was ready and run to break in. The line was up and lights used from the town source. On June 4th at midnight the engine was shut down, the generator moved and set up in the new plant and at 3:00 P.M. the town was serviced by waterpower. At this time all night services began.

The old steam plant had 2 generators either of which could be used. The one moved to the falls was a 60 K.W. 2 phase, 60 cycle revolving armature at 2200 volts. However only one phase was used while operating in town or at the new site. The other generator was a 25 K.W. single phase, 1100 volt, 133 cycle machine. Both were old even at that time.

Soon after starting operation at the falls the work became routine there were few houses yet to be wired and the let-up was enjoyed. But not for long for on Sept. 11, 1921, a thunderstorm came up, it grew dark so the operator started up the plant too soon have lightning come in on the wires and short the coils in the generator. The damage was augmented by it being in operation so no quick repair could be made.

The next day I took the train for Portland where I ordered a 75 K.W. 3 phase 60 cycle machine. My brother got the steam plant ready so on my return the steam plant was in operation again until Sept. 22, 1911 when the new generator arrived and put in operation at the water power plant.

In April 1922 continuous service was furnished as the Yacolt Meat Co. installed a 10 HP motor to replace the gas engine driving the ice plant in the shop below the present Masonic Hall. This shop was managed by Vasco Christy for the Twin Falls Logging Co. which name was later changed to the Clarke County Timber Co.

Since only 2 wires had been strung from the plant to town only single phase service for motors was available so a single phase motor was used.

In August 1913 the C. C. Timber Co. got a 20 H. P. 3 phase motor to operate a rock crusher at the bluff N.E. of Yacolt where the cut can still be seen. To furnish this motor with 3 phase power the 3rd wire was strung from the plant to the Sudan place and a 3 phase line north to the crusher site.

This crusher ran occasionally for a few years, to furnish ballast on the logging roads in the district east of Yacolt.

In April 1920 a 10 H.P, 3 phase motor was installed in the machine shop of C.C. T. Co. to power the machinery and replace a steam engine used from 1904 to this date: To furnish this electric power the 3rd wire was strung from the Sudan place into town and the lighting load was also balanced in the 3-phase circuit. Later the 10 H.P. motor was set up in the locomotive shed adjacent to the shop to drive the big lathe used to turn engine drivers and the 20 H.P. crusher motor took the place of the shop 10 H. motor.

This was the set up when in 1925 logging operations out of Yacolt closed and rails removed to resume logging East of Longview. This move by the C.C.T. Co. gave a dark view for the Light Plant. The revenue became 1/3 of other times and a hundred meters stilled for a time.

In order to keep myself from being the plant operator during this spell and to keep busy I got myself a sawmill. This was not a way to make a living I found out soon.

About this time some socialistic minded residents decided that Yacolt should own the plant. I was willing, a price was set at \$4,000.00, about 1/3 cost up to that time.

An election was called as required. On election day (May 1926) while busy at the sawmill an urgent appeal was sent to me to come and vote if I wanted to sell for it looked doubtful as to the results. I did want to sell. So rushed in to vote. When the ballots were counted there were 67 for and none against.

The Town Council and Mayor took over June 1, 1926 just 16 years later and the corporation, Northern Clarke County Light and Power Company was history.

Very little attention was given by me to the plant operation for sure it was a relief to be free from the attention required the trial and insults so frequent in such a business.

The city had a streak of good luck for when the Murphy Logging Co. finished on Yacolt Mt. and Kelly Hill and moved to town the vacant houses filled and continued filled while logging the old growth stand beginning at the present Staples place and north to the old homestead taken up before the 1902 fire by the Rotschys.

Sometime in 1929 the council negotiated a deal whereby the system would be taken over by the Northwestern Electric Co. pending the building of a power line from the Aerial power plant. During the summer repairs were made to the city reservoir and sediment

cleaned out from storage space. Water was supplied to the town during this work but none to operate the power plant, so the residents were without lights for some time. This shut down was made much longer than planned for a fire in late August 1929 came over Silver Star and Bell Mt. and to the edge of Yacolt burning the power plant.

The N.W.E. Co. in a power line and from Fargher Lake way so the town was served from that source until the system was taken over by us people, the P.U.D.

In conclusion I would like to register a peeve I held all the time I operated the plant. That old Dam. There never was a need for so high or costly a dam. The 8" pipe used to convey water to town could never draw 1/2 the stream flow. The surveyor who was hired to plan and supervise the work and get 5% of cost for his pay. So He specified a dam costing \$3,500.00 and other equipment totaling \$10,000.00

This would-be engineer had no knowledge of construction or hydraulics. So when the forms were removed the concrete structure supposed to be a dam would not hold marbles let alone water. For years it was a constant task to stop the leaks to enable the dam to fill our pipe during low water. The dam was built on clay and soon under mined as did the valve pans rendering several costly 8" valves useless.

The reason told the council for the high dam was so as to have enough head over the pipe to prevent air from entering the pipe. Any student of hydraulics could learn that it requires a head of but 2 1/2 times pipe diameter to prevent the whirl whereby air is drawn in.

This was on a par with instructions I got from the council in my agreement in looking after the city pipeline.

At Weaver creek a valve was installed to drain off any sediment that may be lodged there, the lowest point in the pipeline. I was cautioned to close said valve very slowly so as not to draw in air. I remember it was fun to open the valve under 250 feet head and watch dirt, rocks anything give way to the jet of water. On a hot day it was a good place for a shower in the spray

.P.S. I presume by some this may be considered rather a personal recital. Perhaps but just now I don't have the time to write up all the interesting side lights of this period.

C.R.Miller

Note: This history was copied from Gary & Emma Millers family album and is posted with their permission. Gary is Cort's grandson and they live on the property Cort once owned.

Power plant by
Big Tree Creek and
Nysanger Falls
May 1914



