Beginning The Big Creek Project

In the late 1880's, an engineer named John Eastwood surveyed much of the San Joaquin and Fresno Rivers watershed areas, searching for places to create hydroelectric power plants. He formed a company called San Joaquin Electric Company, which used Willow Creek as a source of water for their hydro system. At what is now called Corrine Lake, Eastman built a powerhouse and a forebay that provided electricity to Fresno by way of power lines that stretched 37 miles from the mountains to the town. But after years of drought and interference from other companies depleted his water supply, he was forced into bankruptcy in 1899.

But he didn't give up on his dream of using water as a source of electrical power. He continued to think about places to build dams and powerhouses along the San Joaquin River. Over the years he drew up plans for several dams and powerhouses, but lacked the financial backing to build any of them. Instead of coming up with smaller plans, he thought bigger. He came up with a grand system that would use nearly the entire upper San Joaquin River watershed as its source of water. He split the system into a series of reservoirs and power houses, where power could be generated in steps.

In 1902, Eastman took his idea to William Kerckhoff, a wealthy Southern California businessman, who was an associate of Henry Huntington. Henry Huntington was the nephew of Collis Huntington, one of the Big Four founders of the Central Pacific and Southern Pacific Railroads. Along with Kerckhoff, Henry Huntington was the founder of the Pacific Light and Power Company, which supplied electrical power to Los Angeles. Huntington was in desperate need for electrical power. He owned vast amounts of real estate that he wanted to develop. He bought the Los Angeles Railway

(known as the "Yellow Cars"), a narrow gauge streetcar system in Los Angeles, as a way to compete with his uncle's Southern Pacific for passenger traffic in and around LA. In 1901, he founded the standard gauge Pacific Electric Railway (also known as the "Red Cars") which became a vast interurban streetcar system that made the extensive expansion of Southern California possible. Ultimately, between the Red Cars and the Yellow Cars, there were not many places in the LA area that you could not go. Who needed a freeway when you have such an extensive and well-operated streetcar system? In fact, what is a freeway?

Streetcars use lots of electricity. In 1901 there weren't many sources of electricity available. PL&P had 10 generating plants in Southern California, most of them steam operated and all of them operating at capacity. Huntington was determined to create more hydroelectric plants, because they were cheaper to operate. So, John Eastman's plan for a huge hydro-electric generating system was welcomed by Henry Huntington and his cohorts. Huntington gave Eastman 5400 shares of Pacific Light and Power stock in return for a complete and thorough survey and a final plan for his hydro-electric system. Eastman completed this survey and plan between 1902 and 1905.

Eastman's initial proposal was for the construction of a large dam and two powerhouses along Big Creek, a tributary of the San Joaquin River. About this time, Eastman came up with the idea for a multiple arch dam, a type of dam which had never been built previously. Later, this type of dam would make him famous. Florence Lake and Hume Lake are two local examples of lakes created by this type of dam. Flaming Gorge Dam and Glen Canyon Dam are more famous examples.

PL&P began buying water rights in the San Joaquin watershed. They courted some of the biggest water rights holders in the area, including Miller and Lux Cattle Company.

They successfully assured Miller and Lux and other farmers that this system of lakes and dams would provide a steady and more constant supply of water for their operations, better than anything that could ever happen without the system. By 1907, PL&P had all the water rights and was ready to begin construction. But, the financial Panic of 1907 greatly reduced their financial power. In 1910, Henry Huntington fired Eastman from his engineering job at PL&P, for unknown reasons. It is thought that since he had already provided his plans and ideas, he was no longer needed by the PL&P.

This was a move that has been the hallmark of the Huntington family. The same fate befell Theodore Judah, the engineer who surveyed the entire Sierra Nevada route by horseback, got the Big Four interested in building the railroad, created the Dutch Flat-Donner Pass route, procured land and bonds appropriations from the US government, campaigned with Abraham Lincoln to get the Pacific Railroad Act approved, and ordered the supplies and materials necessary to make the transcontinental railroad a reality. Since Collis Huntington already had Judah's plans and surveys, he no longer needed Judah once construction was set to begin, so he fired him.

The Big Creek Project was huge by the standards of the day. It was set to transmit power 240 miles from the mountains to LA, an unheard of distance, and an unprecedented proposal. PL&P already had a hydro electric plant at Borel on the Kern River; Mt. Whitney Power and Electric Company had plants on the Kaweah and Tule rivers; and Southern California Edison had a large plant on the Kern River. But these were all dwarfed by the magnitude of the Big Creek Project.

Transport of materials and laborers up the to the mountains was the first problem facing the PL&P. They only method of transport available was by mule team, which was expensive, slow, and wasn't really suited for hauling the kind

of heavy loads that would ultimately be necessary. On January 26, 1912, PL&P signed a contract with Stone and Webster Co., an engineering firm from Boston, to build a railroad to haul the necessary goods to the various construction sites. This railroad would begin at a place called Nopac Siding on the Southern Pacific Clovis Branch, which was about ½ mile from Gordon Siding. Nopac Siding would ultimately be called El Prado, which means "The Meadow". This site is just north of the intersection of Willow and Copper Avenues (Gordon Siding), and is now on property owned by the Ricchutti Family. For many years, up until the early 80's, El Prado was clearly visible from Willow Avenue, looking to the right (east) as you drive north. But then, the Ricchutti's decided to build a huge mansion and surround it with olive trees. The roadbed and station site were demolished. But as you drive past the Ricchutti place today, the siding was just north of where their driveway and mailbox intersect with Willow Avenue.

The Clovis Branch of the SP was actually the brainchild of Marcus Pollasky. Pollasky came to Fresno in 1890 with a scheme to build a railroad 100 miles into the timberlands of the Sierras. He said he wanted to access lumber and mining that would make the valley prosperous. It was Pollasky who laid out what would then be called the San Joaquin Valley Railroad. It ran from a curved spur track through downtown Fresno to its first depot at "East Fresno," at the intersection of First and Tulare Streets (the station stood where the Jack in the Box dumpster is currently located). From East Fresno, the SJVR ran down the middle of Tulare Street, crossing at a northeast angle near 9th Street, then turning due east and down what would become McKenzie St. It had a Y with a mile long spur track at the Barton Vineyards Winery (ending near Maple and Belmont). It continued past the winery, past the Maltermoro Ranch, past the Easterby Ranch, and turned north near what is now Belmont and Clovis Avenue. From there it stopped at its second depot at Ben Woodworth's Las Palmas Ranch, and continued north through what would

become Clovis (there was nothing there but Clovis Cole's wheat fields and George Owens' vegetable ranch in 1890). Pollasky built a small freight loading platform and shed as the first Clovis Depot. The railroad then turned northwest past what would become the Wawona Ranch, then turning north again and paralleling what would become Willow Avenue. The railroad ultimately dropped into the San Joaquin River area, crossed Little Dry Creek, and headed north to Hamptonville, which Marcus Pollasky bought and immediately renamed Pollasky. In 1910, the name was changed to "Friant", after Thomas Friant of the White and Friant Lumber Company.

The SJVR was doomed from the start, and there has been much speculation about the actual reason for its creation. But that is another story for another day. Suffice to say that there was no reason for its existence. There was not enough traffic generated in that area to make it pay for itself. By 1893, the RR was bankrupt, and the Pacific Improvement Company took over. PIC was a subsidiary of the SP, so SP took over the railroad, renaming it the "Clovis Branch." Some people referred to it as the "Friant Branch", but its real name was the Clovis Branch.

The SP Clovis Branch saved Stone and Webster about 18 miles of track building from Fresno. Since the Big Creek Project would mean the movement of massive amounts of people, equipment, and materials, the Clovis Branch was put to good use, where it had been only sparingly used up to this time. Stone and Webster built a storage yard at what is now Willow and International Avenues, where the Junior College stands. Until the college was built, it was possible to wander that property with a metal detector and find small bits and pieces left over from the Big Creek Project.

The railroad started at El Prado and ended at Big Creek, and it was originally known as the "Big Creek Railroad." On March 16,1912, the railroad was granted a charter by the

State of California to establish itself as a separate corporation from the PL&P. It was renamed "The San Joaquin and Eastern Railroad." It was chartered as a common carrier, meaning that it could haul passengers and freight. There were many stops along the way, which I will discuss later. The major stops were New Auberry (where there was a storage yard), Auberry, and at Cascada (which means cascades or waterfall) almost 56 miles from El Prado. Stations were located at El Prado, Auberry (the RR headquarters), and at Cascada. The name was changed from Cascada to Big Creek in 1926. A small waiting room was built at Wellbarn.

There were water stops and section houses located along the upper portion of the track, along what is now called Jose Basin Road and Old Railroad Grade Road. From El Prado for the first 5½ miles to Auberry, the grade was relatively easy at 1.4 percent. It got increasingly steeper after that, topping out at about 2.4 percent. Rod engines were used below Auberry, but only geared locomotives could climb the grade after Auberry, most of which was literally carved out of the river canyon, with a maximum grade of about 5.2 percent. Initially, there were five brand new Shay locomotives ordered from Lima Locomotive Works. Two second hand rod engines were purchased for use below Auberry. Almost all rolling stock was owned by SP, save for a combine car, three cabooses, four passenger cars, one flat car, and Model T Ford Speeder.

All construction work was handled using wheelbarrows, horses, and Fresno scrapers. Holes in rock for blasting (there was a lot) were drilled by hand. The railroad was completed on July 10, 1912, a mere 157 days after the first ground was broken. There were 255 grades and 1078 curves (some as much as 60 degrees), so many that the railroad was often called "the crookedest railroad ever built in the world." There were 43 wooden trestles.

The railroad was immediately pressed into service. Regular train service began on August 1, 1912, but the railroad had seen use prior to that for setting up operations uphill. It was poorly built, poorly ballasted, and in need of constant repair through it's life. It was described by one railroad man as a "bunch of junk." Later riders, using the railroad's initials SJ&E, would dub it "the Slow, Jerky, and Expensive." But the PL&P brass and the Stone and Webster officials were nonplussed. They didn't care how well it was built, but rather that it WAS BUILT! It only needed to hold together long enough to complete the construction of the Big Creek Project. Total cost of building the SJ&E was $1,175,012.12.

Included in those costs was an incline built above Cascada and into the basin that would become Huntington Lake. That incline would take materials up the steep hill a total length of 6000 feet, at a rise of 2000 feet, with a maximum grade of 80%!!! That is 80 feet of rise in 100 feet of run. STEEP! All the equipment necessary to build the three dams at Huntington would go over that incline. The remains of that incline can still be seen at Big Creek and at Huntington Lake.

Now it was time to begin the construction in earnest of the actual hydro-electric project. Stone and Webster would now begin what was called "Initial Development" of the Big Creek Project. Included in that phase was the creation of two dams and a powerhouse at Cascada, and three dams and a powerhouse at Huntington Lake. But, more on this in the next installment.