On 1 January 1908, the Los Angeles Herald applauded Huntington for his building of the Los Angeles basin:

To Henry E. Huntington who is essentially a man who does things and does them well once he undertakes them, the city owes a large degree of its prosperity. He handles millions where the ordinary man handles dollars. He is not one of those who waits for a place to grow up in a favored locality before he builds a railroad to it. He first builds the road, and then puts his shoulder to the wheel with the rest of the people and aids in the upbuilding of the town and the development of its enterprises.¹

Although Huntington’s business career in southern California was at its peak in 1908, the entrepreneur had repeatedly said he wished to retire by 1910, and when that date arrived, he appeared ready to comply with his original plan. In April 1910, he told the Los Angeles Times: “I have been trying to get out of business during the past few years, and when my home [at the San Marino Ranch] is done, I am going to retire.”² But once his home was completed, he failed to follow through with his retirement plans. Thriving on the process of creation, Huntington the builder once confessed: “After all the great joy in life is in the creating; I expect to get pleasure in the thing that is accomplished, but it is in the making of it that the real thrill comes.”³ This viewpoint made his early retirement improbable, and although he often contemplated such a move and began to delegate more authority to hired managers, Huntington remained actively in charge of his major commitments in southern California.

Rather than marking the beginning of a life of leisure, the years
from 1908 to 1913 represented a period of transition and adjustment for this metropolitan entrepreneur. Huntington labored to improve and develop the region and, of course, to gain wealth. After the SP blocked his original plans for an interurban system stretching from southern California to the Mexican border, he sold his interest in the trolley firm and turned to other ventures.

The seeds for a new direction in his business career had been planted in 1903 and 1904, when E. H. Harriman acquired one-half interest in the Pacific Electric for the Southern Pacific. Huntington discovered that sharing ownership of the interurban with the SP worked well—the steam railroad company was prepared to spend millions of dollars to improve and extend the electric network—as long as the PE extensions he proposed did not conflict with the existing SP system or its long-range goals. When potential conflicts arose, however, Harriman and the SP were quick to scuttle any unwanted PE incursions. Huntington eventually realized the futility of fighting his trolley partner and in 1907 began negotiations with the SP to consolidate all the streetcar lines under one management or to separate completely the ownership of the urban LARY and the interurban PE. The subsequent business deal, finally consummated in 1910, gave Huntington sole ownership of the Los Angeles Railway, and the SP received all the stock of the Pacific Electric.

Out of the interurban business, Huntington then became more involved in other enterprises. Now he reorganized the Los Angeles Railway to provide more financing for improvements and extensions and incorporated a subsidiary, City Railway, to act as a construction firm serving the parent company. But unlike previous years when his trolleys were unhampered by government regulatory agencies, from 1910 onward, Huntington’s streetcar company had to adjust to operating under the scrutiny of both state and municipal agencies.

Meanwhile, Huntington remained active in real estate development, subdivision, and sales, and the HL&I continued to generate profits. However, the Panic of 1907 and the recession that followed slowed land sales; HL&I lost money in 1909 and 1910. Toward the end of 1912, the economy began to recover, and, in 1913, HL&I netted more than $2 million. In spite of that year’s earnings, HL&I’s net return on investment for this six-year period averaged only 3.8 percent.

Yet, although HL&I did not record high profits on the basis of actual land sales, it did enjoy huge paper profit as the value of its unsold inventory of property skyrocketed. Because of HL&I’s vast
assets, which rose in market value from $4.3 million in 1908 to $10.9 million by 1910, Huntington was able to borrow large sums of money through the issuance of HL&I debenture notes and bonds. He then financed Pacific Light and Power's building of the Big Creek power station, the largest hydroelectric-generating facility in the country, and his most ambitious project of this period. In addition to expanding its production and distribution of electricity, PL&P also entered the natural gas industry by purchasing several small companies and merging them into a subsidiary, the Southern California (SoCal) Gas Company.

Huntington understood that electric railway profits were easily made by running trolleys through the more densely populated areas. In explaining to William Herrin why neither the LARY nor the PE should build a line on a particular street, Huntington wrote: "Wilshire Blvd. is laid out in large lots on which large houses will be erected. As you know, it is a street like Figueroa St. which is very unprofitable for street railways. It is the houses on 25 foot lots that bring in the nickels." He realized that because the PE and LAIU operated hundreds of miles of track that connected small communities to the downtown core, they were not likely to be big money makers. Yet as long as Huntington could decide the destination of future interurban lines and as long as the trolley companies were operated in close cooperation with his land firms, profits from eventual real estate sales made up for the poor earnings of the railroads.

After the SP joined him in the ownership of the PE and the LAIU, Huntington was not always able to utilize the interurbans for the sole benefit of his own subdivisions, and the trolley became more of a tool of the SP's transit system in southern California. Pacific Electric rail expansions proposed by Huntington were only approved by the SP if the extensions did not injure the steam railroad's existing regional transportation network and, of course, seemed promising as transit ventures. As the electric railways became integrated into its network, the SP pushed to acquire full ownership of the PE/LAIU. Given the competitive situation, Huntington decided to negotiate with the SP.

Ever since the SP had obtained an interest in the PE and then acquired a majority interest in the Los Angeles Pacific in 1906, area newspapers began speculating about an imminent consolidation of the region's streetcar companies. In 1907, the Los Angeles Express reported that Huntington and Harriman's personal representative, William Herrin, had conferred, "signaling the merger
between Huntington street railway companies and the Los Angeles Pacific Railway system, recently purchased by Harriman and undergoing improvements reaching into millions.”

Talks had begun between Huntington and the SP in the spring of 1907. The following year, some preliminary deals were made to pave the way for the eventual consolidation. In June 1908, all the lines of the LAIU were leased to the PE. The two trolley companies already shared the same ownership and management, and arrangements were made to expedite the integration of the two systems. The following year, Huntington further divested himself of the interurban business by selling the SP his trolley systems in Fresno and Santa Clara County.

Negotiations continued intermittently for over two years, but the talks did not halt the PE expansion program. In 1908, an electric line reached La Habra, a citrus-growing community twenty miles southeast of downtown Los Angeles; work was also completed on another line linking the two Orange County towns of Santa Ana and Huntington Beach. The following year, tracks were laid from Covina eastward to San Dimas and from La Habra eastward about ten miles to Stearn, a trolley stop southeast of present-day Yorba Linda. Unlike previous extensions that were financed by PE stockholder cash advances to the PE in exchange for LAIU bonds, these expansions were paid for by loans to the PE from its two owners, Huntington and the Southern Pacific. By 1910, the PE, including the leased lines of the LAIU, operated nearly nine hundred miles of track. Earnings, however, remained poor. In 1909, the PE’s net income was only $75,000; the following year it lost $22,000.

As with the PE, Huntington expanded and improved the Los Angeles Railway. During 1908, the LARY extended the Seventh Street line northeast from Broadway to the Los Angeles River and built the Temple Street line in a northwest direction up Hoover Street to Virgil Avenue and then on to Monroe Street.

Although a few short extensions were added the following year, the most important change introduced in 1909 was a new design of streetcar—the pay-as-you-enter (PAYE) car. In New York City, Huntington had been impressed with the operation of these cars. Always ready to adopt an innovation or new technology that might improve his streetcar system, he ordered his engineers to build an experimental PAYE car and test it in Los Angeles. In use in Portland and Montreal as well as New York, most PAYE cars had a box at the rear for the payment of fares. Passengers entered via the rear door, deposited the fare in the box, and when they arrived
at their stop, exited the trolley from either the front or rear door. This method of collecting fares allowed the conductor to remain at the back of the trolley while the motorman operated the car from the front. Most trolley accidents were caused by passengers trying to enter or exit a car while it was in motion, but the PAYE car made such mishaps less likely by placing employees at the front and rear of the car where they could insure that people did not try to get on or off the streetcar before it came to a complete stop. Satisfied with the success of the new car design, the Los Angeles Railway decided to transform thirty of its cars to PAYE type—the new Los Angeles Railway’s PAYE cars did not have fare collection boxes; rather, entering passengers paid the conductor stationed at the rear door—and planned to convert more the following year.¹⁰

In 1910, the LARY expanded two of its east Los Angeles routes; the Seventh Street line was extended further east across the Los Angeles River to Indiana Street, and the Santa Fe line was lengthened a few blocks south to Randolph Street. By the end of that year, the LARY operated 222.5 miles of track and continued to be profitable. In 1908, the Los Angeles Railway’s net income was $408,000, and the return on investment was 5.1 percent. Net earnings for the following two years are unavailable, but using the gross revenue figures for these years, less the operating expenses of 1908, the approximate net earnings for 1909 were $750,000 and $1,365,000 for 1910.¹¹

By mid-1909, progress had been made in the negotiations to consolidate the streetcar companies in the Los Angeles basin, but on 9 September, E. H. Harriman died, and discussions were temporarily halted. In the spring of the following year, negotiations were reopened. Huntington and the SP were near a settlement in July 1910, but an agreement was held up because Harriman’s successor at the SP, R. S. Lovett, considered Huntington’s asking price for the Los Angeles and Redondo Railway too high.¹²

Both sides dickered through the summer, but an accord was finally reached on 27 September and announced in November 1910. The deal involved a complicated exchange of stock, bonds, and notes of the various street railways owned by Huntington and the SP. Turning over his 50 percent interest in the PE to the SP, Huntington received in exchange the SP’s 45 percent interest in the LARY. This trade gave the SP complete ownership of the interurban PE. Because the Los Angeles Inter-Urban had become a wholly owned subsidiary of the PE by 1908, all the LAIU lines were now also part of SP.¹³ Huntington, on the other hand, became
sole proprietor of the urban Los Angeles Railway. The Los Angeles basin's electric railway market was now divided by two major operators. The SP owned the metropolitan interurban lines, and Huntington controlled the city lines in the downtown core.

Meanwhile, Huntington conveyed the Los Angeles and Redondo to the SP for $750,000; then, to obtain the city lines of the Los Angeles and Redondo which were to be integrated into the LARY, he paid the SP $153,000 ($930,000 minus $777,000 of the Los Angeles and Redondo bonds, which the SP agreed to assume). For the PE's downtown lines, Huntington paid $3,500,000 minus the PE notes he held—representing loans he had made to the interurban company amounting to $3,276,000—which he surrendered to the SP. In addition, since Huntington agreed to assume the $500,000 in outstanding bonds of these downtown lines, that amount was also subtracted from the purchase price. When these complex dealings were worked out, the SP owed Huntington about $113,000. Furthermore, Huntington received new consolidated PE bonds in exchange for $3,170,000 of Los Angeles and Redondo bonds and $2,563,000 of LAIU bonds.4

Once the Southern Pacific had outright control of the PE and the LAIU, it merged them with its other regional streetcar properties—the Los Angeles Pacific, the Los Angeles and Redondo, and several smaller lines in San Bernardino County. On 1 September 1911, in a move that was subsequently dubbed "The Great Merger," the SP incorporated a new PE firm, consolidating its southern California trolley companies. Now owning the largest electric interurban system in the world, with over 1,000 miles of track, the SP worked to integrate the trolley into its steam railroad network. In order to improve the interchange of passengers from the steam lines to the interurbans, the PE honored SP tickets for local service.5

The SP began concentrating on the interurban's freight-carrying ability to take advantage of its many miles of standard-gauge trackage. Following its takeover of the PE, the SP actively began to solicit local freight business. Major products carried included citrus fruit, grain, gravel, hay, lumber, nuts, oil, sand, and vegetables. Already hauling the U.S. mail, the PE also started to operate a daily milk train. This freight operation soon became a significant source of the interurban's income. In 1911, the PE's freight revenue was $519,226; in 1912, it was $1,164,654. By 1915, the PE's gross income from its hauling business had climbed to $1,203,956, or 13 percent of total revenue.6 The trolley also played an impor-
tant role as an intermediary between the SP's steam railroads and ocean-going traffic. George W. Hilton and John F. Due, who have studied the nation's interurbans, noted that "the Pacific Electric served as a vast switching network for the Southern Pacific, and did a heavy carload business between Los Angeles and the port facilities at San Pedro."\(^{17}\)

Although the enlarged PE was considered a valuable addition by the Southern Pacific, it was not as financially successful as the original PE. In 1912, its first full year of operation, the new PE's net income was $71,000; the following year its net income rose to $478,000. However, in 1914, the railroad lost $610,000, and the PE showed a profit only once during the next twenty years.\(^{18}\)

Huntington's turning over full control of the PE to the SP seemed to represent a local victory for the Harriman forces. Yet the SP victory did not necessarily mean Huntington had been defeated. On the contrary, Huntington also came away from the 1910 deal a winner. At the time of the settlement, the PE operated a large first-class trolley system that maintained rail routes radiating out in all directions from the downtown core to various suburbs of the Los Angeles basin. Because the PE had previously promoted many of his subdivisions and already had lines to areas where future Huntington real estate developments were planned, Huntington assumed that the trolley had served its purpose and saw no benefit in battling the SP for control of the PE. Whether or not he managed the interurban, the trolley system would still carry passengers to Huntington subdivisions. Besides, he correctly assumed that the SP would continue expanding the PE. On 11 November 1910, speaking about the streetcar settlement and the PE's future, Huntington said:

\[
\text{The Southern Pacific is now in control of the Pacific Electric. The Harriman interest in the LA Railway has passed. I was assured by R. S. Lovett, head of the Southern Pacific, in New York, that the same broad policy that had dominated the management of the PE in the past will be continued under the new regime, and I believe it. The people of Southern California may be assured of fair and liberal treatment in the future.}\]^{19}\]

Finally, in giving up his interest in the financially draining PE, Huntington had more time and money to devote to his profitable Los Angeles Railway.

Following the agreements of 1910, Huntington emerged with an enlarged Los Angeles Railway. From the PE, the LARY took over several miles of city rail routes, including lines on West Temple, Angeleno Heights, Crown Hill, West Sixth Street, and Brooklyn
Avenue. The LAIU transferred to Huntington's urban railroad the former Los Angeles Traction lines on West Adams, West Jefferson, East Fourth, and East Eighth streets. In addition, the LARY received the lines of the Los Angeles and Redondo north of 116th Street. In addition to gaining 73 miles of track from the PE/LAIU and 49 miles from the Los Angeles and Redondo, the Los Angeles Railway obtained an additional 147 streetcars. Huntington's city transit system now comprised 345 miles of track, 25 percent of which were located on private right-of-way, and it had a fleet of 525 cars.20

To consolidate the new properties with the old and to provide funds to improve and expand the system, Huntington incorporated the Los Angeles Railway Corporation on 7 November 1910. Then, in early December, he established City Railway of Los Angeles to finance and construct rail lines to be operated under lease by the parent company.21

With these new organizations, Huntington expanded and upgraded his transit system. From 1911 to mid-1914, trackage operated by the Los Angeles Railway, capitalized at $20 million, increased from 345 to 386 miles. Similarly, Huntington added over 400 cars to his fleet. By June 1914, the Los Angeles Railway owned a total of 926 streetcars, 876 of which were passenger vehicles.22

Possessing more miles of track, serving a larger area, and having a larger number of streetcars, the LARY's patronage dramatically increased. In 1908, the Los Angeles Railway carried 71 million revenue passengers; in the fiscal year ending June 1914, it transported 140 million. In addition to doubling its passenger business, the net operating earnings per car mile—before interest payments on the bonds were deducted—rose from $0.055 in 1908 to $0.073 in 1914. However, the company's bonded indebtedness also vastly increased: prior to the formation of the Los Angeles Railway Corporation, the firm's outstanding funded debt was $5 million; afterward, it rose to $20 million. This hike in the company's debt expanded the annual interest payments from $250,300 in 1908 to $1,064,500 in the fiscal year 1914. The enlarged debt and corresponding high interest payments kept net earnings down, and the Los Angeles Railway's annual net income remained at approximately the same level it had been before the reincorporation in 1910. Hence, the Los Angeles Railway netted $575,445 in 1912; $536,673 in 1913; and $582,142 in 1914. Based on the reported capitalization of $20 million, the LARY's net return on investment over this three-year period was only 2.8 percent.23

Yet the LARY was actually much more profitable than it ap-
peared on the company's financial statements. When the Los Angeles Railway Corporation was created in 1910, it had an authorized bonded indebtedness of $20 million. After assuming the $5 million in bonds of the Los Angeles Railway Company and the $500,000 bonded indebtedness of the lines Huntington had purchased from the PE, the new Los Angeles Railway still had authority to issue $14.5 million in bonds. These remaining bonds were issued to Huntington's Los Angeles Railway Company for the property it transferred to the new corporation.24

In 1911 Huntington issued $9.86 million of Los Angeles Railway bonds and placed them in his personal account. Earning 5 percent interest, the bonds paid Huntington approximately $490,000 in 1912. He thus held a large block of Los Angeles Railway bonds for which he had advanced no cash, yet on which he received interest payments. If the interest Huntington earned is added to the net income for 1912, the year's net return on investment rises from 2.9 to 5.2 percent. Using the same calculation for the following two years, a period in which Huntington apparently sold $4 million of LARY bonds, the Los Angeles Railway's net return on investment was 4.7 percent in 1913 and 4.3 percent in 1914.25

Several factors may account for Huntington's actions. In taking the bonds, he guaranteed himself a constant inflow of cash. Even if the railroad's net earnings declined in future years, the company was obligated to pay the interest on the bonded debt prior to paying the stockholders any dividends. As a bondholder, Huntington had a first lien on the Los Angeles Railway and assured himself a constant source of cash, which helped him finance his purchases of rare books, manuscripts, and artwork.

For example, in 1911 he purchased a Gutenberg Bible, an acquisition that prompted a humorous exchange of letters between Epes Randolph and Huntington. Randolph wrote: "I have known for years that you were sadly in need of the influence imparted by a constant use of the Holy Writ, but I did not suppose that on short notice you would feel the need of $50,000 worth of it in a bunch." Huntington replied: "I note what you say about the Holy Writ. I certainly should not have paid $50,000 for that Bible if I had not needed it very much, although, as a matter of fact, I found that I could buy one for 10 cents, the contents of which would probably have done me as much good as the one I have."26 In addition to financing his book and art collecting, Huntington sought—in disguising profits by taking revenues as interest—to strengthen the position of his company against the city that had recently ac-
quired the power to regulate streetcar fares and was contemplating a reduction.

Huntington also removed cash from the company by directing the LARY to declare dividends for the first time. As the sole stockholder, he was paid the first dividend of $400,000 in fiscal year 1912. This declaration was followed by a dividend of $800,000 in 1913 and $300,000 in 1914. Yet, as his West Coast manager William Dunn reported to the California Railroad Commission, Huntington took the three-year total of $1.5 million in dividends in the form of City Railway bonds. This transaction allowed Huntington to keep the $1.5 million in cash in the company and provided him with securities that collected interest and could be used for collateral in any future borrowing.

Until 1910, Huntington's street railroads were largely unrestrained by governmental authority, and he was relatively free to manipulate the company's finances to his personal advantage. Although the California Railroad Commission had existed since 1880, it did not have authority over street railways until 1911. The same was true of the city's Board of Public Utilities, which had been established in 1902 but was not given any real regulatory power until 1909. Then, reporting to the city council, the Board of Public Utilities was empowered to examine the financial records of utilities companies, investigate charges brought against such firms, and recommend just and fair rates for utilities providing service in Los Angeles.

In early 1911, the city council commissioned the first study to examine Los Angeles transportation and offer recommendations to relieve downtown congestion. Bion J. Arnold, a municipal transit expert, was retained to conduct the investigation. As part of the study, an Arnold employee requested the earnings record of the Los Angeles Railway for 1900–10. General manager Howard Huntington believed it was best to cooperate with the Arnold people and provided the railway's gross earnings for the previous ten years. When Huntington was informed of his son's actions, he expressed consternation over divulging information:

I would of course have preferred not to give Mr. Damon [manager of Arnold's Los Angeles office] the earnings for the year 1910, and I don't see how the back earnings could have been obtained when we did not have the books to refer to. Of course, I want you to treat Mr. Damon with a good deal of courtesy . . . but I don't like to give the earnings for the back years because I can see where a great deal of harm can come from it.
Huntington had good cause to hide the LARY’s profits. In the latter half of 1911, the city council was considering an investigation of the LARY’s earnings to determine whether a fare reduction was in order. By the summer of 1912, at the council’s request, the Board of Public Utilities prepared to examine the railway’s financial records.  

At the same time, the city council considered the possibility of purchasing the Los Angeles Railway. In March 1912, Councilman Haines Reed proposed that the city pay from $35 million to $40 million to acquire the railroad. Two months later, the council appointed a committee to negotiate the acquisition of the Los Angeles Railway. Huntington met with the committee in May, indicating that he was prepared to sell the railway to the city, but $15 million separated Huntington’s $40 million price and the city’s $25 million offer. On 12 July, the Los Angeles Railway asked the city council to appoint an expert to make a valuation of the streetcar company’s property to facilitate talks. To make this study, as well as examine the books of the LARY, the Board of Public Utilities again hired the Bion Arnold Company.  

The Arnold report, completed by the company’s Los Angeles representative, George Damon, was presented to the Board of Public Utilities on 9 January 1914. Unaware that Huntington had taken almost $10 million in Los Angeles Railway bonds without paying any cash, Damon accepted the net earnings recorded in the company’s annual reports as the railroad’s actual income. Because that figure was never outrageously high, the study concluded that the streetcar company was just becoming profitable; therefore, a reduction of the five-cent fare rate was not justified. Hence, Huntington’s scheme of removing cash from the company by accepting interest on bonds helped protect the nickel fare. By making the net income to the sole owner appear substantially lower than it was in reality, Huntington thus disguised the true earnings of the LARY.

The report also provided the first independent valuation of the LARY. Considering the property and franchises of the firm as of 1 January 1913, Damon set the value at $19,762,389. But the estimate did not help in bringing the city council and Huntington to an agreement on the proposed sale of the railroad. By the time the study was finally completed, the city’s interest in purchasing the Los Angeles Railway had subsided. Then, on 5 February 1914, Councilman Reed, the major proponent of a municipal purchase of the Los Angeles Railway, resigned from the council because of poor health. With Reed’s retirement, the city’s efforts to purchase the streetcar company subsided.
During this time, Huntington continued developing and selling real estate. The Panic of 1907 ushered in a recession, and the economy was generally sluggish through 1913. The weak local economy hurt land sales. The usually very profitable Huntington Land and Improvement Company struggled through these lean years with comparatively low earnings. In 1908, the HL&I's net income was $182,117 but declined over the next three years. Net earnings for 1909 fell to $32,562; in 1910, HL&I lost $49,110, and the following year it lost $5,988. The next two years however, real estate sales picked up, and earnings rebounded. In 1912, the company netted $109,750, and in 1913, net earnings escalated to $2,102,275.34

Huntington's biggest real estate sale during these years was in commercial rather than residential property, and much like Thomas Burke had done in Seattle, it was the result of successful land speculation. In January 1902, Huntington had wisely purchased the nine-acre homestead of Orzo W. Childs, an early Los Angeles developer, located in the block of Main, Hill, Eleventh, and Twelfth streets in downtown Los Angeles. At the time he bought the property, for $200,000, it was in the heart of the older, wealthy residential area of the city. Aware that the business district was gradually moving in a southwesterly direction, Huntington correctly assessed that this property would eventually become part of the city's business section and vastly increase in value. In March 1913, he cashed in on his foresight and sold this land to an investment company for $3 million dollars.35

Huntington found it expedient to use the HL&I to borrow money to finance his other undertakings. From 1908 to 1913, he focused on the Pacific Light and Power Company, which entered the natural gas business and constructed the first phase of its massive Big Creek hydroelectric power project 240 miles northeast of Los Angeles in the Sierra Nevada Mountains.

Until 1905, the natural gas industry in the Los Angeles area was dominated by a single firm, Los Angeles Gas and Electric Company. Hoping to break up the monopoly, Thaddeus S. C. Lowe, an inventor, pioneer hot air balooner, and builder of the Mt. Lowe Railway, formed the People's Gas and Coke Company. But Lowe's firm was too small and undercapitalized to compete with Los Angeles Gas and Electric, and it soon went bankrupt. Following an extremely cold winter in 1906, in which the local gas companies could not meet the local demand, a group of prominent businessmen, led by wealthy reformer John R. Haynes and banker J. F. Sartori, formed the City Gas Company in 1907. Capitalized at $1 million, City Gas was established to compete with Los Angeles Gas and Electric and
then to be sold to the city for cost plus 10 percent. However, the organizers of City Gas soon lost interest in the project. In August 1908, the Domestic Gas Company, a subsidiary of Huntington’s Pacific Light and Power, purchased the property and franchises for $1,350,000.\textsuperscript{36}

Huntington and Kerckhoff sought to expand the Domestic Gas Company as they had their other PL&P projects. To do so, they needed to increase the firm’s supply of natural gas and extend its distribution system. Because of their work with the PL&P’s hydroelectric facility on the Kern River, Huntington and Kerckhoff knew of the rapid development of large oil fields in Kern County between 1905 and 1910. While drilling for oil, vast deposits of natural gas were also found in Kern County’s Buena Vista and Midway fields. Kerckhoff thought this natural gas could provide the PL&P subsidiary with the additional supplies it needed to increase its market share of the Los Angeles gas business. In 1909, Domestic Gas furnished about 10 percent of Los Angeles’s natural gas, and the Los Angeles Gas and Electric provided almost 90 percent.\textsuperscript{37}

Plans to build a 120-mile pipeline to bring natural gas from Kern County to Los Angeles were prepared by PL&P engineers. Because of the project’s estimated high cost of $1.5 million, plus the expenses of the proposed betterments and extensions of the distribution system throughout the Los Angeles basin, Huntington and Kerckhoff formed Southern California Gas Company, a larger subsidiary to succeed Domestic Gas. Capitalized at $10 million and having an authorized bonded indebtedness of $10 million, the firm was incorporated on 5 October 1910.\textsuperscript{38}

With additional capital available from sales of bonds—$6.4 million was outstanding by December 1911—Southern California Gas proceeded to lay high-pressure gas mains in Los Angeles and Orange counties. Because Los Angeles Gas and Electric already controlled the downtown market, SoCal Gas concentrated on obtaining new business on the fringe areas of the city and in its suburbs. In March 1911, it purchased Edison’s Riverside Light and Fuel Company, and in August the parent PL&P transferred the gas business of its San Bernardino Gas and Electric to SoCal Gas. In addition to an expanding distribution system in Los Angeles and Orange counties, the PL&P’s gas division was extended to Riverside and San Bernardino counties as well.\textsuperscript{39}

On 18 November 1911, PL&P formed another subsidiary, the Midway Gas Company, to build a pipeline to transport natural gas from Kern County to Los Angeles. Once the line was completed
and gas was first delivered to the southland, on 28 April 1913, Midway Gas acted as a wholesaler, purchasing gas from Honolulu Consolidated Oil's Midway field or the SP's Buena Vista field and then sending it to Los Angeles. Although Midway Gas could sell its gas to any retailer in Los Angeles, it was under contract to first meet the natural gas needs of SoCal Gas.\textsuperscript{40} By 1914, the aggressive expansion of SoCal Gas had proved successful. When organized in 1910, the firm's share of the Los Angeles gas market was slightly less than 10 percent; four years later, it had risen to 20 percent.\textsuperscript{41}

Although he was diversifying his energy holdings by moving into the field of natural gas, Huntington remained primarily interested in developing electric power. His entrance into electric power production was originally motivated by his desire to guarantee a source of power for his streetcars. But with the rapidly expanding population of the Los Angeles basin, he believed that electric power generation and distribution could become very profitable. From 1908 to 1910, the gross earnings of PL&P rose from $1.8 million to $2.1 million, but a larger amount of outstanding bonds increased interest payments and cut down net earnings. In 1908, PL&P's net income was $377,352, but by 1910, it had dropped to $248,366.\textsuperscript{42}

In order to provide electricity for more consumers and for the additional trolleys necessary to accommodate the growing area, Huntington decided to expand the steam plant at Redondo. When the $1 million addition was completed in December 1910, the generating capacity had been doubled, but this enlarged plant was only a stopgap measure. By the time the Redondo expansion was finished, PL&P was preparing to undertake a massive hydroelectric development project designed to generate electricity at Big Creek, a branch of the south fork of the San Joaquin River in eastern Fresno County, and then to transmit the electrical current approximately 240 miles southwest to the Los Angeles basin.

Aware of the potential of hydroelectric power, Huntington and Kerckhoff realized it was more efficient and thus cheaper than steam-generated electricity. For example, the cost of a kilowatt-hour of power provided by the state-of-the-art Redondo steam plant was about four cents; the same amount of hydroelectric-generated electricity was about 10 percent of one cent. Such a tremendous cost advantage led PL&P to investigate the likelihood of further hydroelectric development.\textsuperscript{43}

Huntington and Kerckhoff were introduced to the Big Creek area in 1902 by John S. Eastwood, hydroelectric power pioneer and
engineer. Eastwood had told Kerckhoff of the tremendous possibilities for power development in the Sierra Nevada Mountains in east Fresno County. When Huntington was informed of Eastwood's ideas for Big Creek, he promptly put the engineer on the PL&P payroll and sent him to make additional surveys and studies of the area. In 1905, Eastwood filed his report and proposed designs for hydroelectric power facilities with the PL&P. Busy expanding his trolley systems, Huntington lacked the time and capital to consider the vast power project. But by 1910 Huntington had sold his interest in the financially draining PE. In addition, the city's demand for electricity continued to grow, and PL&P wanted to increase its generating capacity to meet that demand. The time was propitious for Huntington to launch an enormous power venture.

In January 1910, Huntington and partners Kerckhoff and Balch incorporated a new Pacific Light and Power Corporation. Established to absorb the property of the earlier PL&P, the firm was capitalized at $40 million, and it had an authorized bonded indebtedness of $40 million. Kerckhoff explained that the larger company was formed "to give us additional capital. Our old company was too small." One month after its incorporation, the new PL&P laid the groundwork for the Big Creek development. On 23 February, PL&P acquired the water rights to Big Creek by purchasing the company that held this franchise, Eastwood's Mammoth Power Company.

Ready to develop Big Creek, Huntington placed George Ward in charge of the project. In November 1910, PL&P hired the Boston engineering firm of Stone and Webster to oversee the Big Creek venture. Plans called for creating a reservoir by building three concrete dams to close off the outlets of a natural basin near the headwaters of Big Creek. Below this reservoir, a series of powerhouses were to be constructed. Water from this artificial lake would flow via pipeline downward more than 2,100 feet to a powerhouse. After turning two waterwheel generators in this plant, the water would drop another 1,900 feet by pipeline to a second powerhouse. Initial estimates for the first phase of the venture were $9.3 million.

The capital was difficult to obtain. By October 1911, only $2.5 million of a $10 million PL&P bond issue had been sold. The trustee of the mortgage, United States Mortgage and Trust Company, called on investment bankers William Salomon and Company to set up a syndicate and take the remaining $7.5 million of the PL&P bonds at 85 percent of their face value. The syndicate was formed and purchased the bonds for $6.375 million; Huntington
was a member and subscribed for $2.5 million of the securities. Meanwhile, because the PL&P had had difficulty raising money, the financially strong HL&I borrowed $1 million by issuing two-year, 6 percent notes and loaned the money to PL&P to complete its Redondo steam plant expansion.46

When capital became available, preliminary work on the project began, but PL&P had to surmount the lack of a good transportation system. The Big Creek area was fifty miles from the nearest railroad, and the only existing means of transporting the heavy equipment and tons of material was by mule teams. But, as PL&P learned during the construction of the Kern River hydroelectric station, that means of transit was slow and expensive. Huntington and Ward’s solution was to build a spur line off the SP track from Fresno to Big Creek.47

Stone and Webster began building the Big Creek Railroad on 5 February 1912. The railway was to start at the SP station at El Prado, about twenty miles northeast of Fresno, and wind its way fifty-six miles further northeast to the site of Big Creek power station No. 1. After construction started, PL&P incorporated the subsidiary San Joaquin and Eastern Railroad (SJ&E) in March 1912. Four months later in July, the railroad was completed.

With the rail connection in place, the pace of construction on the Big Creek power facility rapidly increased. Powerhouse No. 1 was originally scheduled to open in July 1913, but progress was slowed for several reasons, and the facility’s debut was postponed. Because of the continuing steady growth of demand for electricity in the Los Angeles basin, PL&P management decided to increase the initial capacity of its Big Creek development from 40,000 to 60,000 kilowatts. To finance the larger generators, PL&P issued $2.5 million of one-year, 6 percent notes in May 1913. But one month earlier, prior to the sale of its bonds, PL&P experienced a setback when a fire broke out in powerhouse No. 2. The blaze caused the building’s just-poured concrete ceiling to collapse, resulting in major damage to the structure.48

The extensive repairs necessary on powerhouse No. 2 created another capital shortage. William Dunn, Huntington’s West Coast manager, tried to solve the cash problem by negotiating for a $4 million loan for HL&I. On 14 July 1913, he told C. E. Graham, the East Coast manager, about the dilemma: “We shall be obligated to stop work on Big Creek unless we get additional large sums of money. It is impossible to raise it here unless I am able to put through a HL&IC debenture loan, which we are working on
now.” Noting that stopping work at Big Creek would cost PL&P “at least a half million extra,” Dunn said that completing the project required a total of $2.5 million; beginning in August, $500,000 would be spent in each of the succeeding five months. In addition to the immediate cash needed at Big Creek, HL&I had to repay $1.5 million of loans due in September.19

Fortunately for the PL&P, Dunn closed the $4 million loan deal with the banking house of E. H. Rollins and Sons by the end of July, and work on the Big Creek venture continued unabated. On 2 September 1913, HL&I issued $4 million in 6 percent debenture notes, with maturities scheduled in equal $1 million installments over the next four years. The deal called for E. H. Rollins and Sons to purchase the $4 million in bonds at 92.5 percent of face value. This gave HL&I $2.2 million—$3.7 million minus $1.5 million that Rollins had advanced HL&I to meet its maturing loans and notes due in the fall—to invest in the Big Creek construction. The balance received from the loan was funneled to the project by the HL&I’s purchase of PL&P first preferred stock.50

Thus financed, the Big Creek project neared completion. On 14 October, a generator in powerhouse No. 1 began delivering electricity to local circuits near the facility. But power from Big Creek could not be sent to southern California until 241 miles of transmission wires were strung from the hydroelectric station to the Eagle Rock substation in northeast Los Angeles. The transmission lines reached Los Angeles the first week of November. Then, on 8 November, a failure at the Redondo plant caused it to shut down, and to make up for the power shortage, electricity from Big Creek’s powerhouse No. 1 was sent to southern California for the first time. By mid-December, the two-year, $13.9 million project was completed. The three remaining generators of Big Creek’s initial development were activated, and the new hydroelectric facilities provided the Los Angeles basin with 60,000 kilowatts of electricity, or a total of 80,400 horsepower. With the two additional power stations, PL&P had more than doubled its previous operating capacity of 75,000 horsepower.51

During construction of its Big Creek facilities, PL&P net earnings began to increase. With the modern, efficient Redondo plant in operation, PL&P’s net income was $594,634 in 1911 and $619,136 in 1912. The first dividend declared in 1912 amounted to only $72,232. Despite this first dividend payment and the likelihood of more payments once Big Creek was in operation, Kerck-
hoff and Balch tired of waiting for a substantial return on their sizable PL&P investment of approximately $1.3 million. In addition, the bonds were difficult to move at low rates. Kerckhoff and Balch worried about the continuing problem of financing the massive power project. However, Huntington was sanguine about the prospects of Big Creek, the future of electricity, and the considerable return on investment he felt PL&P would eventually generate.

Kerckhoff and Balch’s anxieties ran counter to Huntington’s optimism and led to a deal that separated the partners’ power interests. Because Huntington believed in the future of hydroelectric power and wished to pour all available resources into Big Creek construction, he saw PL&P’s subsidiary, Southern California Gas Company, which was not yet very profitable, as a drain on PL&P funds and thus a liability. Besides earning a return on investment of only 1.8 percent in 1912, SoCal Gas was largely financed by PL&P which held $4 million of its bonds and over thirty thousand shares of its stock. To free Huntington of the costly natural gas holdings and his nervous partners, his staff worked out an agreement, which divided up the holdings of the three and broke up the power triumvirate established in 1902.

On 14 August 1913, the settlement was concluded. Huntington purchased the 33,000 shares of common and 1,250 of preferred SoCal Gas stock owned by PL&P. He then exchanged this stock, as well as his holdings of Midway Gas stocks and bonds, for Kerckhoff and Balch’s interest in the PL&P. This interest consisted of 985 shares of first preferred, 12,601 shares of second preferred, and 43,995 shares of common stock, as well as the SJ&E Railroad. The deal left Kerckhoff and Balch in control of SoCal Gas and the subsidiary Midway Gas, and Huntington gained sole control of PL&P.

Following this stock exchange, Huntington left his southern California business interests under the watchful eyes of his lieutenants—Dunn, Graham, and Ward—and headed for Europe to enjoy a few months of vacation. While in France, the sixty-three-year-old Huntington once again followed in his Uncle Collis’s footsteps. But this was not the usual type of business venture. Rather, on 16 July 1913, Huntington married his deceased uncle’s widow, sixty-one-year-old Arabella Huntington, at the American Church in Paris.

Like the other transitions Huntington went through during this period, his marriage did not signal a retirement from business.
While he remained active in the financial end of his various enterprises in southern California, he increasingly relied on his managers to run his many concerns.

His marriage and the opening of the Big Creek hydroelectric development did, however, mark the close of another period in Huntington’s business career. The years 1908–13 were ones of retooling and reorientation in southern California. Because the Southern Pacific, Huntington’s equal partner in the Pacific Electric, wanted to use the interurban for its own advantage by integrating the trolley lines into its regional transit network, Huntington was no longer able to use the PE as a vehicle for his new subdivisions. Deciding that the trolleys had already largely served their purpose in providing transportation lines to many of his developments, Huntington exchanged his interest in the PE for the SP’s share of the LARY.

Free of the PE, Huntington concentrated on expanding his profitable Los Angeles Railway amidst the first attempts of government regulation of the streetcar industry. Aware of the continued population expansion of the Los Angeles basin, he entered the area’s natural gas business and embarked on the enormous Big Creek hydroelectric power project designed to provide cheap electricity to meet increasing demand.

Thus, unable to carry out his original trolley scheme, the ever-versatile and optimistic metropolitan entrepreneur altered his business strategies in southern California. Yet he remained the guiding force behind his various enterprises and a key developer of the Los Angeles basin’s economy.
Young Henry Huntington, c. 1870s. Courtesy of the Huntington Library

Henry Huntington, c. 1880s. Courtesy of the Huntington Library

Arabella Huntington, c. 1890. Courtesy of the Huntington Library
Collis Huntington, left, with Henry Huntington and newsboy in New York City, 1895. Courtesy of the Huntington Library

Henry Huntington and his first family, Oneonta, New York, 1901. Seated at center are his mother, Harriet, and his first wife, Mary. Standing at left is his son, Howard. Henry is in the middle, surrounded by his three daughters. Courtesy of the Huntington Library
Northbound Los Angeles Railway car no. 275 on Spring Street looking north from Second Street in downtown Los Angeles, c. 1901. Magna Collection, courtesy of Richard J. Fellows

The Pacific Electric Railway Glendale station. Note the various businesses already established along the trolley line. Courtesy of the Huntington Library
The Pacific Electric Railway Building. Note the emerging trolley. Courtesy of the Huntington Library

Pacific Light and Power Company’s Kern River power station, 1909, named the Borel Hydro Plant in honor of Huntington’s associate Antoine Borel. Workers are standing by the original generators. Southern California Edison Company Historical Collection
Pacific Electric Building, 1910. Courtesy of the Huntington Library

Outbound Los Angeles Railway car on Main Street at junction of Main, Spring, and Ninth streets in downtown Los Angeles, c. 1910. Collection of William A. Myers
Los Angeles Railway “Huntington Standard” car, c. 1910. Collection of William A. Myers

The Pacific Electric Sierra Madre junction at San Marino, 1910. Courtesy of the Huntington Library
Center, Henry Huntington and his son, Howard, at an employee baseball game during the annual Los Angeles Railway employees' picnic at Redondo Beach, 1912. Courtesy of the Huntington Library

Pacific Light and Power Corporation's Redondo Beach steam plant operating at full capacity, 1912. Southern California Edison Company Historical Collection
Left to right, George Ward, Henry Huntington, and banker E.H. Rollins inspecting the Big Creek facility, c. 1913. Courtesy of the Huntington Library

The Huntington Hotel. Courtesy of the Huntington Hotel and Cottages
Henry Huntington in his New York library, 1917. Courtesy of the Huntington Library
Pacific Light and Power Corporation's Big Creek powerhouse No. 2, 1917. Southern California Edison Company Historical Collection
*Left and center,* Henry Huntington and art dealer Joseph Duveen, c. 1920. Courtesy of the Huntington Library

[Huntington's San Marino mansion, c. 1920. Courtesy of the Huntington Library]