

BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA.

In the matter of ascertaining )  
the value of the property of ) Case No. 145.  
the PETALUMA AND SANTA ROSA )  
RAILWAY COMPANY. )

E. M. Van Frank for Petaluma and Santa Rosa  
Railway Company.  
Charles N. Black for Ford, Bacon & Davis.

THELIX, Commissioner.

O P I N I O N.

This proceeding was brought on the Railroad Commission's initiative for the purpose of ascertaining various elements entering into the value of the property of the Petaluma & Santa Rosa Railway Company. This property is situated in Sonoma County, California. For the general procedure in these valuation cases and for a general description of the work performed by this Commission's engineering department in these cases, reference is hereby made to the Commission's opinion and findings in Case No. 206, being the matter of ascertaining the value of the property of the Stockton Terminal & Eastern Railroad Company, and Case No. 210, being the matter of ascertaining the value of the property of the Tonopah & Tidewater Railroad Company.

These valuations were begun under Section 20 of the Stetson-Eshleman Act, effective February 10, 1911, and continued under the provisions of the Public Utilities Act, effective March 23, 1912. The sections of the Public Utilities Act particularly applicable to this proceeding are Sections 47 and 70. As is usual in these cases, I shall confine myself to making findings of fact on specified elements bearing on the question of the value of this company's property, as shown by the evidence in this case, and shall not make a finding on the question of the ultimate value of the property, irrespective of the purpose for which the value is ascertained.

As is usual in these valuation proceedings, I shall in connection with this inquiry consider the following matters:

1. Organization, construction and operation.
2. Stocks and bonds.
3. Revenues and expenses.
4. Original cost, as defined.
5. Reproduction cost, as defined.
6. Reproduction cost less depreciation, as defined.

I shall first define the three elements of value which I propose to find:

The term "original cost" means the original book cost, and is defined as the actual expenditures chargeable to capital account in accordance with the Interstate Commerce Commission's classification, in cash or its equivalent in terms of cash, by the public utility for its operative property in the State of California, as of the date of the valuation.

The term "reproduction cost" is defined as the estimated cost in cash of acquiring the operative right of way and real estate and of reproducing, in the condition in which it was acquired, the other physical property of the public utility in the State of California, as of the date of the valuation; to which are added overhead expenditures for engineering, law, interest and other similar items.

The term "reproduction cost less depreciation," is defined as the reproduction cost less the diminution of the value of the physical elements of the property, due to use, age, obsolescence, inadequacy, or other causes, this diminution being called depreciation, and plus the increase in the value of the physical elements of the property, due to age or other causes, this increase being called appreciation.

In accordance with this Commission's order dated October 17, 1912, the Petaluma & Santa Rosa Railway Company on May 1, 1913, filed an inventory of its property, together with an estimate of its reproduction cost and reproduction cost less depreciation, as of June 30, 1912. A copy of the company's final summary sheet is attached to this opinion and marked "Exhibit A."

On September 1, 1914, the Commission's engineering department submitted to the Commission its detailed valuation report as of June 30, 1912, a copy of which was furnished to the company. A copy of the final summary sheet of this report is attached hereto as Exhibit "B".

Prior to the hearing upon this proceeding, the company's engineer took up with the engineering department of the Commission certain objections to its valuation report, and in all cases where physical quantities were at issue an agreement was reached. On certain points, however, the engineering department could not agree with the company and these differences were presented at the hearing held January 25, 1915, at which the Railroad Company and the engineering firm in charge of its valuation were represented. Subsequent to the hearing the Commission's engineering department submitted to the Commission a supplemental report embodying the changes agreed upon, and a copy of this supplemental report was also furnished the company. The final summary sheet of the engineering department's supplemental report is attached hereto and marked "Exhibit C". On March 6, 1915, the Commission was advised by letter that the company could not agree with the disposition of certain items in the supplemental report, these items being the same to which objections were made by the company at the hearing on January 25, 1915. These objections will hereinafter be considered in detail. A copy of the revised final summary sheet containing the Commission's finding in this case is attached hereto and marked "Exhibit D".

1. Organization, Construction and Operation.

The Petaluma <sup>and</sup> Santa Rosa Railway Company was incorporated under the laws of California on May 22, 1903. The proposed route of this railway was from Petaluma northerly to Santa Rosa, thence northwesterly to Forestville, and from Santa Rosa in a southwesterly direction to Sebastopol. This route, however, was not followed. The constructed line runs from Petaluma to Sebastopol, thence to Santa Rosa and Forestville. The following table presents the mileage:

Division	From	To	TRACK MILES		
			Main Track	Side Track	Total
1	Petaluma	Sebastopol	16.71	2.95	19.66
2	Sebastopol	Santa Rosa	7.75	1.22	8.97
3	Sebastopol	Forestville	7.13	1.63	8.76
Total.....			31.59	5.80	37.39

In addition to the operation of an electric railway, this company operates steamers between Petaluma and San Francisco, making two round trips each day. Its marine equipment consists of two stern wheel steamers, and also a barge which is used intermittently as business may require. With the exception of approximately two miles of line, this road was placed in operation in November, 1904. The railway traverses an agricultural district in the lower foothills of the Coast range in Sonoma county, and operates in a comparatively level country, with no unusual physical characteristics. Its total length of curved line amounts to 8.96 miles, or approximately 28% of the total mileage, and its maximum grade is 3 per cent. Power is distributed at 600 volts D. C. by overhead trolley, and the construction is simple span suspension. In grading the roadbed no heavy earthwork was necessary. The rail is 70-lb. A.S.C.E. placed on redwood ties; the track is well ballasted with crushed rock, and in general, the road was <sup>well</sup> built and is well maintained.

For passenger service the company usually operates single cars, making twelve trips daily and fifteen on Sunday, between Petaluma and Sebastopol; nineteen trips daily and nineteen on Sunday, between Sebastopol and Santa Rosa; and sixteen trips each day between Sebastopol and Forestville. Freight trains are run as extras, the number depending on the traffic, the average being two or three each way per day. The company purchases all power from the Pacific Gas and Electric Company, and in 1912 entered into a new contract with that company. Through this change the cost of power has been very materially reduced.

## 2. Stocks and Bonds.

The company's articles of incorporation authorize the issue of <sup>10,000 shares of</sup> capital stock of a par value of \$100. each, representing a total par value of \$1,000,000.

These 10,000 shares were issued as follows: 40 shares to the incorporators; 8,960 shares on September 28, 1903, for options on two small horse-car lines in Petaluma and Santa Rosa, franchises in Sonoma county, Petaluma and Sebastopol, rights of way and options for other rights of way, real estate, terminals, etc., and \$168,000 in cash; 900 shares were sold in November, 1904, at \$40.00 per share; and the disposition of the remaining 100 shares is not known.

On November 17, 1903, a first mortgage of \$1,000,000 on the entire property to secure 5% twenty-year first mortgage bonds, of date March 1, 1904, was authorized. In the following December, \$500,000 of these bonds were contracted to be sold at 90% of their face value. On April 18, 1904, the sale of a total of \$900,000 of these bonds was authorized, but not all of them were sold. On April 1, 1905, a second mortgage of \$250,000 was authorized, and 6% ten year second mortgage bonds were issued. Part of these bonds were exchanged at 97½ for 6% certificates of indebtedness of par value of \$100,000, which had been authorized February 2, 1905. Toward the end of 1905, small lots of the first mortgage bonds were sold at 95% of their face value and second mortgage bonds were sold at face value and accrued interest.

The San Francisco disaster of 1906 and the sale of the California Northwestern Railroad to the Southern Pacific and Santa Fe, together with the financial stringency of 1907, put this company in financial difficulties, and in December, 1907, the 10,000 shares of capital stock were assessed \$10 per share. The full \$100,000 was paid in on this assessment. There is no record of any dividends having been paid on the common stock.

The following table shows the status of the company's securities from June 30, 1908 to June 30, 1912, the data being obtained from the company's annual reports to this Commission:

Item No.	I t e m	Year ending June 30th			
		1909	1910	1911	1912
1	Funded Debt, First Mortgage Bonds (Outstanding).	\$ 698000.00	\$ 697000.00	\$ 697000.00	\$ 694000.00
2	Funded Debt, Second Mortgage Bonds (Outstanding).	250000.00	250000.00	250000.00	250000.00
3	Floating Debt, Notes Outstand'g	38000.00	38000.00	38000.00	28000.00
4	Total Debt Outstanding.	\$ 986000.00	\$ 985000.00	\$ 985000.00	\$ 972000.00
5	" " " per mile.	26757.12	26729.96	26636.01	26038.03
6	Interest Paid	52211.65	52161.69	52161.69	51787.63
7	Cap. Stock Outstanding	1000000.00	1000000.00	1000000.00	1000000.00
8	Total Securities Outstanding	1986000.00	1985000.00	1985000.00	1972000.00
9	" " " per mile	53894.16	53867.02	53677.65	52826.13
10	Additions and Improvements and Deductions - Railway.	5869.39	5882.82	(a) 13363.82	27442.79
11	" " " Marine.	667.07	2727.52	8648.83	8276.33

(a) \$10,000 was charged to depreciation as a blanket charge, covering both railway and marine departments.

### 3. Revenue and Expenses.

About 57% of the company's total revenue is derived from the railway traffic and 43% from marine traffic. 66% of the railway revenue results from freight traffic. The larger part of the total freight revenue is derived from the water traffic, and a large part of all freights is transportation of eggs and sundry poultry supplies.

The passenger rates appear low, averaging about 2 cents per mile, the maximum one-way fare being 50 cents.

For the five years ending June 30, 1913, the gross income less operating expenses shows a consistent increase from \$34,927.60 for 1909 to \$111,712.59 for 1913. Deducting the item of \$17,450 received by the company as a bonus on the newly constructed branch line to Two Rock, the corresponding figure for 1914 amounts to \$96,559.75, or a decrease of \$15,152.84 over the preceding year.

The surplus, it will be noted, on June 30, 1914, was

\$94,298.97, which is an increase of \$153,452.23 over a deficit for the year 1909 of \$59,153.26.

The following table presents various revenue, expense and traffic statistics for the years ending June 30, 1912 and 1914:

Item No.	I T E M	Year Ending	
		June 30 1912	June 30 1914
1	Mileage - Main Tracks	31.59	37.02
<u>OPERATING REVENUE</u>			
2	Railway - Passenger Train Service	98,924.05	95,736.09
3	" - Freight " "	71,782.95	77,034.40
4	" - Total " "	170,707.00	172,770.49
5	Steamer - Passenger	33,544.45	3,613.48
6	" - Freight	123,510.13	119,268.03
7	" - Total	127,054.58	122,881.51
8	Other revenue and deductions	5,161.78	13,525.82
9	Total operating revenue	302,923.36	301,663.43
<u>OPERATING EXPENSE</u>			
10	Maintenance of way and structures	13,070.59	16,954.49
11	" " equipment - Railway	11,868.62	10,514.52
12	" " " - Marine	4,359.23	2,681.38
13	Traffic	6,380.43	6,908.99
14	Transportation - Railway	77,288.39	65,199.95
15	" - Marine	70,240.50	89,165.35
16	General	19,506.48	18,809.00
17	Total Operating Expense	202,714.24	210,233.68
18	Per cent Operating Expenses to Operating Expenses	66.9%	69.69%
19	NET OPERATING REVENUE	100,209.12	91,429.75
20	Miscellaneous Income	1,980.00	22,580.00
21	Gross Income less Operating Expenses	102,189.12	114,009.75
22	Taxes	6,860.43	8,842.46
23	Interest	51,787.63	55,482.12
24	Total deductions from Gross income	58,648.06	64,324.58
25	Net Income	43,541.06	49,685.17
26	Profit and Loss adjustments	----	16,355.95
27	SURPLUS OR DEFICIT AT END OF YEAR	6,151.13	94,298.97
28	Operating revenue per car mile-Railway only	.29	.2712
29	Operating expenses per car mile " "	.209	.16037
30	Freight Railway earnings Ton mile " "	.069	----
31	Freight Railway expenses Ton mile " "	.041	----
32	Fare Passengers carried (Railway) " "	754,994.00	752,512.00
33	Average Fare - Revenue Passengers) only " "	.13	.12643
34	Tons of freight moved Railway only	61,812.00	----
35	Tons of freight moved 1 mile " "	1,116,055.00	----
36	Average loading per car-tons " "	7.26	----
37	" haul of freight " "	18.055	----
38	" cars per freight train " "	8.071	----

The above statistics are taken from the annual reports of this company to the Commission.

4. Original Cost.

The records of the company having been destroyed in the San Francisco Fire of April, 1906, the original cost was not to be ascertained. There was, however, a trial balance as of February 28, 1905, about three months after operation commenced, which was not too charred to be legible. This balance shows a total of \$1,662,254.74 charged to road and equipment, including "franchises" amounting to \$902,310.02. As no analysis could be made or verified, these figures cannot be considered of any more importance than as representing a maximum book cost to that date and which might include amounts not properly chargeable to original cost, as indicated by the amount charged to "franchises."

The original cost of certain items was, however, found and has been utilized by the engineering department. These data are mentioned in the department's report.

5. Reproduction Cost.

Under this heading the company prior to, and at the hearing in this proceeding, made objections to certain parts of the report as submitted by the engineering department. As hereinbefore mentioned, a number of items to which objections were made prior to the hearing have been fully covered by the supplemental report, and I shall now consider the other objections in<sup>the</sup> order mentioned by the company in its letter of March 6, 1915.

(a) Engineering.

For this item the engineering department allowed 5% of the total of classes 3 to 39, inclusive, which, as shown by the supplemental report, amounts to \$40,653.89. In addition to this amount, engineering in connection with purchase of land is covered in the allowance for the cost of acquisition of lands. The company claimed that this amount is inadequate and that an allowance should



be made of 10% on classes 3 to 39, inclusive, and 7½% on classes 43 to 48, inclusive, except class 44 - Freight Train Cars - on which 2½% is asked. With these claims, however, the engineering department could not agree.

For the allowance on the total of classes 3 to 39, inclusive, the position of the engineering department is based upon the actual costs as found for a considerable number of railroads both within and outside of this state. Among these there are carriers fairly comparable with the road here under consideration. At the hearing the representative of the engineering firm which made the valuation report for the company claimed that it is practically impossible to secure the services of an engineering firm which would undertake the construction of such a road for less than 5% and expenses, and such an allowance would be equal to a total of 10%. It is well known to this Commission that such charges for engineering services in a number of construction undertakings have been paid by public utilities. But it is also known that one reason why the large engineering firms can obtain such allowances is that they are frequently intimately connected with or branches of large financial institutions; and that the financial agent in some cases simply stipulates with the public utility that a certain engineering firm must be employed on terms fixed, in effect, by the financial agent. In this particular case, however, the road was not constructed in that manner, and it is a fact that the total engineering expenditures actually incurred during the construction of this property were very much less than the total sum allowed by the Commission's engineering department in its reproduction estimate. No testimony was introduced by the company which would lead me to believe that the allowance made by the department for engineering would not be amply sufficient to reconstruct this line within the assumed construction period of one year, and this construction period was admitted by the company to be fair. For the equipment, classes 43 to 48, in-

clusive, the engineering department made no flat percentage allowance for engineering, as such services are properly included in the reproduction cost estimate of the individual items of equipment.

I am satisfied that the amount allowed for engineering by the Commission's engineering department in its revised estimate is fair and reasonable, and I shall accordingly allow no increase in this item.

(b) Right of Way.

In this account the company attacked the multiple used by the engineering department for right of way within corporate limits of various cities. For such right of way the company claims a multiple of 1.50 should be allowed. The engineering department in its report allowed 1.25 plus 10% for expenses, which is equivalent to 1.37½. If the lands owned by the company were merely strips of <sup>right of</sup> way in the outskirts of the towns, the multiple might have been as high as the company claimed, but the engineering department includes large areas of terminal lands in this classification, for which the company was not called upon to pay excessive prices. The records of the engineering department contain the analysis of some 1140 miles of recently constructed railroad rights of way in California, the total cost of which is \$8,211,632.65, and the market value of the land for ordinary purposes, at the time of purchase, was \$6,293,862.89, which would show a multiple of 1.30. The incidental expense in connection with the ~~purchase~~ acquisition of 844 miles of this right of way was \$648,329.00, which is 9.14% of the amount paid to the grantors. Practically 88% of the costs of lands was for property located within incorporated city limits and the multiple on this classification was approximately 1.25. Therefore, I am satisfied that for the lands in question the multiple of 1.25 plus 10% expenses is amply sufficient if multiples and costs of acquisition are to be added to the fair average market value as estimated from the fair average market value of lands in the vicinity having a

similar character.

I must draw attention, however, at this point, to the fact that the Supreme Court of the United States has definitely denied the right to use multiples and conjectural costs of acquisition and consequential damages when ascertaining the value of railroad properties for rate fixing purposes. In the famous Minnesota Rate case, 230 U.S. 352, Justice Hughes, at page 455, expresses the unanimous view of the Court as follows:

"Assuming that the company is entitled to a reasonable share in the general prosperity of the communities which it serves, and thus to attribute to its property an increase in value, still the increase so allowed, apart from any improvements it may make, cannot properly extend beyond the fair average of the normal market value in the vicinity having a similar character. Otherwise we enter the realms of mere conjecture. We therefore hold that it was error to base the estimates of value of the right of way, yards and terminals upon the so-called 'railway value' of the property. The company would certainly have no ground of complaint if it were allowed a value for these lands equal to the fair average market value of similar land in the vicinity, without additions by the use of multipliers, or otherwise, to cover hypothetical outlays. The allowances made below for a conjectural cost of acquisition and consequential damages must be disapproved; and, in this view, we also think it was error to add to the amount taken as the present value of the lands the further sums, calculated on that value, which were embraced in the items of 'engineering, superintendence, legal expenses,' 'contingencies' and 'interest during construction.'"

It is, of course, impossible to "reproduce" land in the sense that other physical elements of railroad property can be reproduced and their reproduction cost determined. If it is found that land originally cost more or less than the present market value, those facts will, of course, be shown in connection with the finding as to the original cost of the property.

In another proceeding now pending, I shall consider this question in greater detail. For the present, I shall merely draw attention to the fact that the arbitrary additions to the present market value of this company's lands, by reason of applying multiples, cost of acquisition and interest, amount to \$123,102.71.

If in any future case the question of the value of this property for some particular purpose should become relevant, the Commission may see fit to hold that this sum should be deducted from the grand totals shown in Exhibit "D" under the headings "reproduction cost" and "reproduction cost less depreciation."

(c) Working Capital.

This is an item which was not included in the estimate of the engineering department. The company claims an allowance of \$49,200.00 on the ground that working capital is "essential to have to carry on business." The classifications as prescribed by the Interstate Commerce Commission for expenditures for road and equipment do not provide any account for working capital.

When the allowance for interest during construction is made it is assumed that the total amount of money expended for capital account has been employed one-half the estimated construction period. This, as is maintained by the engineering department, automatically presupposes that any time during construction there must be sufficient capital on hand to meet all charges. Working capital during the construction period is thus provided for. The company's estimate of \$49,200.00 is for working capital for the going concern. This claim will receive attention if this company at any time hereafter appears before the Commission in a proceeding affecting its value as a going concern. In establishing rates, the Commission always gives consideration to the question of working capital. I concur with the engineering department that, bearing in mind clearly the precise nature of the findings which are being made herein, an allowance for the item "working capital" should not be included in the totals making up the values in this case.

(d) Interest.

For the account of Interest the engineering department allowed 3% on the total of classes 3 to 52, inclusive, and 5% on class 2. The company in its valuation estimated the allowance for interest at 3½% of the total of classes 1 to 51, 3½% on class

50, and  $3\frac{1}{2}\%$  on part of class 52. While there is evidently some difference in the method of calculating this allowance, it appears that both the company and the engineering department agreed upon the assumption that it would take one year to reproduce this railway and also that the allowance for the account Interest should be based, at a certain interest rate per annum, upon the theory that the total amount expended on the capital accounts would be tied up during one-half the construction period. The real point of difference, therefore, is not in the theory or in the estimated construction period, but in the interest rate. The company claims a rate of 7% per annum, while the engineering department estimates that money could be secured for this road at 6% per annum. The best evidence on this point, it appears to me, is the fact that there are two mortgages on this property, the first mortgage paying 5% interest and the second paying 6%. The first mortgage bonds sold at from 90 to 95 per cent of their face value and the second mortgage bonds sold at par and accrued interest. It would not be reasonable in these findings to allow the higher rates of interest caused by merely temporary financial stringency. I am satisfied to allow the sum estimated for interest during construction to stand as shown in the engineering department's report.

(e) Preliminary and Organization Expenses.

These items in the report of the engineering department are covered by account 44 - "Miscellaneous," for which the allowance of 2% of classes 3 to 51, inclusive, or a total of \$22,599.23, has been made. Under the Interstate Commerce Commission's classifications this account covers organization expenses, including the payment of all necessary fees, the cost of printing certificates of stocks and bonds, payments to trustees and expenses incurred, and disposal of securities, salaries and expenses of executives and general officers of the road under construction, of clerks in general offices engaged on construction accounts or work, rent and

repair of general offices when rented, and furniture and office expenses; also all items of a special or incidental nature that cannot properly be charged to any other account.

The company adopted a different method from that of the engineering department for estimating the amount properly chargeable to this account, the details of which appear in Exhibit No.2, filed by the company January 25, 1915. This exhibit presents a total for this item made up of various sub-totals, some of which, such as interest and franchises, appear in other accounts in the estimate by the engineering department. It must also be considered that the larger portion of the total for this account as allowed by the company is made up of purely arbitrary estimates, while the percentage allowance made by the engineering department is based upon facts and known percentages on a considerable number of actual construction undertakings of this character. The bases for the department's estimates were fully gone into at the hearing. In my opinion, the percentage allowance, resulting in a total of \$22,599.23 for this account, is ample and no increase should be granted.

(f) Franchise Cost.

In the original valuation the engineering department reported that the company owned eight operative franchises. Six of these were grants acquired through ordinance and the other two were so-called "rights" which were considered as the "rights" acquired by the company with its purchase of the two original horse-car lines formerly operating in Petaluma and Santa Rosa. The acceptance of these rights as items to be included in the valuation was based on the statement made by the company's valuation engineers in their report to this Commission. The wording in this report is as follows:

"Franchises: Purchase of Petaluma horse-car line for its rights, \$2,790; purchase of Santa Rosa horse-car line for its rights, \$14,963, totaling \$17,753."

The engineering department assumed that in the purchase of these two horse-car lines there were certain rights acquired which were of value to the present operating company and, therefore, estimated these rights as having values analogous to franchise values. It/ <sup>now</sup> appears, however, as stated in the company's letter hereinbefore referred to, that,

"this company is not now and never has operated under the two franchises so purchased, but was put to the expense of acquiring two new franchises in Santa Rosa."

The value given these two franchises should therefore be deducted, leaving the values of only the six franchises. The following computation shows that the/ <sup>elimination of the</sup> two "rights" results in a reduction of \$762.76 from the estimated reproduction cost of franchises appearing in the supplemental report of the engineering department:

Advertising application, each .....	\$ 125.00	
Payment to City or County, each.....	100.00	
Advertising granted ordinance, each.....	125.00	\$ 350.00
Contingencies, 5%.....	17.50	
Interest, one year at 5%.....	18.38	35.88
Approximate cost of each franchise.....		\$ 385.88

Six franchises operative at the present time.		
Estimated total cost at \$385.88 each.....		\$2,315.28
Cost of two elections at Petaluma at \$600 each, \$1200.		
Plus contingencies at 5%.....	60.	
Plus interest on above total for 1 yr. at 5%...	63.	<u>1,323.00</u>
Total cost of operative franchises.....		\$3,638.28
Valuation formerly fixed on franchises.....		<u>4,401.04</u>
Reduction in value as per above.....		\$ 762.76

As also stated in the company's letter, the physical property and real estate acquired in the purchase of the two horse-car lines were sold, leaving a net cost of \$13,465.03 to the present company. This sum the company claims should be added to the estimate of franchise costs. Since the property acquired by this company in these purchases has been disposed of, its original value cannot be included in an estimate of reproduction cost as of June 30, 1912, and such property as may still be in existence is allowed in another account.

In accordance with the above revision in franchise values, resulting in a reduction of \$762.76, the new totals to be used for I. C. C. accounts 2 and 3 are as follows:

<u>Operative</u>	<u>Area</u>	<u>Market Value</u>	<u>Reprod. Cost</u>
Acct. 2 - R/W & Sta. Grounds,	198.903	\$ 211,836.00	\$347,589.14
<u>Non-Operative</u>			
Acct. 3 - Real Estate,	50,653	57,741.00	57,741.00
Grand Total.....	249,556	\$ 269,577.00	\$405,330.14

With the exception of the above six points of contention all other objections are covered by the supplemental report of the engineering department.

After a careful consideration of all changes and the evidence in this case bearing on the matter of reproduction cost, I find that the reproduction cost, as that term has hereinbefore been defined, of the operative property of the Petaluma & Santa Rosa Railway Company, as of June 30, 1912, is the sum of \$1,550,170.44. The reproduction cost of the non-operative property amounts to \$50,436.62, resulting in a total for both operative and non-operative property of \$1,610,607.06.



I find also that the reproduction cost of the entire property, both operative and non-operative, if the "market value" of lands is used without the addition of multipliers and other arbitrary percentages, is the sum of \$1,487,504.35.

6. Reproduction Cost less Depreciation.

The company at the hearing stated that its appraisal had been made with the understanding that the values found might be used for the purpose of establishing rates, and under this theory had depreciated only those elements of property which are not taken care of through the normal operating expenses. With this understanding the company made objections to the methods and theories applied by the engineering department in determining the reproduction cost less depreciation. However, these objections were withdrawn when it was understood that the purpose of this proceeding was to find certain elements of value only, as has heretofore been stated in this decision.

- The changes which have been made in the engineering department's estimate of the reproduction cost made it necessary to revise the corresponding figures under this heading. The details of these changes are set forth in the supplemental report made by the engineering department subsequent to the hearing, a copy of which was furnished to the company. The changes as shown in the supplemental report, together with the items above mentioned, have made necessary the revised totals which appear in Exhibit "D" attached to this opinion.

I find, therefore, that the reproduction cost less depreciation, as that term has hereinbefore been defined, of the operative property of the Petaluma <sup>and</sup> Santa Rosa Railway Company as of June 30, 1912, is the sum of \$1,378,716.24, and the reproduction cost less depreciation of the non-operative property amounts to \$59,768.97, resulting in a total for both operative and non-operative property of \$1,438,485.21.

I find also that the reproduction cost less depreciation of the entire property, both operative and non-operative, if the "market value" of lands is used without the addition of multipliers and other arbitrary percentages, is the sum of \$1,315,382.50.

The foregoing opinion and findings are hereby approved and ordered filed as the opinion and findings of the Railroad Commission of the State of California.

Dated at San Francisco, California, this 5<sup>th</sup> day  
of <sup>May</sup>~~April~~, 1915.

Wm. J. Heelan  
H. B. F. Ireland  
W. G. Gordon

Commissioners.

CALIFORNIA RAILROAD COMMISSION

PHYSICAL VALUATION OF ELECTRIC RAILROADS

FINAL SUMMARY SHEET

Valuation as of June 30, 1912

Submitted with Report of \_\_\_\_\_

A. H. Rich

Date compiled April 19, 1913

Main Line 1st Track 31.59 Mi.

Line 2d Track \_\_\_\_\_ Mi.

Yard Tracks, Sidings, etc., 5.74 Mi.

Total 37.33 Mi.

Exhibit A

Class No.	Form No.	I.C.C. Acct. No.	CLASSES	ORIGINAL COST	REPRODUCTION VALUE	Cond. per ct.	PRESENT VALUE
40		1	Engineering		86 079 96		86 079 96
1	1	2	Right of way		398 732 00		398 732 00
2	2	3	Other land used in electric ry. operations		66 421 00		66 421 00
3	3	4	Grading		94 962 82		103 986 34
4	4	5	Ballast		116 252 23		127 864 88
5	5	6	Ties		71 331 30		71 331 30
6	6	7	Rails		168 186 26		156 392 66
7	7	7	Track fastenings and joints		24 235 73		22 141 74
8	8	8	Special work		4 772 40		3 014 52
9	9	8	Frogs and switches		12 266 75		11 195 23
10	10	9	Underground construction				
11	11	10	Paving		27 617 95		27 617 95
12	12	11	Tracklaying and surfacing		70 081 93		63 073 73
13	13	12	Roadway tools		1 118 23		1 118 23
14	14	13	Tunnels				
15		14	Elevated structures and foundations				
16	15	15	Steel bridges and trusses				
17	16	15	Pile and frame trestles		27 070 46		27 070 46
18	17	15	Culverts		5 881 57		5 881 57
19	18	16	Fences and cattle guards		26 032 82		26 032 82
20	19	16	Crossings and signs		8 693 81		9 237 34
21	20	17	Interlocking plants				
22	21	17	Signal apparatus				
23	22	18	Telegraph and telephone lines		2 135 92		2 135 92
24	23	19	Poles and fixtures		52 104 68		52 104 68
25	24	20	Underground conduits				
26	25	21	Transmission system				
27	26	22	Distribution system		85 968 14		85 968 14
28	27	23	Dams, canals and pipe lines				
29	28	24	Power plant buildings				
30	29	25	Sub-station buildings		9 279 00		9 279 00
31	30	26	General office buildings		4 841 55		4 841 55
32	31	27	Shops and car houses				
33	32	28	Stations and waiting rooms		17 414 50		17 414 50
34	33	28	Miscellaneous buildings		14 053 10		14 053 10
35	34	29	Docks and wharves		5 536 60		5 536 60
36	35	30	Power plant equipment				
37	36	31	Sub-station equipment		3 624 00		3 624 00
38	37	32	Shop equipment		7 337 85		7 337 85
39	38	33	Park and resort property				
41		34	Cost of road purchased				
42		42	Injuries and damages		4 304 00		4 304 00
43	39	35	Cars		51 987 00		36 787 00
44	40	35	Freight train cars		63 140 00		50 683 00
46	41	36	<del>Stores and supplies</del> Floating Equipment		95 026 29		50 986 29
46	42	36	Electric locomotives		9 377 50		6 689 50
47	43	37	Electric equipment of cars		43 212 00		28 024 00
48	44	38	Other rail equipment		2 401 00		1 537 00
49	45	39	Miscellaneous equipment		64 416 54		61 801 54
50		40	Law expenses		7 824 00		7 824 00
51	46	43	Taxes		5 528 67		5 528 67
52	46	44	Miscellaneous		136 122 00		136 122 00
53		41	Interest <u>3%</u> classes 1 to 51 inclusive		61 573 73		61 573 73
55	47		Stores and supplies on hand for use in Calif.		12 665 00		12 665 00
			Contingencies <u>7 1/2%</u> Classes 1 to 52 incl.		142 152 86		142 152 86
			Average per mile for main track		2 111 763 15		2 016 165 66
			Working Capital other		66 849 10		63 823 00
			than Stores & Supplies		49 200 00		49 200 00
			going Value and Good Will		110 057 00		110 057 00
			<b>GRAND TOTAL</b>		<b>2 271 020 15</b>		<b>2 175 422 66</b>

Owning Company Petaluma & Santa Rosa Ry. Co. FORM No. 49.

Operating Company do

Operating Division Railway and Marine CALIFORNIA RAILROAD COMMISSION

Valuation Unit Entire System PHYSICAL VALUATION OF ELECTRIC RAILROADS

MARINE to Petaluma **FINAL SUMMARY SHEET**

RAILWAY and Forestville. Valuation as of June 30, 1912.

County San Francisco and Sonoma

"EXHIBIT B"

Submitted with Report of E. C. Weeks

Date compiled May, 1914

Main Line 1st Track 31.59 Mi.

Line 2d Track        Mi.

Yard Tracks, Sidings, etc., 5.80 Mi.  
Total 37.39 Mi.

Class No.	Form No.	I.C.C. Acct. No.	CLASSES	ORIGINAL COST	REPRODUCTION VALUE	Cond. per ct.	PRESENT VALUE
40		1	Engineering <u>5%</u> of Classes 3 to 39		39 602 95	100	39 602 95
1	1	2	Right of way		345 344 81	100	345 344 81
2	2	3	Other land used in electric ry. operations				
3	3	4	Grading		83 639 09	106	88 741 92
4	4	5	Ballast		82 460 15	100	82 460 15
5	5	6	Ties		62 139 39	60	37 283 62
6	6	7	Rails		167 553 29	87	145 815 25
7	7	7	Track fastenings and joints		24 451 43	78	19 102 43
8	8	8	Special work		2 806 37	60	1 695 68
9	9	8	Frogs and switches		8 510 39	90	7 689 02
10	10	9	Underground construction				
11	11	10	Paving		22 043 89	86	18 851 08
12	12	11	Tracklaying and surfacing		61 003 43	85	51 652 92
13	13	12	Roadway tools		1 050 82	80	840 64
14	14	13	Tunnels				
15		14	Elevated structures and foundations				
16	15	15	Steel bridges and trusses				
17	16	15	Pile and frame trestles		28 063 93	56	15 719 25
18	17	15	Culverts		6 133 92	86	5 247 90
19	18	16	Fences and cattle guards		23 601 95	77	18 204 44
20	19	16	Crossings and signs		7 861 77	86	6 766 19
21	20	17	Interlocking plants				
22	21	17	Signal apparatus				
23	22	18	Telegraph and telephone lines		2 324 21	55	1 283 46
24	23	19	Poles and fixtures		56 993 00	52	29 355 92
25	24	20	Underground conduits				
26	25	21	Transmission system				
27	26	22	Distribution system		88 199 28	70	61 449 34
28	27	23	Dams, canals and pipe lines				
29	28	24	Power plant buildings				
30	29	25	Sub-station buildings		6 604 23	74	4 887 13
31	30	26	General office buildings		4 673 97	86	4 035 15
32	31	27	Shops and car houses		10 194 36	92	9 365 69
33	32	28	Stations and waiting rooms		20 544 28	87	17 886 30
34	33	28	Miscellaneous buildings		5 189 12	87	4 523 30
35	34	29	Docks and wharves		4 933 52	90	4 412 66
36	35	30	Power plant equipment				
37	36	31	Sub-station equipment		3 420 58	84	2 873 29
38	37	32	Shop equipment		7 662 72	82	6 244 82
39	38	33	Park and resort property				
41		34	Cost of road purchased				
42		42	Injuries and damages <u>1/2%</u> of Classes 3-49		5 438 61	100	5 438 61
43	39	35	Cars		49 585 00	68	33 718 00
44	40	35	Freight train cars		51 740 00	94	48 523 00
<del>45</del>	<del>41</del>	<del>36</del>	<del>Locomotive Floating Equipment</del>		53 855 27	89	47 920 57
46	42	36	Electric locomotives		7 656 00	68	5 206 00
47	43	37	Electric equipment of cars		34 770 00	60	20 863 00
48	44	38	Other rail equipment		2 040 00	60	1 224 12
49	45	39	Miscellaneous equipment		56 413 45	93	52 699 28
50		40	Law expenses <u>1%</u> of Classes 3 to 39		7 920 59	100	7 920 59
51	46	43	Taxes <u>1/2%</u> of classes 3-49, Ex. #42		5 438 61	100	5 438 61
52	46	44	Miscellaneous <u>2%</u> of classes 3 to 51		22 130 39	100	22 130 39
53		41	Interest <u>3%</u> of classes 3 to 52		33 859 50	100	33 859 50
55	47		Stores and supplies on hand for use in Calif.		15 443 84	100	15 443 84
GRAND TOTAL					1 523 298 11	87	1 331 920 82
Average per mile for main track					48 220 90	87	42 162 47
Total, "Road," I.C.C. Accounts 1-34 (Inc.)					1 177 006 85	87	1 031 535 31
Total, "Equipment," " 35-39 "					256 059 72	81	210 153 97
Total, "General," " 40-44 "					74 787 70	100	74 787 70
Total, Non-Operative Property (not included in above totals)					56 540 74	98	55 617 47
Total Operative and Non-Operative Property					1 579 838 85	88	1 387 538 29

Operating Company do

Operating Division Railway & Marine

Valuation Unit Entire System

MARINE- San Francisco

to Petaluma

Railway Petaluma to

Santa Rosa & Forestville

County San Francisco and Sonoma

CALIFORNIA RAILROAD COMMISSION

PHYSICAL VALUATION OF ELECTRIC RAILROADS.

FINAL SUMMARY SHEET

Valuation as of June 30, 1912

Exhibit C<sup>n</sup>

Date compiled Jan. 25th 1915

Main Line 1st Track 31.59 MI.

Line 2d Track \_\_\_\_\_ MI.

Yard Tracks, Sidings, etc., 5.80 MI.

Total 37.39 MI.

Class No.	Form No.	I.C.C. Acct. No.	CLASSES	ORIGINAL COST	REPRODUCTION VALUE	Cond. per ct.	PRESENT VALUE
40		1	Engineering		40 653 89	100	40 653 89
1	1	2	Right of way		348 351 90	100	348 351 90
2	2	3	Other land used in electric ry. operations				
3	3	4	Grading		89 438 29	106	94 947 69
4	4	5	Ballast		94 333 58	100	94 333 58
5	5	6	Ties		62 139 39	60	37 283 62
6	6	7	Rails		167 777 05	87	146 031 75
7	7	7	Track fastenings and joints		24 496 20	78	19 146 28
8	8	8	Special work		2 806 37	60	1 695 68
9	9	8	Frogs and switches		8 510 39	90	7 689 02
10	10	9	Underground construction				
11	11	10	Paving		22 043 89	86	18 851 08
12	12	11	Tracklaying and surfacing		62 752 31	85	53 339 47
13	13	12	Roadway tools		1 118 16	80	894 51
14	14	13	Tunnels				
15		14	Elevated structures and foundations				
16	16	15	Steel bridges and trusses				
17	16	15	Pile and frame trestles		28 063 93	56	15 719 25
18	17	15	Culverts		6 133 92	86	5 247 90
19	18	16	Fences and cattle guards		23 601 95	77	18 204 44
20	19	16	Crossings and signs		7 861 77	86	6 766 19
21	20	17	Interlocking plants				
22	21	17	Signal apparatus				
23	22	18	Telegraph and telephone lines		2 324 21	68	1 579 14
24	23	19	Poles and fixtures		57 142 10	58	33 104 15
25	24	20	Underground conduits				
26	25	21	Transmission system				
27	26	22	Distribution system		88 880 99	87	77 765 39
28	27	23	Dams, canals and pipe lines				
29	28	24	Power plant buildings				
30	29	25	Sub-station buildings		6 604 23	84	5 547 56
31	30	26	General office buildings		4 673 97	86	4 035 15
32	31	27	Shops and car houses		10 194 36	92	9 365 69
33	32	28	Stations and waiting rooms		20 974 78	87	18 256 84
34	33	28	Miscellaneous buildings		5 189 12	87	4 523 30
35	34	29	Docks and wharves		4 933 52	90	4 412 66
36	35	30	Power plant equipment				
37	36	31	Sub-station equipment		3 420 58	84	2 873 29
38	37	32	Shop equipment		7 662 72	82	6 244 82
39	38	33	Park and resort property				
41		34	Cost of road purchased		5 553 62	100	5 553 62
42		42	Injuries and damages				
43	39	35	Cars		50 076 00	68	34 052 00
44	40	35	Freight train cars		51 740 00	94	48 523 00
45	41	36	<del>XXXXXXXXXX</del> : Floating Equipment		53 855 27	89	47 920 57
46	42	36	Electric locomotives		7 732 00	68	5 257 00
47	43	37	Electric equipment of cars		35 115 00	60	21 069 00
48	44	38	Other rail equipment		2 060 00	60	1 236 00
49	45	39	Miscellaneous equipment		56 413 45	93	52 699 28
50		40	Law expenses		8 130 78	100	8 130 78
51	46	43	Taxes		5 553 62	100	5 553 62
52	46	44	Miscellaneous		22 599 23	100	22 599 23
53		41	Interest		34 576 82	100	34 576 82
55	47		Stores and supplies on hand for use in Calif.		15 443 84	100	15 443 84
GRAND TOTAL					1 550 933 20	89	1 379 479 00
Average per mile for main track					49 095 70		43 668 22
Total, "Road," I.C.C. Accounts 1-34 (Inc.)					1 202 083 57	90	1 076 864 24
Total, "Equipment," " " " 35-39 " "					256 991 72	82	210 756 85
Total, "General," " " " 40-44 " "					76 414 07	100	76 414 07
Total, Non-Operative Property (not included in above totals)					60 436 62	99	59 768 97
Total Non-Operative and Operative Property					1 611 369 82	89	1 439 247 97

Owning Company Petaluma & Santa Rosa Ry. Co.

FORM No. 49.

Submitted with Report of \_\_\_\_\_

H. G. Weeks

Operating Company do

Operating Division Railway and Marine

Valuation Unit Entire System

From Marine- San Francisco to

To Petaluma- Railway-Petaluma to Santa Rosa

County San Francisco and Sonoma.

**CALIFORNIA RAILROAD COMMISSION**

PHYSICAL VALUATION OF ELECTRIC RAILROADS

**FINAL SUMMARY SHEET**

Valuation as of June 30, 1912

Exhibit "D"

Date compiled April 5th, 1915

Main Line 1st Track 31.59 Mi.

Line 2d Track \_\_\_\_\_ Mi.

Yard Tracks, Sidings, etc., 5.80 Mi.

Total 37.39 Mi.

Class No.	Form No.	I.C.C. Acct. No.	CLASSES	ORIGINAL COST	REPRODUCTION VALUE	Cond. Per Ct.	PRESENT VALUE
40		1.	Engineering		40 653 89	100	40 653 89
1	1	2	Right of way		347 589 14	100	347 589 14
2	2	3	Other land used in electric ry. operations				
3	3	4	Grading		89 438 29	106	94 947 69
4	4	5	Ballast		94 333 58	100	94 333 58
5	5	6	Ties		62 139 39	60	37 283 62
6	6	7	Rails		167 777 05	87	146 031 75
7	7	7	Track fastenings and joints		24 496 20	78	19 146 28
8	8	8	Special work		2 806 37	60	1 695 68
9	9	8	Frogs and switches		8 510 39	90	7 689 02
10	10	9	Underground construction				
11	11	10	Paving		22 043 89	86	18 851 08
12	12	11	Tracklaying and surfacing		62 752 31	85	53 339 47
13	13	12	Roadway tools		1 118 16	80	894 51
14	14	13	Tunnels				
15		14	Elevated structures and foundations				
16	16	15	Steel bridges and trusses				
17	16	15	Pile and frame trestles		28 063 93	56	15 719 25
18	17	15	Culverts		6 133 92	86	5 247 90
19	18	16	Fences and cattle guards		23 601 95	77	18 204 44
20	19	16	Crossings and signs		7 861 77	86	6 766 19
21	20	17	Interlocking plants				
22	21	17	Signal apparatus				
23	22	18	Telegraph and telephone lines		2 324 21	68	1 579 14
24	23	19	Poles and fixtures		57 142 10	58	33 104 18
25	24	20	Underground conduits				
26	25	21	Transmission system				
27	26	22	Distribution system		88 880 99	87	77 765 39
28	27	23	Dams, canals and pipe lines				
29	28	24	Power plant buildings				
30	29	25	Sub-station buildings		6 604 23	84	5 547 56
31	30	26	General office buildings		4 673 97	86	4 035 15
32	31	27	Shops and car houses		10 194 36	92	9 365 69
33	32	28	Stations and waiting-rooms		20 974 78	87	18 256 84
34	33	28	Miscellaneous buildings		5 189 12	87	4 523 30
35	34	29	Docks and wharves		4 933 52	90	4 412 66
36	35	30	Power plant equipment				
37	36	31	Sub-station equipment		3 420 58	85	2 873 29
38	37	32	Shop equipment		7 662 72	82	6 244 82
39	38	33	Park and resort property				
41		34	Cost of road purchased		5 553 62	100	5 553 62
42		42	Injuries and damages				
43	39	35	Cars		50 076 00	68	34 052 00
44	40	36	Freight train cars		51 740 00	94	48 523 00
45	41	36	<del>Freight train cars</del> Floating Equipment		53 855 27	89	47 920 57
46	42	36	Electric locomotives		7 732 00	68	5 257 00
47	43	37	Electric equipment of cars		35 115 00	60	21 069 00
48	44	38	Other rail equipment		2 060 00	60	1 236 00
49	45	39	Miscellaneous equipment		56 413 45	93	52 699 28
50		40	Law expenses		8 130 78	100	8 130 78
51	46	43	Taxes		5 553 62	100	5 553 62
52	46	44	Miscellaneous		22 599 23	100	22 599 23
53		41	Interest		34 576 82	100	34 576 82
55	47		Stores and supplies on hand for use in Calif.		15 443 84	100	15 443 84
<b>GRAND TOTAL</b>					<b>1 550 170 44</b>	<b>89</b>	<b>1 378 716 24</b>
Average per mile for main track					<b>49 071 56</b>		<b>43 644 07</b>
Total, "Road," I.C.C. Accounts 1-34 (Inc.)					<b>1 201 320 81</b>	<b>90</b>	<b>1 076 101 48</b>
Total, "Equipment," " " 35-39 "					<b>256 991 72</b>	<b>82</b>	<b>210 756 85</b>
Total, "General," " " 40-44 "					<b>76 414 07</b>	<b>100</b>	<b>76 414 07</b>
Total, Non-Operative Property (not included in above totals)					<b>60 436 62</b>	<b>98</b>	<b>59 768 97</b>
Total, non-operative & operative property					<b>1 610 607 06</b>	<b>89</b>	<b>1 438 485 21</b>
Total non-operative and operative property, based on "market value" of lands					<b>1 487 504 35</b>		<b>1 315 382 50</b>