

BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA.

In the Matter of ascertaining the value of the property of the TONOPAH AND TIDEWATER RAILROAD COMPANY within the State of California.

Case No. 210.

C. M. Rasor and E. Escherich for Tonopah and Tidewater Railroad Company.

REELIN, Commissioner.

OPINION AND FINDINGS.

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 Tonopah and Tidewater Railroad Company. For the general procedure in these so-called 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 this Commission's opinion and findings in Case No. 206, being the matter of ascertaining the value of the property of the Stockton Terminal and Eastern Railroad Company. As in that case, so here also, I shall make findings of fact and shall not make findings on the elusive question of the value of the property, irrespective of the purposes for which the value is ascertained.

At the outset I desire to define certain terms which will be used herein.

The term "original book cost" as used in this opinion, means the actual expenditures, chargeable to capital account in accordance with the classification of expenditures for road and equipment as prescribed by the Interstate Commerce Commission for steam roads, made by the Railroad Company for its operative property in the State of California, as of June 30, 1912.

The term "reproduction value" as used in this opinion, means the estimated cost in cash of acquiring the operative right of way and other real estate and of reproducing it in the condition in

which it was acquired the other physical property of the Railroad Company in the State of California, as of June 30, 1912, to which are added overhead expenditures for engineering, law, interest and commissions, and similar items.

The term "present value" as used in this opinion, means the "reproduction value" less the diminution in value of the physical elements of the property, due to use, age, obsolescence, inadequacy and other causes, plus appreciation wherefound. This might properly be called "depreciated reproduction value" and does not mean the ultimate fact of present value, as that term is ordinarily used.

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In accordance with this Commission's order dated March 11, 1912, the Tonopah and Tidewater Railroad Company, on September 21, 1912, filed an inventory of its property in the State of California, together with a statement of its original book cost, and an estimate of its reproduction value and present value. At the hearing in this proceeding, the Railroad Company requested that certain changes be made in this statement, which changes are included in the Railroad Company's modified final summary sheet, which is attached to this opinion and marked "Exhibit A."

On December 16, 1912, this Commission's engineering department submitted its detailed report in the above proceeding, a copy of the final summary sheet whereof, as presented on said day, is attached hereto and marked "Exhibit B."

Thereafter, on April 20, 1913, the hearing was held in this proceeding. The Railroad Company was represented and made numerous objections to the report of this Commission's engineering department, particularly with reference to the department's estimate as to reproduction value and present value. The objections of the Railroad Company are embodied in a statement which was filed at the hearing, and marked "Exhibit A."

Thereafter, this Commission's engineering department prepared a revised statement increasing the estimated reproduction value of rails and track laying and surfacing, as will hereinafter appear

in greater detail. Thereafter, the engineering department, acting under instructions of this Commission, made a second inspection of the present physical condition of the property, as a result whereof the estimated present value of the property has been materially increased, as will hereinafter appear. The Commission also made further investigation into other items of original book cost and reproduction value. A revised final summary sheet containing the Commission's findings is attached hereto and marked "Exhibit C."

As 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 book cost.
- 5 - Reproduction value.
- 6 - Present value.

1. ORGANIZATION, CONSTRUCTION AND OPERATION.

The Tonopah and Tidewater Railroad Company was incorporated on July 15, 1904, under the laws of the State of New Jersey, primarily to furnish a rail outlet for the borax deposits in Death Valley, Inyo county, California. The Railroad Company has constructed a standard gauge/<sup>main</sup>line railroad from a junction with the line of the Atchison, Topeka and Santa Fe Railway Company at Ludlow, in San Bernardino county, California, to the gold fields in Nye county, Nevada, and a standard gauge branch line railroad from Death Valley Junction to the borax deposits of the Pacific Coast Borax Company at Ryan, California.

Construction of the railroad was actively begun at Ludlow in the fall of 1905. Operation kept pace with construction. The completed line from Ludlow to Gold Center, Nevada, was placed in operation in December 1907.

The mileage of the Railroad Company consists of 175.06 miles of single stem and 9.45 miles of yard tracks and sidings.

making a total of 182.51 miles of all kinds of track. Of the single stem track, 166.08 miles of main line lie between Ludlow, California, and Gold Center, Nevada, and 6.98 miles of branch line lie between Death Valley Junction, California and Ryan, California. Of the 166.08 miles of main line, 137.62 miles are in California and 28.46 are in Nevada. A tabulated statement showing all the owned lines by states and by main, branch and other tracks follows:

TONOPAH AND TIDEWATER RAILROAD COMPANY MILEAGE.

<u>Item</u>	<u>California</u>	<u>Nevada</u>	<u>Total.</u>
Main line	137.62	28.46	166.08
branch line	6.98	-----	6.98
Total M & Br.	144.60	28.46	173.06
Other track	8.496	.954	9.45
Grand total	153.096	29.414	182.51

Throughout a considerable extent in the state of California the railroad traverses barren and unproductive lands. The greater portion of its route in this State lies through what is known as the Mojave Desert. There are but few agricultural possibilities along the line of the railroad. Its traffic depends almost entirely on the borax mines at Ryan and the gold fields in Ely County, Nevada.

2. STOCKS AND BONDS.

The capital stock of the Railroad Company consists of 10,000 shares of common stock of the par value of \$100. each. The entire 10,000 shares were issued to the promoters of the railroad at par and charged originally to "right of way" and since June 30, 1912, to "organization." Practically none of the physical property of the Railroad Company was secured from the issue of this stock. It seems to have been issued mainly for ~~xxxxxxx~~ promoters' services. The Railroad Company has authorized two bond issues. The first issue is dated November 1, 1905, and is for an authorized total of 500,000 pounds sterling (\$2,432,871.61.) These bonds are payable on July 1, 1960. They are guaranteed by the Borax

Consolidated, Limited, of London, which Company was to receive one half of 1% annually in return for the guarantee. The interest originally, including this half of 1%, was 5% per annum. Since on or about January 1, 1912, the 1/2% per annum has been waived, so that the interest rate on the bonds is now 4 1/2%. The bonds are secured by a deed of trust dated November 1, 1905, conveying all the railroad's real and personal property to the Mercantile Trust Company of New Jersey. The entire authorized issue was sold at par, but underwriting expenses to the amount of \$156,836.56 are carried on the Railroad Company's books as having been incurred in connection with the sale. The details of this item are not known to the Railroad Company nor to this Commission, and are to be found only in London. I do not pass on the reasonableness of this charge, but am simply stating such facts as the Commission has been able to ascertain in connection therewith. On September 1, 1907, a second issue of bonds, amounting to 250,000 pounds sterling (\$1,217,722.49) was authorized. These bonds are payable on July 1, 1960 and are also guaranteed by the Borax Consolidated, Limited. The bonds originally drew interest at the rate of 5 1/2% per annum, including 1/2% to be paid to the Borax Consolidated, Limited, in return for its guarantee. The percentage for the guarantee has been waived since on or about June 30, 1910, so that such bonds of this authorization as have been issued are now paying interest at the rate of 5%. Of this authorization, bonds of the face value of 175,000 pounds (\$852,472.49) have been issued. This issue is secured by a second lien on all the real and personal property of the Railroad Company under a deed of trust running to the trustee under the first issue.

The Railroad Company's books show that an underwriting expense of \$47,036.31 was incurred in connection with the sale of the bonds of the second issue, but no details are available. As usual in cases of this kind, I am finding the facts in connection with the sale of stocks and bonds without passing on the weight to which those

facts shall be entitled in any inquiry into rates or other matters.

3. REVENUES AND EXPENSES.

The revenues and expenses of the Railroad Company for the year ending June 30, 1912, appear in the annual report of that Company, on file with this Commission, as follows:

Operating revenues -----	\$291,390.69
Operating expenses -----	197,329.51
Net operating revenue -----	94,061.18
Taxes accrued -----	18,624.58
Operating income -----	75,436.60
Interest on securities, loans and accounts- -----	23,736.67
Gross corporate income -----	\$ 99,173.27

Deductions from gross corporate income.

Hire of equipment -----	\$3695.47
Joint facilities -----	5670.53
Interest accrued on funded debt -----	155810.16
Other interest -----	1805.00
Other deductions -----	1705.28
Total deductions -----	\$ 168,686.44
Net corporate loss -----	\$ 69,513.17

In ascertaining the amount of net corporate loss for the year, being \$69,513.17, no deductions other than \$6,429.73 on equipment appear to have been made for depreciation.

4. ORIGINAL BOOK COST.

The total original book cost, as reported by the Railroad Company, in its modified form, is -----	\$ 3,573,673.67
The revised total original book cost as reported by this Commission's engineering department is -----	\$ 2,772,728.38
Difference -----	\$ 800,945.29

The chief items of difference consist in the following

two items:

	<u>Railroad Co.</u>	<u>Engineering Dept.</u>
I. C. C. 55 - Other expenditures	\$1,030,857.47	\$ 195,557.47
I. C. C. 57 - Stores and supplies. -----		35,728.27

The Railroad Company's total of \$1,030,857.47 for "other expenditures" includes \$835,300.00 of its common capital stock, being the California proportion thereof, <sup>on a mileage basis</sup> and \$170,295.01 of underwriting expenses in connection with the sale of its bonds. Under the definition of "original book cost" herein used, only the latter item is properly chargeable to "original book cost." In finding the fact as to underwriting expenses, I do not desire to be understood as passing on the question whether this item should properly be allowed in a rate fixing inquiry. No sum was originally reported by the Railroad Company for "stores and supplies," but \$35,728.27 has been allowed by the Commission's engineering department for this item.

I desire to draw attention to the fact that the form of the engineering department's <sup>final</sup> summary sheet is misleading with reference to the items of "engineering," "law expenses," "interest and commissions" and "contingencies" in so far as those items refer to original book cost. The department's return on "original book cost" represents accurately the expenditures actually incurred for these items. The percentages are applied only to "reproduction value" and "present value."

I find that the "original book cost", as heretofore defined, of the ~~xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx~~ <sup>xxx</sup> operative property of the Tonopah and Tidewater Railroad Company within the State of California as of June 30, 1912, is the sum of ----- \$ 2,772,728.38.

#### 5. REPRODUCTION VALUE.

The Railroad Company made an extended attack on the engineering department's estimate both as to "reproduction value" and "present value." The Railroad Company's objections are embodied in the statement which was filed at the hearing, and marked "Exhibit A," which statement has hereinbefore been referred to. The repro-

duction value ~~xxxx~~ estimate presented by the Railroad Company is \$2,809,396.02. The reproduction value estimate as originally presented by the Commission's engineering department is \$2,474,235.86, the difference/ <sup>being</sup> ~~\$335,160.16.~~

I shall now comment on those items as to which I consider comment to be necessary under the head of "reproduction value."

(1) Right of way and real estate.

This Commission's engineering department reported a "reproduction value" and also a "present value" of right of way, including all operative real estate, of \$5,682,000. This sum was arrived at in the following manner: The department first ascertained the present market value of the operative real property, based on the fair average value of adjacent land: ~~xxxxxxxxxxxx~~ This value, which is designated by the engineering department as "present market value," was found to be \$5,187,000. The department then applied to such of this land as was represented by purchases made by the Company a multiple of  $1\frac{1}{2}$ , so as to include the added amount of money which the department estimated the Railroad Company would have to pay for the cost of acquisition and consequential damages by severance and otherwise, thus reaching the total of \$5,682,000. It appears that some 135 miles of the Company's right of way in California were acquired from the government by filing the maps necessary in such cases, and that not to exceed 10 miles of right of way were actually purchased.

Subsequent to the filing of the engineering department's report, the Supreme Court of the United States, on June 9th, 1913, rendered its decision in the so-called "Minnesota Rate Cases." It appeared that while these cases were pending in the Federal Courts below, the land commissioner of the railroad companies, after ascertaining the ~~xx~~ railroad value of the Railway Company's land, ~~xxxxxxxxxx~~, applied certain multiples ranging from 1.25 for terminal properties, to 3 for agricultural lands, in order to ascertain the



"reproduction value" of the real estate owned by the railroad companies. The Master in said court allowed 75% of the increase so claimed, on the ground that it was necessary to add items for cost of acquisition, consequential damages and value for railroad use in order to ascertain the actual cost of reproducing the real property. The Federal courts below upheld the addition of percentages to represent these items. Mr. Justice Hughes, in delivering the opinion of the Supreme Court as to what would be a fair basis for fixing rates, refused to apply said multiples, and also to allow so-called "overhead percentages," as will hereinafter appear. Referring to the increase represented ~~represented~~ by said multiples, the Court says:

"The increase sought for 'railway value' in these cases is an increment over all outlays of the carrier and over the values of similar lands in the vicinity. It is an increment which cannot be referred to any known criterion, but must rest on a mere expression of judgment which finds no proper test or standard in the transactions of the business world. It is an increment which in the last analysis must rest on an estimate of the value of the railroad use as compared with other business uses; it involves an appreciation of the returns from rates (when rates themselves are in dispute) and a sweeping generalization embracing substantially all the activities of the community. For an allowance of this character there is no warrant."

Continuing, the Court expresses its conclusion on this branch of the case 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 a normal market value of land in the vicinity having a similar character. Otherwise we enter the realm 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.'"

In applying this decision to proceedings such as the present one, the distinction between ascertaining the cost of reproducing a public utility's property and the proper sum to be used as a basis for fixing rates must be clearly borne in mind.

An estimate of reproducing property is an estimate of a fact. This fact is ascertainable with reasonable accuracy. On the other hand, it by no means follows that if this fact be ascertained the sum so found must be used as the basis for fixing rates. In ascertaining the proper basis on which a public utility is entitled to a return, the rate fixing body must consider all pertinent facts, including original cost, reproduction value, depreciated reproduction value and any other fact which may have bearing on the question of the proper basis of return in each particular case. In the Minnesota Rate Cases the Supreme Court found that it would not be fair to take as the basis for fixing rates the "reproduction value" of the real property as found by the lower courts. Under all the circumstances of the case, the Supreme Court found that the railroad companies would be receiving at least all to which they were entitled if they were given, in the rate fixing inquiry, a value "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." There is much reason in support of this ruling. The unearned increment of land is growing so rapidly that if public utilities in rate fixing inquiries were allowed not merely the fair average market value of similar lands in the vicinity, including the unearned increment, but also multiplies *etc* in addition thereto, rates might soon go so high that it would be impossible for the public to pay them. It may well be that in rate fixing inquiries which may hereafter come before rate fixing bodies, both state and national, justice to the public may demand that the basis of return on real property shall be less even than the "fair average market value of similar land in the vicinity," including the unearned increment. If we bear clearly in mind the distinction between a fact, namely, the cost of reproducing real estate, and the entirely distinct matter of ascertaining the proper basis for fixing rates in any particular case, we shall not be led astray. As I am finding facts in this case and not saying how

they should be applied in a rate fixing inquiry, I find that the operative real property owned by the Railroad Company in this proceeding based on the "fair average market value of similar land in the vicinity. is the sum of \$5,187.00 and that the cost to reproduce said property is the sum of \$5,682.00.

(2) Grading.

The engineering department's estimate of re-	
production of grading is -----	\$ 569,061.24
The Railroad Company's estimate is -----	<u>605,981.91</u>
Difference -----	63,079.33

It thus appears that this Commission's engineering department has estimated a reproduction value for grading of \$63,079.33 in excess of the amount submitted by the Railroad Company as the original book cost. It appears that prior to 1907 and before the I. C. C. Classification went into effect, the Railroad Company charged to an account called "track" all expenses which were later segregated into accounts "grading", "ties," "rails", "fastenings," "ballast" and "track laying and surfacing." When the Railroad Company's appraisal in the present proceeding was made the Company re-distributed the account "track" but included in the account "grading" only such items as were clearly attributable to that account, and included under the other accounts items which might properly be included under the "grading" account. It appears that the total original book cost of grading, ballast and track laying and surfacing is \$871,519.99, and that the reproduction value as estimated by the engineering department, including increase in track laying and surfacing hereinafter referred to, is \$903,848.81, so that considering these three accounts together, the engineering department's estimate of reproduction value ~~is~~ is only some \$32,328.82 in excess of the original book cost although the excess under the item of "grading" amounts to \$63,079.33. It also appears that the Railroad Company's roadway was graded in an economical manner and that the work could not be reproduced today for the money originally spent on

the work by the company. I am satisfied to permit the engineering department's estimate for reproducing the grading to stand at \$669,061.24.

(3) Rails.

The Railroad Company estimated the cost of reproducing its rails at \$490,076.86, being the original book cost thereof. This Commission's engineering department originally estimated the cost of reproducing the rails at \$399,689.07, being an amount of \$90,387.79 less than the Railroad Company's estimate. It seems that a large portion of the Railroad Company's rails are relay rails and that there are at present no such rails to be bought on the market for prices representing the real value thereof. Under these circumstances, an estimate of reproducing the relay rails in the condition in which they were originally acquired would result in an estimate in excess of the real value thereof. Subsequent to the hearing the engineering department prepared a supplemental report on reproduction value and present value of rails and of track laying and surfacing, increasing the estimate for rails by the sum of \$132,349.70. To this increase are added the usual percentages for overhead charges, making a total increase of \$154,392.54. I am satisfied that under the facts of this case the engineering department's estimate as thus increased is fair and reasonable. It should be borne in mind, however, that this amount does not represent the cost of reproducing relay rails, for the simple reason that no relay rails are to be had in the market at a reasonable price. It has been necessary to estimate the cost of reproducing rails on the basis of new rails in a depreciated condition.

(4) Track laying and surfacing.

The Railroad Company estimated the reproduction value of track laying and surfacing as \$223,676.76. This Commission's engineering department, in its original report, gave an estimate of \$180,892.70. It thus appears that the engineering department's estimate was \$42,784.06 lower than that of the Railroad Company.

Subsequent to the hearing, the engineering department prepared a revised estimate of reproduction value of this item, increasing the reproduction value by \$18,443.27, and the present value by \$26,434.96. I am satisfied with these revised figures.

(5) Contingencies.

The engineering department's estimate of 5% for "contingencies" on all items except stores and supplies I consider to be very liberal. The testimony showed that practically all physical items were accounted for by the engineering department except some items under the head/<sup>of</sup>grading, ballast and water stations. The total expenditure not accounted for under the head of water stations was only \$3,455.06. The total added for contingencies amounts to \$118,837.03. In my opinion it would be more accurate to estimate the contingencies on each item instead of allowing a gross sum, if the amount properly chargeable can be worked out by the engineering department. It will be found that on some items no contingencies can reasonably accrue while on others a liberal allowance must be made therefor. I shall allow 5% in this case but feel that in doing so the Commission is more than liberal with the Railroad Company.

After careful consideration of all the evidence in the case bearing on the matter of "reproduction value," including the supplemental investigations which were conducted by the engineering department under this Commission's direction, I find that the "reproduction value" as that term is herein defined, of the operative ~~xxxxxxx~~ property of the Sonopah and Tidewater Railroad Company within the State of California as of June 30, 1912, to be the sum of ----- \$ 2,650,143.35.

6. PRESENT VALUE.

The importance of determining a "present value" as distinguished from the "reproduction value" is emphasized by the opinion of the United States Supreme Court in the Minnesota Rate Cases. In that case it appeared that the Master, in ascertaining

a basis for rate fixing, allowed the cost of reproduction new without any deduction for depreciation. It was not denied that there was depreciation in fact, but the Master found that the depreciation was more than off-set by appreciation in certain items. The Supreme Court refused to approve this disposition of the matter. Mr. Justice Hughes in delivering the opinion of the court, points out that "the depreciation in question is not that which has been overcome by repairs and replacements, but is the actual existing depreciation in the plant as compared with the new one." He continues as follows: "It would seem to be inevitable that in many parts of the plant there should be such depreciation, as for example in old structures and equipment remaining on hand. And when an estimate of value is made on the basis of reproduction new, the extent of existing depreciation should be shown and deducted." He concludes this branch of the subject as follows: "And when particular physical items are estimated as worth so much new, if in fact they be depreciated, this amount should be found and allowed for. If this is not done, the physical valuation is manifestly incomplete. And it must be regarded as incomplete in this case."

At the hearing in this proceeding the Railroad Company complained that the engineering department's estimate of present value was unfair to the company in many respects. The Commission was not satisfied with the evidence presented on this question and accordingly directed its engineering department to make another inspection of the property and to pay particular attention to the present depreciated condition thereof. As a result of this inspection the engineering department has prepared a supplemental report on "present value" in which report it has increased its estimate of present value, in addition to the increases in rail and track laying and surfacing, in the amount of \$124,079.05. I shall now discuss some of these items in further detail.

(1) Grading.

The engineering department originally allowed no ap-

preciation for grading while the Railroad Company claimed 20% appreciation. Whether appreciation should be allowed depended upon questions of fact as to which a dispute existed between the engineer of the Railroad Company and members of the engineering department of the Commission. The engineers for the engineering department contended that portions of the roadway had been blown and washed away while the engineer for the Railroad Company contended that there was actually more material in the roadbed than shown on the original profile. The re-inspection of the roadbed has satisfied me that the roadbed is maintained in first-class condition and that an allowance of 8% should be made for appreciation.

(2) Timber structures and ties.

The engineering department in its original report used its average depreciation figures in estimating the depreciation of timber structures and ties of the Railroad Company. It appears that the department was in error in applying these average percentages to the conditions of the present Railroad for the reason that the life of timber in the locality traversed by this Railroad Company is considerably longer than the average in other localities. A reinspection of the ties, trestle timber and telegraph poles shows that while they are from five to seven years old no evidence of decay appears either above or below the ground. The only exceptions were unpeeled Oregon pine trestle piles, as to which dry rot has begun to set in. The ties are Oregon pine and have suffered almost no depreciation from age. The depreciation from wear is less than on average railroads, for the reason that only two trains daily <sup>run</sup> over the track. In view of these facts and taking into consideration maintenance and renewal, the engineering department has prepared a revised estimate raising the percentage of present condition to condition now as follows:

Trestles and culverts (material and labor) from 60% to 70%

Ties (Material only) " 55% " 65%

Telegraph lines (material and labor) from 70% to 75%

(3) Rails.

The engineering department's estimate of "present value" of rails was raised as the result of the raise in "reproduction value". This raise, combined with a raise in the condition percent from 71% to 79%, has resulted in a total increase of \$134,051.03. In my opinion this revised figure should stand.

(4) Ballast.

The engineering department's original report depreciated this account to 75% of the reproduction value on an assumed 20-year life for ballast. This estimate is erroneous for the reason that it does not take into consideration the fact that additional ballast was placed on this railroad, which brought the condition of the ballast up to its original condition of 100%. The "present value" of ballast should be based on a condition of 100%.

(5) Track laying and surfacing.

I am satisfied with the engineering department's revised report increasing the present value of track laying and surfacing in the sum of \$26,494.96.

The total result of the increases hereinbefore indicated will be to raise the estimated "present value" of the Railroad Company's property in this state, as the term "present value" is herein defined, from the engineering department's original estimate of \$2,008,269.05 to \$2,304,075.03, being an increase of \$295,785.98. Almost half of this difference is accounted for by the fact that the engineering department in making its estimate relied on average percentages of depreciation and applied them to conditions which are not average. It is the Commission's aim in all these cases to make findings which shall be fair and just as applied not to some average railroad, but rather to the particular railroad which is the subject of the Commission's investigations. Average unit prices



and average percentages of depreciation are of very great value as a basis in this work, but they must be modified where the conditions are not average, if this Commission is to be fair to each particular railroad.

I find that the present value, as that term is herein defined, of the operative ~~xxxxxxx~~ property of the Tonopah and Tidewater Railroad Company in the State of California, as of June 30th, 1912, is the sum of----- \$2,304,075.03.

The findings herein made refer to California mileage.

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 29th day of July, 1913.

John W. Stebbins  
Mar. Fisher  
Edwin O. Edgerton  
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Commissioners.

EXHIBIT "A"

Name of Owner Monopah & Midwater R.R.Co.

Valuation as of June 30, 1912.

Operating Co. do do

FORM No. 48.

C. M. Rector Field Inspector

Division California CALIFORNIA RAILROAD COMMISSION

E. Escherich Office Compiler

From Indlow to Nevada State Line PHYSICAL VALUATION OF STEAM RAILROADS

Date Compiled Sept 19 1912

Miles, Main Line Track 144.60

Joint Main Line none Miles

Miles, Second Track none

Joint Second Track none Miles

Miles, Yard Tracks, etc. 8.49

Joint Yard Track, etc. none Miles

Total 153.09

Total none Miles

FINAL SUMMARY SHEET  
Exhibit "A"  
Entire Line in California

Class No.	Form No.	I.C.C. Acct. No.	CLASSES	ORIGINAL COST	Book	REPRODUCTION VALUE	Cond. pr. ct.	PRESENT VALUE
1	1	2	Right of way and station grounds.	728 02		35157 80		35157 80
2	2	3	Real estate.	2087 25		2429 45		2429 45
3	3	4	Grading.	605981 91		605981 91		727178 38
4	4	5	Tunnels.					
5	5	6	Steel bridges and trusses.					
6	6	6	Pile and frame trestles.	104440 70		114538 12		98511 43
7	7	6	Culverts.	19786 22		21666 85		17760 15
8	8	7	Ties.	343515 81		334279 16		237032 18
9	9	8	Rails.	490076 86		490076 86		490076 86
10	10	9	Frogs and switches.	8565 80		8565 80		7709 22
11	11	10	Track fastenings and other material.	94297 16		102484 22		92235 81
12	12	11	Ballast.	42861 32		41861 32		50263 58
13	13	12	Tracklaying and surfacing.	223676 76		223676 76		223676 76
14	14	13	Roadway tools.	4599 92		4399 92		3872 31
15	15	14	Fencing right of way.					
16	16	15	Crossings and signs.	636 00		636 00		561 20
17	17	16	Interlocking plants.	3340 18		3340 18		3006 16
18	18	16	Signal apparatus.	193 20		193 20		193 20
19	19	17	Telegraph and telephone lines.	19930 63		19930 63		18338 43
20	20	18	Station buildings and fixtures.	16583 85		16583 85		15089 18
21	21	18	Platforms, walks, paving and curb.					
22	22	19	General office buildings and fixtures.	844 32		844 32		681 64
23	23	20	Shop buildings and engine houses.	5894 20		5894 20		4801 99
24	24	20	Transfer and turntables, cinder pits, etc.					
25	25	20	Miscellaneous shop buildings and structures.	3181 87		3181 87		2580 13
26	26	21	Shop machinery and tools.	15701 75		15701 75		12085 52
27	27	22	Water stations.	13992 26		13992 26		12375 44
28	28	23	Fuel stations.	1925 50		1925 50		1880 50
29	29	24	Grain elevators.					
30	30	25	Storage warehouses.					
31	31	26	Dock and wharf property.					
32	32	27	Electric light plants.					
33	33	28	Electric power plants.					
34	34	29	Electric power transmission.					
35	35	30	Gas producing plants.					
36	36	31	Miscellaneous structures.	18321 09		18321 09		15549 16
			Total Classes 1 to 36, inclusive.	2039952 58		2085663 02		2073016 48
37	--	1	Engineering <u>7.19</u> per cent, 1 to 36, inclusive.	146829 58		146829 58		146829 58
38	37	32	Transportation of men and material.	1461 70		2603 00		2603 00
39	38	33	Rent of equipment.	7808 58		7808 58		7808 58
40	38	34	Repairs of equipment.	19427 78		19427 78		19427 78
41	--	35	Earning and operating exp. during construction.	2618 84				
42	--	35	Injuries to persons.	275 10				
43	--	36	Cost of road purchased.					
			Total Classes 1 to 43, inclusive.	2213146 48		2262331 96		2249685 42
44	39	37	Steam locomotives.	89224 15		94217 36		58485 00
45	--	38	Electric locomotives.					
46	40	39	Passenger train cars.	37454 55		43180 88		25399 20
47	41	40	Freight train cars.	21340 42		30652 18		14370 60
48	42	41	Work equipment.	3540 18		5096 55		2924 25
49	43	42	Floating equipment.					
			Total Classes 1 to 49, inclusive.	2364705 78		2435478 93		2350864 47
50	--	43	Law expenses <u>0.36</u> per cent, Classes 1 to 36, incl.	8472 34		8472 34		8472 34
51	44	44	Stationery and printing.	630 44		630 44		630 44
52	44	45	Insurance.					
53	45	46	Taxes.	7824 43		7824 43		7824 43
			Total Classes 1 to 53, inclusive.	2381632 99		2452406 14		2367791 58
54	--	47	Int. & Comm. <u>6.77</u> per cent, Classes 1 to 53, incl.	161183 21		161183 21		161183 21
55	45	48	Other expenditures.	1030857 47		195557 47		195557 47
56	--	--	Contingencies <u>per cent</u> , Classes 1 to 53, incl.					
57	46	--	Stores and supplies on hand for use in California.					
			GRAND TOTAL.	3573573 67		2809146 82		2724532 36
			Average per mile for main line track.					166

EXHIBIT "B".

Name of Owner Topopah & Tidewater R.R. Co. FORM No. 44.  
 Operating Co. do do  
 Division Entire line in California CALIFORNIA RAILROAD COMMISSION  
 From Indlow to Nevada Line PHYSICAL VALUATION OF STEAM RAILROADS  
 Miles, Main Line Track 144.6  
 Miles, Second Track 0.8  
 Miles, Yard Tracks, etc. 8.6  
 Total 153.2

Valuation as of June 30, 1912  
 By Cooke Field Inspector  
 Checked by Cooke Office Compiler  
 Date Compiled \_\_\_\_\_ 1912  
 Joint Main Line \_\_\_\_\_ Miles  
 Joint Second Track \_\_\_\_\_ Miles  
 Joint Yard Track, etc. 0.75 Miles  
 Total 0.75 Miles

FINAL SUMMARY SHEET

Exhibit "B"

Class No.	Form No.	I.C.C. Acct. No.	CLASSES	ORIGINAL COST	REPRODUCTION VALUE	Cond. pr. ct.	PRESENT VALUE
1	1	2	Right of way and station grounds.	1275 85	5682 00	100	5682 00
2	2	3	Real estate.				
3	3	4	Grading.	605981 91	669061 24	100	669061 24
4	4	5	Tunnels.				
5	5	6	Steel bridges and trusses.				
6	6	6	Pile and frame trestles.	104440 70	93890 73	60	56334 44
7	7	6	Culverts.	19786 22	16173 05	60	9703 82
8	8	7	Ties.	343515 81	341166 13	55	187641 37
9	9	8	Rails.	490076 86	399689 07	71	284968 60
10	10	9	Frogs and switches.	8565 80	10698 87	88	9414 99
11	11	10	Track fastenings and other material.	94297 16	94543 27	75	71316 26
12	12	11	Dallast.	41861 32	35451 50	75	26588 70
13	13	12	Tracklaying and surfacing.	223676 76	180892 70	68	123007 02
14	14	13	Roadway tools.	4399 92	4399 92	88	3870 07
15	15	14	Fencing right of way.				
16	16	15	Crossings and signs.	636 00	758 66	60	455 40
17	17	16	Interlocking plants.	3340 18	3340 18	76	2538 54
18	18	16	Signal apparatus.	193 20	193 20	100	193 20
19	19	17	Telegraph and telephone lines.	19930 63	15904 87	70	11133 02
20	20	18	Station buildings and fixtures.	12594 66	11527 29	90	10316 09
21	21	18	Platforms, walks, paving and curb.				
22	22	19	General office buildings and fixtures.	1010 18	1010 51	84	848 83
23	23	20	Shop buildings and engine houses.	5894 20	6320 41	81	5148 08
24	24	20	Transfer and turntables, cinder pits, etc.				
25	25	20	Miscellaneous shop buildings and structures.	3181 87	2985 02	77	2300 22
26	26	21	Shop machinery and tools.	15701 75	17035 74	76	12946 31
27	27	22	Water stations.	13992 26	10537 20	75	7889 43
28	28	23	Fuel stations.	1925 50	1692 30	75	1303 60
29	29	24	Grain elevators.				
30	30	25	Storage warehouses.				
31	31	26	Dock and wharf property.				
32	32	27	Electric light plants.				
33	33	28	Electric power plants.				
34	34	29	Electric power transmission.				
35	35	30	Gas producing plants.				
36	36	31	Miscellaneous structures.	22310 28	22481 70	77	17420 14
			Total Classes 1 to 36, inclusive.	2038589 02	1945435 66		1520081 37
37	--	1	Engineering <u>5</u> per cent, 1 to 36, inclusive.	155506 31	97271 79	100	97271 79
38	37	32	Transportation of men and material.	1461 70			
39	34	33	Rent of equipment.	7808 58			
40	33	34	Repairs of equipment.	19427 78			
41	--	35	Earning and operating exp. during construction.	2618 84			
42	--	35 1/2	Injuries to persons.	275 10			
43	--	36	Cost of road purchased.				
			Total Classes 1 to 43, inclusive.	2220449 65	2042707 45		1617353 16
44	39	37	Steam locomotives.	89224 15	89209 53	74	65573 20
45	--	38	Electric locomotives.				
46	40	39	Passenger train cars.	37454 55	37454 55	74	27943 32
47	41	40	Freight train cars.	21340 42	21340 42	68	14511 22
48	42	41	Work equipment.	3540 18	3540 18	82	2924 42
49	43	42	Floating equipment.				
			Total Classes 1 to 49, inclusive.	2372008 95	2194252 13		1728305 32
50	--	43	Law expenses <u>1</u> per cent, Classes 1 to <u>49</u> incl.	8472 34	21942 52	100	21942 52
51	44	44	Stationery and printing.	630 44	630 44	100	630 44
52	44	45	Insurance.				
53	45	46	Taxes.	7824 43			
			Total Classes 1 to 53, inclusive.	2388936 16	2216825 09		1750878 28
54	--	47	Int. & Comm. <u>5</u> per cent, Classes 1 to 53, incl.	139015 74	110841 25	100	110841 25
55	46	48	Other expenditures.	35981 14			
56	--	--	Contingencies <u>5</u> per cent, Classes 1 to 53, incl.		110841 25	100	110841 25
57	46	--	Stores and supplies on hand for use in California.	35728 27	35728 27	100	35728 27
			GRAND TOTAL	2599661 31	2474235 86	81	2008289 05
			Average per mile for main line track.	17978 30	17110 90		13888 50

EXHIBIT "C".

Name of Owner Monarch & Excavator R.R. Co.

FORM No. 411.

Valuation as of June 30, 1912

Operating Co. 20 20

Division San Joaquin Valley

From Indio to Mayada Line

Miles, Main Line Track 144.6

Miles, Second Track 0.0

Miles, Yard Tracks, etc. 8.6

Total 153.2

CALIFORNIA RAILROAD COMMISSION

PHYSICAL VALUATION OF STEAM RAILROADS

FINAL SUMMARY SHEET

Exhibit "C".

Field Inspector

Date Compiled June 16 1912

Joint Main Line 0.0 Miles

Joint Second Track 0.0 Miles

Joint Yard Track, etc. 0.75 Miles

Total 0.75 Miles

Class No.	Form No.	I.C.C. Acct. No.	CLASSES	ORIGINAL COST	REPRODUCTION VALUE	Cond. pr. ct.	PRESENT VALUE
1	1	2	Right of way and station grounds.	1275 85	5682 00	100	5682 00
2	2	3	Real estate.				
3	3	4	Grading.	605981 91	669061 24	108	724405 17
4	4	5	Tunnels.				
5	5	6	Steel bridges and trusses.				
6	6	6	Pile and frame trestles.	104440 70	93890 73	70	65723 51
7	7	6	Culverts.	19786 22	16173 05	70	11521 14
8	8	7	Ties.	343515 81	341166 13	65	221757 99
9	9	8	Rails.	490076 86	532038 77	79	419019 63
10	10	9	Frogs and switches.	6565 80	10598 87	88	9414 99
11	11	10	Track fastenings and other material.	94297 16	94543 27	75	71316 26
12	12	11	Ballast.	41861 32	35451 60	100	35451 60
13	13	12	Tracklaying and surfacing.	223676 76	199335 97	75	149501 93
14	14	13	Roadway tools.	4399 92	4399 92	88c	3870 07
15	15	14	Fencing right of way.				
16	16	15	Crossings and signs.	636 00	753 66	60	455 40
17	17	16	Interlocking plants.	3340 18	3340 18	76	2538 54
18	18	16	Signal apparatus.	193 20	193 20	100	193 20
19	19	17	Telegraph and telephone lines.	19930 63	15904 87	75	11928 65
20	20	18	Station buildings and fixtures.	12594 66	11527 29	90	10316 09
21	21	18	Platforms, walks, paving and curb.				
22	22	19	General office buildings and fixtures.	1010 18	1010 51	84	848 83
23	23	20	Shop buildings and engine houses.	5894 20	6320 41	81	5148 08
24	24	20	Transfer and turntables, dinder pits, etc.				
25	25	20	Miscellaneous shop buildings and structures.	3181 87	2985 02	77	2300 22
26	26	21	Shop machinery and tools.	15701 75	17035 74	76	12946 31
27	27	22	Water stations.	15992 26	10537 20	75	7889 43
28	28	23	Fuel stations.	1925 50	1692 30	75	1303 60
29	29	24	Grain elevators.				
30	30	25	Storage warehouses.				
31	31	26	Dock and wharf property.				
32	32	27	Electric light plants.				
33	33	28	Electric power plants.				
34	34	29	Electric power transmission.				
35	35	30	Gas producing plants.				
36	36	31	Miscellaneous structures.	22310 28	22431 70	77	17420 14
			Total Classes 1 to 36, inclusive.	2038589 02	2096228 63		1790752 83
37		1	Engineering <u>5</u> per cent, 1 to 36, inclusive.	146829 58	104811 43	100	104811 43
38	37	32	Transportation of men and material.	1461 70			
39	38	33	Rent of equipment.	7806 58			
40	38	34	Repairs of equipment.	19427 78			
41		35	Earning and operating exp. during construction.	2618 84	(Credit)		
42		35 1/2	Injuries to persons.	275 10			
43		36	Cost of road purchased.				
			Total Classes 1 to 43, inclusive.	2211772 92	2201040 06		1893564 26
44	39	37	Steam locomotives.	89224 15	89209 53	74	65573 20
45		38	Electric locomotives.				
46	40	39	Passenger train cars.	37454 55	37454 55	74	27943 32
47	41	40	Freight train cars.	21340 42	21340 42	68	14511 22
48	42	41	Work equipment.	3540 18	3540 18	82	2924 42
49	43	42	Floating equipment.				
			Total Classes 1 to 49, inclusive.	2363332 22	2352584 74		2006516 42
50		43	Law expenses <u>1</u> per cent, Classes 1 to <u>49</u> incl.	8472 34	23525 84	100	23525 84
51	44	44	Stationery and printing.	630 44	630 44	100	630 44
52	44	45	Insurance.				
53	45	46	Taxes.	7824 43			
			Total Classes 1 to 53, inclusive.	2380259 43	2376741 02		2030672 70
54		47	Int. & Comm. <u>3</u> per cent, Classes 1 to 53, incl.	161183 21	118837 03	100	118837 03
55	46	48	Other expenditures.	195557 47	195557 47		
56			Contingencies <u>5</u> per cent, Classes 1 to 53, incl.		118837 03	100	118837 03
57	46		Stores and supplies on hand for use in California.	55728 27	35728 27	100	35728 27
			GRAND TOTAL	2772728 38	2650143 35	87	2304075 03
			Average per mile for main line track.	19273 16	18327 41		15937 13

2,772,728.38  
19,173.16  
168