

## HOPE NATURAL GAS COMPANY

Summary of utility plant investment as at Dec. 31, 1940, showing 1940 additions and retirements after examiner's reclassification of account 100-6, by accounts

	Investment per books at Jan. 1, 1940, as reclassified by examiner					1940			Balance per books as at 12/31/40 (as reclassified)
	Account 100-1—Utility plant in service			Acct. 100-6, utility plant in process of reclassification	Total	Additions	Retirements		
	Total	Less reserve acquisition	Balance				100-1	100-6	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
<b>Natural gas production plant:</b>									
330-1 Natural gas producing lands.....				\$23,522.05	\$23,522.05				\$23,522.05
330-2 Natural gas producing leaseholds, operated.....	\$1,640.92	\$1,640.92		1,301,824.55	1,301,824.55	\$482.17		\$23,192.25	1,279,114.47
330-4 Rights-of-way.....	5,208.85	60.47	\$5,148.38	523,349.97	528,498.35	3,810.26		6,089.92	526,218.69
330-5 Other land and land rights.....									
331-1 Gas well structures.....	15.93		15.93		15.93	187.39			203.32
331-2 Field meas. and reg. station structures.....	1,302.38	293.82	1,008.56	29,832.90	30,841.46	4,727.05	\$32.99	1,372.19	34,163.33
331-3 Other production system structures.....	3,308.51		3,308.51	171,877.45	175,186.96	10,997.15	253.67	9,476.92	176,452.52
332-1 Producing gas wells, well construction.....	106,320.45	2,210.79	104,109.66	4,237,022.99	4,341,132.65	253,906.28	9,373.86	131,360.09	4,454,304.98
332-2 Producing gas wells, well equipment.....	84,939.95	6,356.61	78,583.34	7,626,941.82	7,705,525.16	169,570.34	10,075.32	222,278.59	7,642,741.59
333-1 Field lines.....	153,990.07	5,134.05	148,856.02	10,786,383.76	10,935,239.78	239,620.18	3,357.24	176,297.10	10,995,205.62
333-2 Field meas. and reg. station equipment.....	11,234.28	1,811.63	9,422.65	198,127.96	207,550.61	5,658.10	895.38		212,313.33
334 Drilling and cleaning equipment.....	89,353.78	6,129.97	83,223.81	333,652.77	416,876.58	64,522.10	31,803.79	18,661.69	430,933.20
337 Other production equipment.....	2,730.49	600.45	2,130.04	26,962.21	29,092.25	9,126.89			38,219.14
Total natural gas production plant.....	460,045.61	24,238.71	435,806.90	25,259,498.43	25,695,305.33	762,607.91	55,792.25	588,728.75	25,813,392.24

Transmission plant:										
351-12	Land.....	900.00		900.00	152,660.05	153,560.05	3,382.27		901.50	156,040.82
351-23	Rights-of-way.....	783.52	17.39	766.13	551,354.41	552,120.54	1,121.00		1,310.33	551,931.21
352-2	Compressor station structures.....	4,168.25	2,467.38	1,700.87	1,759,311.84	1,761,012.71	65,402.12		20,451.77	1,805,963.06
352-3	Meas. and reg. station structures.....	1,749.09		1,749.09	5,155.15	6,904.24	3,056.02	287.08	7.20	9,665.98
352-4	Other transmission system structures.....	765.74		765.74	6,704.81	7,470.55	954.57			8,425.12
353	Mains.....	114,206.06	6,897.51	107,308.55	14,578,358.33	14,685,666.88	238,746.99	39.58	48,798.86	14,875,575.43
354-2	Compressor station equipment.....	93,385.59	46,475.76	46,909.83	8,042,390.35	8,089,300.18	421,572.88	25.00	122,082.86	8,388,765.20
354-3	Meas. and reg. station equipment.....	9,213.15	7.67	9,205.48	9,219.00	18,424.48	529.85	466.49		18,487.84
354-4	Other transmission system equipment.....	6,609.58	1,122.42	5,487.16		5,487.16	6,900.31	2,291.13		10,096.34
Total transmission plant.....		231,780.98	56,988.13	174,792.85	25,105,153.94	25,279,946.79	741,666.01	3,109.28	193,552.52	25,824,951.00
General plant:										
370	Land and land rights.....				158,769.60	158,769.60	20.69		850.00	157,940.29
371	Structures and improvements.....	4,476.78		4,476.78	250,343.14	255,319.92	261,352.59		11,202.48	505,470.03
372	Office furniture and equipment.....	11,925.95		11,925.95	235,898.32	247,824.27	49,023.07	2,391.82	31,874.59	262,580.93
373	Transportation equipment.....	49,656.18		49,656.18	175,535.67	225,191.85	43,328.47	4,531.14	19,869.58	244,119.60
374	Stores equipment.....	25.83		25.83		25.83				25.83
375	Shop equipment.....	7,633.17		7,633.17		7,633.17	9,472.48	148.89		16,956.76
376	Laboratory equipment.....	160.22		160.22		160.22				160.22
377	Tools and work equipment.....	1,457.37		1,457.37	436,248.34	437,705.71	1,259.14	1,457.37	19,407.65	418,099.83
378	Communication equipment.....	10,248.20	1,375.60	8,872.60	243,687.45	252,560.05	41,752.65	76.84	1,956.55	282,279.31
379	Miscellaneous equipment.....				19,898.38	19,898.38				19,898.38
Total general plant.....		85,583.70	1,375.60	84,208.10	1,520,880.90	1,605,089.00	406,209.09	8,606.06	95,160.85	1,907,531.18
Total gas plant (exclusive of distr. plt.).....		777,410.29	82,602.44	694,807.85	51,885,533.27	52,580,341.12	1,910,483.01	67,507.59	877,442.12	53,545,874.42
25	Distribution plant.....	149,401.69	1,716.25	147,685.44	2,753,575.22	2,901,260.66	243,490.55	4,462.74	50,339.50	3,089,948.97
Total gas plant.....		926,811.98	84,318.69	842,493.29	54,639,108.49	55,481,601.78	2,153,973.56	(4) 71,970.33	927,781.62	56,635,823.39
100-3	Construction work in progress.....	398,286.55	2,012.74	396,273.81		396,273.81	72,952.88			469,226.69

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HOPE NATURAL GAS COMPANY—Continued

Summary of utility plant investment as at Dec. 31, 1940, showing 1940 additions and retirements after examiner's reclassification of account 100-6, by accounts—Continued

	Investment per books at Jan. 1, 1940, as reclassified by examiner				1940			Balance per books as 12/31/40 (as reclassified)	
	Account 100-1—Utility plant in service			Acct. 100-6 utility plant in process of reclassification	Total	Additions	Retirements		
	Total	Less reserve acquisition	Balance				100-1		100-6
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
100-4 Unoperated leaseholds.....	\$21,933.09	\$22.34	\$21,910.75	\$462,526.90	\$484,437.65	\$12,704.68		\$13,751.68	\$483,390.65
	1,347,031.62	86,353.77	1,260,677.85	55,101,635.39	56,362,313.24	2,239,631.12	71,970.33	941,533.30	57,588,440.73
Reserve Gas Co. acquisition:									
100-1 Utility plant in service (classified).....			86,353.77		86,353.77				86,353.77
100-6 Utility plant in process of reclassification.....				7,335,767.68	7,335,767.68			283,309.23	7,052,458.45
Total gas plant.....	1,347,031.62		1,347,031.62	62,437,403.07	63,784,434.69	2,239,631.12	71,970.33	1,224,842.53	64,727,252.95
110 Other physical property—Coal property.....				(1)341,281.68	341,281.68				341,281.68
146 Other deferred debits—Contracts for gas.....				(2) 23,915.61	23,915.61				23,915.61
			1,347,031.62	62,802,600.36	64,149,631.98	2,239,631.12	71,970.33	1,224,842.53	65,092,450.24
271 Earned surplus.....				(3) 6,207.94	6,207.94			186.30	6,021.64
			1,347,031.62	62,808,808.30	64,155,839.92	2,239,631.12	71,970.33	1,225,028.83	65,098,471.88

**Summary:**

Totals—Exclusive of reserve acquisition.....	1,260,677.85	55,473,040.62	56,733,718.47	2,239,631.12	(4) 71,970.33	941,719.60	57,959,659.66
Reserve acquisition.....	86,453.77	7,335,767.68	7,422,121.45	-----	-----	283,309.23	7,138,812.22
Grand totals.....	1,347,031.62	62,808,808.30	64,155,839.92	2,239,631.12	71,970.33	1,225,028.83	65,098,471.88

**Notes:**

- (1) Reclassified, as shown, by examiners b/c. sheet jnl. entry No. 100, at 12/31/38.
- (2) Reclassified, as shown, by examiners b/c. sheet jnl. entry No. 101, at 12/31/38.
- (3) Chgd. to surplus, as shown, by examiners b/c. sheet jnl. entry No. 101, at 12/31/38.
- (4) Although no check has been attempted it seems likely that retirements of classified Reserve Gas Company acquisitions may be included in this amount.

## HOPE NATURAL GAS COMPANY

## Depletion and Depreciation Expense for the Year Ended Dec. 31, 1940

Particulars	Plant balance, Jan. 1, 1940	Depreciation rate	Deple. and deprec. exp., year 1940
(a)	(b)	(c)	(d)
<b>Natural gas production plant:</b>			
R-of-W and field line labor.....	\$4,312,320.58	Deple.....	\$175,004.00
Structures.....	210,393.60	4.17%.....	8,773.41
Fd. line mat'l and stat. equipment.....	7,887,861.72	2.22%.....	175,110.31
Operated acreage.....	1,570,191.83	Deple.....	57,084.00
Gas well equipment.....	7,468,118.73	2.50%.....	186,702.97
Gas well construction.....	4,088,489.32	Deple.....	286,492.00
Cost of abandoning gas wells.....		Deple.....	105,860.00
Drilling and cleaning equipment.....	625,013.96	Clearing acct. <sup>1</sup> .....	
<b>Total, nat. gas prod. plant.....</b>	<b>26,162,379.74</b>		<b>995,026.69</b>
<b>Transmission plant:</b>			
Mains mat'l, labor and equipment.....	14,631,829.54	1.56%.....	228,256.54
Structures.....	1,458,921.09	2.50%.....	36,473.03
Compressor station equipment.....	7,637,298.30	2.56%.....	195,514.84
<b>Total, transmission plant.....</b>	<b>23,728,048.93</b>		<b>460,244.41</b>
<b>General plant:</b>			
Structures and improvements.....	218,602.40	2.17%.....	4,743.67
Office furniture and equipment.....	186,518.29	4.00%.....	7,460.73
Other equipment.....	111,056.48	3.57%.....	3,964.72
Communication equipment.....	246,933.62	3.85%.....	9,506.94
Transportation equipment.....	156,390.93	Clearing acct. <sup>1</sup> .....	
<b>Total, general plant.....</b>	<b>919,501.72</b>		<b>25,676.06</b>
<b>Subtotal.....</b>	<b>50,809,930.39</b>		<b>1,480,947.16</b>
<b>Nondepreciable plant:</b>			
Natural-gas-producing lands.....	3,319.84		
Other land and land rights.....	20,801.29		
Transmission land.....	163,812.21		
General plant land and land rights.....	101,159.99		
<b>Total, nondepreciable plant.....</b>	<b>289,093.33</b>		
<b>Total, gas plant in service (exclusive of distrib. plant).</b>	<b>51,099,023.72</b>		<b>1,480,947.16</b>

<sup>1</sup> Depreciation expense on these accounts is distributed through clearing accounts. It is not considered necessary, or practicable, to revise company's depreciation accounting.

## HOPE CONSTRUCTION AND REFINING COMPANY

West Virginia Gasoline Earnings, per Books and as Adjusted, Year Ended  
Dec. 31, 1940

Particulars	Per books	Examiners adjustments	As adjusted
(a)	(b)	(c)	(d)
<b>Sales:</b>			
Gallons sold.....	18,094,389		18,094,389
Average price per gallon.....	\$0.0288		\$0.0288
<b>Amount.....</b>	<b>521,949.77</b>		<b>521,949.77</b>
<b>Expenses:</b>			
<b>Production expense:</b>			
Contract gas.....	62,435.67	<del>62,435.67</del>	
Less: Vapor fuel earnings.....	<i>119,662.32</i>	119,592.32	
Net cost of gas purchased.....	<i>57,166.65</i>	57,156.65	
Labor.....	52,139.07		52,139.07
Fuel and power.....	125,592.62		125,592.62
Other production expenses.....	93,649.40		93,649.40
<b>Total direct production exp.....</b>	<b>219,224.44</b>	<b>57,156.65</b>	<b>276,381.09</b>
Overhead.....	26,805.27		26,805.27
Taxes.....	6,355.37		6,355.37
Depreciation.....	49,497.68	25,245.42	74,743.10
<b>Total indirect production exp.....</b>	<b>82,658.32</b>	<b>25,245.42</b>	<b>107,903.74</b>
<b>Total production expense.....</b>	<b>301,882.76</b>	<b>82,402.07</b>	<b>384,284.83</b>
Gasoline purchased.....	8,777.52		8,777.52
Inventory fluctuations.....	1,392.42		1,392.42
<b>Total cost of gasoline sold.....</b>	<b>312,052.70</b>	<b>82,402.07</b>	<b>394,454.77</b>
Shipping, handling, and storage exp.....	40,515.78	1,328.72	41,844.50
Administrative and general exp.....	22,521.25		22,521.25
Federal income tax.....	28,000.00		28,000.00
Other miscellaneous charges and ers.....	2,936.16		2,936.16
<b>Total expense.....</b>	<b>406,025.89</b>	<b>83,730.79</b>	<b>489,756.68</b>
<b>Net earnings.....</b>	<b>115,923.88</b>	<b>83,730.79</b>	<b>32,193.09</b>

*Italic figures denote decrease.*

## HOPE CONSTRUCTION AND REFINING COMPANY

*Butane Department Earnings per Books and as Adjusted Year Ended Dec. 31, 1940*

Particulars	Per books	Examiners ad-justments	As adjusted
(a)	(b)	(c)	(d)
<b>Sales:</b>			
Gallons sold.....	5,018,992		5,018,992
Average price per gallon.....	\$0.0619		\$0.0619
<b>Amount.....</b>	<b>310,902.08</b>		<b>310,902.08</b>
<b>Expenses:</b>			
<b>Production expense:</b>			
Contract gas.....	25,957.50	<i>\$25,957.50</i>	
Less: Vapor fuel earnings.....			
Net cost of gas purchased.....	25,957.50	<i>\$5,957.50</i>	
Labor.....	4,173.47		4,173.47
Fuel and power.....			
Other production expenses.....	6,215.01		6,215.01
<b>Total direct production expense.....</b>	<b>36,345.98</b>	<i>\$5,957.50</i>	<b>10,388.48</b>
Overhead.....	3,957.73		3,957.73
Taxes.....	1,960.44		1,960.44
Depreciation.....	12,452.43	<i>506.95</i>	11,945.48
<b>Total indirect production expense.....</b>	<b>18,370.60</b>	<i>506.95</i>	<b>17,863.65</b>
<b>Total production expense.....</b>	<b>54,716.58</b>	<i>\$6,464.45</i>	<b>28,252.13</b>
Butane purchased.....	337.55		337.55
Inventory fluctuations.....	<i>6,124.90</i>		<i>6,124.90</i>
<b>Total cost of butane sold.....</b>	<b>48,929.23</b>	<i>\$6,464.45</i>	<b>22,464.78</b>
Shipping, handling and storage expense...	31,528.51	<i>\$8.89</i>	31,501.82
Marketing expense.....	9,499.96		9,499.96
Administrative and general expense.....	12,130.75		12,130.75
Federal income tax.....	35,000.00		35,000.00
Other miscellaneous charges and credits...	<i>\$58.94</i>	246.15	7.21
<b>Total expense.....</b>	<b>136,849.51</b>	<i>\$6,244.99</i>	<b>110,604.52</b>
<b>Net earnings.....</b>	<b>174,052.57</b>	<b>26,244.99</b>	<b>200,297.56</b>

Italic figures denote decrease.

## HOPE CONSTRUCTION AND REFINING COMPANY

*Earnings Statement—Adjusting Entries Year 1940*

	Dr.	Cr.
1		
Hope Natural Gas Company.....	\$88,393.17	
Operating expenses—Gasoline—W. Va.....		\$62,435.67
Operating expenses—Butane.....		25,957.50
<p>To reverse the royalty paid to the above company on the contractual basis of <math>\frac{1}{6}</math> of the net gasoline sales for the year 1940. This royalty was charged to gasoline and butane expenses under account "Gas Purchased." The purpose of this entry is to present the net revenue of the West Virginia gasoline and butane departments excluding royalties.</p>		
2		
Operating expenses—Gasoline—W. Va.....	119,592.32	
Hope Natural Gas Company.....		119,592.32
<p>To reverse the charges against the above company for vent gases returned to that company. According to the Commission Engineers these vent gases are the property of the Hope Natural Gas Company and no charge should have been made by the Hope Construction and Refining Company for the return of these gases. The revenue derived from this charge was credited to gasoline operating expenses, account "Vapor Fuel Earnings."</p>		
3		
Operating expenses—Gasoline—W. Va.....	78,676.95	
Operating expenses—Butane.....	12,574.19	
Operating expenses—Gasoline—W. Va.....		52,102.81
Operating expenses—Butane.....		12,861.68
Surplus.....		26,286.65
<p>To reverse entries recording annual depreciation, profits, or loss on plant and equipment retired, and profit or loss on sale of capital assets, and to set up depreciation expense on West Virginia gasoline and butane investment based on rates furnished by Commission Engineers, per the following detail:</p>		

	Per books	Per examiners	Adjust ment
(a)	(b)	(c)	(d)
30 Year 1940:			
Operating expenses—gasoline—W. Va.:			
Production expense depreciation.....	\$49,497.68	\$74,743.10	\$25,245.42
Shipping, handling, and storage expense, depreciation.....	2,605.13	3,933.85	1,328.72
Total.....	52,102.81	78,676.95	26,574.14
Operating expenses—butane:			
Production expense depreciation.....	12,452.43	11,945.48	<i>506.95</i>
Shipping, handling, and storage expense depreciation.....	655.40	628.71	<i>26.69</i>
Profit or loss from sale of capital assets.....	<i>246.15</i>		246.15
Total.....	12,861.68	12,574.19	<i>287.49</i>
Total year 1940.....	64,964.49	91,251.14	26,286.65

*Italic figures denote decrease.*



## HOPE CONSTRUCTION AND REFINING COMPANY

## West Virginia Gasoline and Butane Investment and Related Reserve for Depreciation—Year 1940

Investment	Adjusted plant investment				
	Balance Jan. 1	Additions	Retirements	Balance Dec. 31	
(a)	(b)	(c)	(d)	(e)	
Other West Virginia plants.....	\$1,429,952.34	\$20,014.15	\$45,170.90	\$1,404,795.59	
Kennedy plant.....	258,876.66	932.71	188.59	259,620.78	
Butane.....	261,663.62	2,214.84	530.24	263,348.22	
<b>Total.....</b>	<b>1,950,492.62</b>	<b>23,161.70</b>	<b>45,889.73</b>	<b>1,927,764.59</b>	
Computed reserve for depreciation					
	Balance Jan. 1	Provision	Salvage	Retirements	Balance Dec. 31
4.79 Other W. Va. plants.....	\$1,085,281.08	\$67,892.21	\$1,537.14	\$45,170.90	\$1,109,539.53
4.16 Kennedy plant.....	207,322.21	10,784.74	192.62	188.59	218,110.98
4.79 Butane.....	156,651.54	12,574.19	457.22	530.24	169,152.71
	1,449,254.83	91,251.14	2,186.98	45,889.73	1,496,803.22
Average investment					
	Total	West Virginia	Kennedy	Butane	
Average investment.....	\$1,939,128.60	\$1,417,373.96	\$259,248.72	\$262,505.92	
Reserve for depreciation.....	1,473,029.02	1,097,410.30	212,716.59	162,902.13	
Average net investment.....	466,099.58	319,963.66	46,532.13	99,603.79	
Working capital.....	80,000.00				
Cost of sites.....	16,629.53				
<b>Total investment.....</b>	<b>562,729.11</b>				

## HOPE CONSTRUCTION AND REFINING COMPANY

*Kennedy Plant Net Earnings and Investment, Years 1939 and 1940*

Particulars	Year	
	1939	1940
<b>Sales:</b>		
Gallons sold.....	3, 173, 397	2, 761, 780
Average price per gallon.....	\$0. 0319	\$0. 0227
Amount.....	101, 256. 05	62, 824. 86
<b>Expenses:</b>		
Direct production expense (1).....	16, 568. 22	14, 963. 49
Indirect production expense (2).....	14, 250. 51	14, 750. 91
Other expenses (3).....	19, 310. 50	19, 276. 24
Total expense.....	50, 129. 23	48, 990. 64
Net earnings.....	51, 126. 82	13, 834. 22
6% of net investment.....	3, 349. 23	2, 791. 93
Difference.....	47, 777. 59	11, 042. 29
Average investment.....	257, 799. 62	259, 248. 72
Average reserve for depreciation.....	201, 979. 08	212, 716. 59
Average net investment.....	55, 820. 54	46, 532. 13
(1) Per books, excluding royalty.....	12, 657. 02	7, 801. 51
(2) Amounts allocated on following bases:		
Overhead—direct labor.....	2, 527. 98	2, 993. 08
Taxes—investment.....	998. 07	973. 08
Depreciation—as calculated.....	10, 724. 46	10, 784. 75
Total.....	14, 250. 51	14, 750. 91
(3) Amounts allocated on following bases:		
Shipping, handling, and storage—gallons produced.....	6, 281. 21	5, 865. 54
Administrative and general—direct charges.....	\$1, 172. 95	\$1, 219. 30
Federal income tax—net earnings before taxes.....	11, 360. 02	12, 032. 44
Other miscellaneous—direct charges.....	496. 32	158. 96
Total.....	19, 310. 50	19, 276. 24

HOPE CONSTRUCTION AND REFINING COMPANY  
Gasoline Sales by Plants, Year Ended Dec. 31, 1940

Plant (a)	Sales to Standard Oil Co. of N. J.			Sales to others			Total sales		
	Gallons (b)	Average price (c)	Amount (d)	Gallons (e)	Average price (f)	Amount (g)	Gallons (h)	Average price (i)	Amount (j)
<b>West Virginia:</b>									
Bristol.....	198,232	\$0.0100	\$1,990.61	798,394	\$0.0322	\$25,670.03	996,626	\$0.0278	\$27,660.64
Cornwell.....				554,875	.0341	18,944.26	554,875	.0341	18,944.26
Field and Drip.....	100,493	.0182	1,837.54	382,505	.0215	8,225.25	482,998	.0208	10,062.79
Goff.....	286,924	.0160	4,585.46	432,604	.0327	14,136.64	719,528	.0260	18,722.10
Hastings.....	2,095,210	.0210	44,019.84	8,633,725	.0322	277,819.62	10,728,935	.0300	321,839.46
Kennedy.....	878,905	.0084	7,401.64	1,882,875	.0295	55,423.22	2,761,780	.0227	62,824.86
Waverly.....	48,024	Adj.	369.10	1,372,733	.0325	44,621.52	1,420,757	.0317	44,990.62
<b>Total.....</b>	<b>3,607,788</b>	<b>.0167</b>	<b>60,204.19</b>	<b>14,057,711</b>	<b>.0316</b>	<b>444,840.54</b>	<b>17,665,499</b>	<b>.0286</b>	<b>505,044.73</b>
<b>Purchased gasoline:</b>									
Sistersville repressuring unit.....	16,181	Adj.	4,726.71	412,709	.0295	12,178.33	428,890	.0394	16,905.04
<b>Total West Virginia.....</b>	<b>3,623,969</b>	<b>.0179</b>	<b>64,930.90</b>	<b>14,470,420</b>	<b>.0316</b>	<b>457,018.87</b>	<b>18,094,389</b>	<b>.0288</b>	<b>521,949.77</b>
<b>Pennsylvania:</b>									
Brave.....	1,522,871	.0113	17,189.88	4,531,663	.0278	126,168.32	6,054,534	.0237	143,358.20
Imperial.....				54,780	.0411	2,250.80	54,780	.0411	2,250.80
Jen-Guffey.....				117,732	.0573	6,750.83	117,732	.0573	6,750.83
<b>Total Pennsylvania.....</b>	<b>1,522,871</b>	<b>.0113</b>	<b>17,189.88</b>	<b>4,704,175</b>	<b>.0287</b>	<b>135,169.95</b>	<b>6,227,046</b>	<b>.0245</b>	<b>152,359.83</b>

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Ohio:									
Ludlow.....				507,870	.0340	17,277.07	507,870	.0340	17,277.07
Total sales.....	5,146,840	.0160	82,120.78	19,682,465	.0310	609,465.89	24,829,305	.0279	691,586.67

Summary of Examiners' Adjusting Entries Showing Accounts Affected for the Year Ended Dec. 31, 1940

Entry No.	Description	Net adjustment	605.1, sales to other gas util. (aff.)	608, other sales						
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
	Accounts 600-608 gas service revenues:									
202	Eliminating compressing refund—Brave station.....	\$292,158.36	\$292,158.36							
203	Eliminating gas delivered to H. C. & R. Co. for oil operations.....	73,644.14		\$73,644.14						
213	Reversing value placed on vent gas to H. C. & R. Co.....	6,000.30		6,000.30						
	Total.....	371,802.80	292,158.36	79,644.44						
			610, rent from gas prop.	617.1 Rev. from process. nat. gas	617.2 Butane gas	619.3, manage- ment fees and exp.	619.6, gas sales cont. adj.			
208	Transfer of W. Va. prod. and sales taxes.....	41,334.28					\$41,334.28			
211	Elimination and concurrent credit to operating expenses and other accounts.....	109,834.45	\$12,440.36			\$122,274.81				
214	Reversing sale of contract and butane gas to H. C. & R. Co.....	80,591.66		54,634.16	\$25,957.50					
	Total.....	231,760.39	12,440.36	54,634.16	25,957.50	122,274.81	41,334.28			

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		733, oper. superv. and engineering	734.2, field line labor	734.3, fd. meas. & reg. stat. labor	734.4, other prod. labor	735.2, field line supp. & exp.	735.3, fd. meas. & reg. stat. supp. & exp.	741, maint. of pro. gas well equip.	747.1, residuals produced, cr.	747.2, residuals operating exp.
Accounts 733-749, natural gas production:										
211	Management fees and expenses transferred.....	12,579.69	\$8,815.71		\$564.83	\$3,010.11		\$189.04		
215	Gasoline and butane sales made by H. C. & R. Co.....	832,861.05							832,861.05	
216	Expenses incurred by H. C. & R. Co., incident to extraction operations.....	600,361.20								\$600,361.20
217	Return on investment to H. C. & R. Co., incident to extraction operations.....	33,763.75								\$3,763.75
223	To eliminate alloc. costs arising from trans. of coke oven gas to Hastings Station.....	1,981.60		\$525.54	1,204.62	\$56.90	\$194.54			
	<b>Total</b> .....	<b>215,227.39</b>	<b>8,815.71</b>	<b>525.54</b>	<b>1,769.45</b>	<b>56.90</b>	<b>194.54</b>	<b>189.04</b>	<b>832,861.05</b>	<b>634,124.95</b>
Accounts 754-757, other production expenses:										
203	Eliminating gas returned from H. C. & R. Co. used for oil operations.....	67,008.05	\$67,008.05							
211	Management fees and expenses transferred.....	5,194.30			\$5,194.30					
218	Eliminate book cost of natural gas purchased from H. C. & R. Co.....	135,167.98	135,167.98							
219	Reinstate adjusted cost of natural gas purchased from H. C. & R. Co.....	95,143.08	95,143.08							
	<b>Total</b> .....	<b>112,227.25</b>	<b>107,032.95</b>	<b>5,194.30</b>						

Italic figures denote decrease.

## Summary of Examiners' Adjusting Entries Showing Accounts Affected for the Year Ended Dec. 31, 1940—Continued

Entry No.	Description	Net adjustment	759.111, Pumping station labor	759.1211, Pump. station supp. & exp.	759.1212, Pump. station fuel	759.21, Oper. of trans., mains—labor	759.22, Oper. of trans., mains—supp. & exp.	759.24, Other trans. system exp.	761.1, Maint. of pump. stat. struct.	762.1, Maint. of mains	762.21, Maint. of pump. stat. equipt.	764.2, Joint exp. cr.		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)
	Accounts 758-764 transmission expenses:													
202	Eliminating compressing refund—Brave station.....	\$292,153.36		\$292,153.36										
203	Differential of gas supplied to and returned by H. C. & R. Co.....	6,636.09										\$6,636.09		
211	Management fees and expenses transferred.....	1,367.97						\$1,361.30			\$16.67			
213	Adj.-H. C. & R. Co. for gas & steam furnished.....	125,592.62			\$125,592.62									
220	Eliminate book cost of coke oven gas furnished by Domestic Coke Corp.....	285,310.44			285,310.44									
222	To eliminate direct costs arising from trans. of coke oven gas to Hastings station.....	30,842.68	19,142.21	3,605.78					\$4,767.24		3,327.45			
223	To eliminate alloc. costs arising from trans. of coke oven gas to Hastings station.....	3,158.11				\$1,944.63	\$89.08			\$1,104.40				
224	To reinstate in oper. exp. value of coke oven gas used at Hastings station for boiler fuel.....	68,683.83			68,683.83									
	Total.....	676,362.44	19,142.21	295,764.14	342,219.23	1,944.63	89.08	1,361.30	4,767.24	1,104.40	3,344.12	6,636.09		

		Direct distr. exp. transf'd												
	Accounts 765-777 distribution ex- penses:													
240	Admin. and general expenses adjusted.....	13,230.55	13,230.55											
241	Taxes expense adjusted.....	148,929.55	148,929.55											
243	Depreciation adjusted.....	89,345.10	89,345.10											
	Total.....	251,505.20	251,505.20											
	Accounts 779-784 customers' ac- counting & collecting. exp.:		781, Cust. billing and acct'g	782, Mis- cellaneous expenses										
211	Management fees and exp. transferred.....	1,009.01	588.69	420.32										
	Total.....	1,009.01	588.69	420.32										
	Accounts 790-809 administrative and general expenses:		790, Sal. of gen'l off. and exec.	791, Other gen'l office sal.	792.1, Ex- penses of gen'l officers	792.2, Exp. of gen'l off. empl.	793, Gen'l office supp. & exp.	795, Special services	797, Reg- latory comm. exp.	800.1, Em- ployees welfare exp.	801, Misc'l. gen'l expenses	802.3, Maint. of comm. equipt.	803, Rents	805, Fran- chise require- ments
211	Management fees and ex- penses transferred.....	89,043.06	15,534.74	62,948.11			31,896.41	346.20		4,081.83	4,535.76			
212	Reclassification, original cost and river rate expenditures suspended.....	624,041.30							341,978.25		282,063.06			
223	To eliminate alloc. costs arising from trans. of coke oven gas to Hastings station.....	598.29										598.29		
237	To eliminate certain donations from operating expenses.....	2,145.76									2,145.76			
238	To segregate certain expenses considered nonrecurring.....	85,068.27			1,979.60	23,531.54	16,238.48				33,738.41		9,570.24	
240	To transfer direct distribu- tion expenses.....	13,230.55												13,230.55
	Total.....	814,117.21	15,534.74	62,948.11	1,979.60	23,531.54	18,134.89	46.20	341,978.25	4,081.83	388,488.97	598.29	9,570.24	13,230.55

Italic figures denote decrease.



## Summary of Examiners' Adjusting Entries Showing Accounts Affected for the Year Ended Dec. 31, 1940—Continued

Entry No.	Description	Net adjustment	503.1, Depreciation	503.2, Amort. and depl. prod. N. G. L. & L. R.	(f)	(g)	(h)	(i)	(j)	(k)
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
	Accounts 503-506 depreciation and depletion:									
243	To trans. portion applying to distri. sys.....	\$89,345.10	\$89,345.10							
245	To reverse the prov. for deprec. and depl.....	1,238,457.19	1,220,073.33	\$18,383.86						
246	To set up deprec. and depl. as per study.....	1,480,947.16	1,423,863.16	57,084.00						
	Total.....	153,144.87	114,444.73	38,700.14						
			Allocated to transport coke oven gas	Fed. income tax adj.	W. Va. gross sales tax adj.	Misc'l. Fed. and State taxes adj.	Taxes transf. to nonoper. rev.	W. Va. sales and purch. taxes	Penna. inc. foreign and corp. tax	Taxes transf. to distr. exp.
	Account 507, taxes:									
208	Transfer of W. Va. taxes billed others.....	41,334.28						\$41,334.28		
223	To eliminate alloc. costs arising from trans. of coke oven gas to Hastings Station.....	11,164.29	\$11,164.29							
226	To adjust for over accrual of Fed. income tax for 1940.....	16,480.00		\$16,480.00						
227	To trans. taxes paid in and charged to 1940 oper. that are applicable to prior years.....	17,098.98				\$17,098.98				
228	To provide for under accrual of W. Va. gross sales tax 1940.....	312.53			\$312.53					
236	To eliminate taxes, not applicable to natural gas operations.....	3,218.10					\$3,218.10			
239	To segregate certain Pa. taxes as nonrec.....	4,601.53							\$4,601.53	
241	To transfer direct distribution taxes.....	148,929.55								\$148,929.55
	Total.....	242,514.00	11,164.29	16,480.00	312.53	17,098.98	3,218.10	41,334.28	4,601.53	148,929.55

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			512, Abandoned leases						
	Accounts 510-513 exploration and development costs:								
248	Recorded losses for abandoned leases .....	12,422.43	12,422.43						
	Total .....	12,422.43	12,422.43						
	Nonrecurring expenses:		792.1, Exp- penses of gen'l. off.	792.2, Exp. of gen'l. office empl.	793, General office sup- plies & exp.	801, Mis- cellaneous gen'l. exp.	803, Rents	507, Taxes	
238	Admin. and gen'l. expenses transferred .....	85,058.27	1,979.60	23,531.54	16,238.48	33,738.41	9,570.24		
239	Taxes expense transferred .....	4,601.33						4,601.33	
	Total .....	89,659.60	1,979.60	23,531.54	16,238.48	33,738.41	9,570.24	4,601.33	
	Accounts 520-527 other income:		527, Non- oper. rev. deduct.						
236	Taxes not applicable to nat. gas oper. ....	3,218.10	3,218.10						
	Total .....	3,218.10	3,218.10						

Italic figures denote decrease.

Summary of Examiners' Adjusting Entries Showing Accounts Affected for the Year Ended Dec. 31, 1940—Continued

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Entry No.	Description	Net adjustment	538, Misc'l. inc. deductions						
	Accounts 530-538 income deductions:								
218	Reverse book cost of nat. gas purch. from H. C. & R. Co.	\$135,167.98	\$135,167.98						
219	Reinstate corrected cost of nat. gas purchased from H. C. & R. Co.	95,143.08	95,143.08						
220	Reverse book cost of coke oven gas used at Hastings and Gallagher Stations	285,310.44	285,310.44						
222	Elimination of direct costs from oper. exp. attributable to trans. of coke oven gas	30,842.68	30,842.68						
223	Elimination of alloc. costs from oper. exp. attributable to trans. of coke oven gas	16,882.29	16,882.29						
224	Reinstate corrected cost of coke oven gas used as boiler fuel at Hastings Stat.	68,683.83	68,683.83						
237	Elimin. of certain donations from oper. exp.	2,145.75	2,145.75						
	Total	306,522.23	306,522.23						
			126.2, Receiv. from assoc. cos.	145.4, Other work in prog. stores exp.	146, Other deferred debits	228, Taxes accrued	250.1, Res. for dep'r. of gas plant	250.2, Res. for depl. of P. N. G. L. & L. R.	271, Surplus begin. of year
	Balance sheet accounts:								
211	Management fees and expenses transferred	640.43		\$640.43					
212	Suspension of reclassification, original cost and river rate expenditures	624,041.30			\$624,041.30				
213	Reversing value of steam, etc. furnished by H. C. & R. Co. for extraction purposes	119,592.32	\$119,592.32						
214	Reversing charges to H. C. & R. Co. for contract and butane gas	80,591.66	80,591.66						
215	To charge H. C. & R. Co. with sale of gasoline and butane extracted	832,851.05	832,851.05						

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216	To credit H. C. & R. Co. with expenses incurred thru extraction operations.....	<i>600,361.20</i>	<i>600,361.20</i>						
217	To credit H. C. & R. Co. with return on prop. used for extraction purposes.....	<i>33,763.75</i>	<i>33,763.75</i>						
226	Overaccrual of Fed. inc. taxes for year 1940.....	16,480.00				\$16,480.00			
227	Taxes paid in and charged to 1940 operations and applicable to prior years.....	17,098.98							\$17,098.98
228	Underaccrual of taxes at Dec. 31, 1940.....	<i>312.53</i>				<i>312.53</i>			
245	To reverse provisions for deprec. & depl. ....	1,238,457.19				\$1,238,457.19			
246	To set up deprec. & depl. as per study.....	<i>1,480,947.16</i>				<i>1,483,863.16</i>		\$57,084.00	
248	To transfer recorded losses for abandoned leases.....	<i>12,422.43</i>				<i>12,422.34</i>			
	Total.....	639,481.68	237,726.76	<i>640.43</i>	624,041.30	16,167.47	<i>197,823.40</i>	<i>57,084.00</i>	17,098.98

Italic figures denote decrease

JOURNAL ENTRIES

HOPE NATURAL GAS COMPANY  
Examiners' Adjusting Entries

ENTRY NO. 202

			Dr.	Cr.
605.1 Sales to other gas utilities (affiliated) .....			\$292,158.36	
759.1211 Pumping station supplies and expenses .....				\$292,158.36
To reduce revenues and expenses by the amount paid to The Peoples Natural Gas Co. in consideration for compressing gas sold to that company, under the provisions of the sales contract dated May 8, 1937, etc. This entry and entries following are given the same numbers as the comparable entry appearing in F. P. C. Exhibit 67A.				
Year	Sales MCF	Compressed by Peoples MCF		
1940 .....	9,738,612	9,738,612 .03		
		\$292,158.36		

ENTRY NO. 203

608 Other sales .....					\$73,644.14	
754.11 Natural gas purchased from affiliated companies .....						\$67,008.05
764.2 Joint transmission expenses—Cr. ....						6,636.09
To reduce revenues and expenses by the amount of gas exchanged with Hope Construction and Refining Company during the year 1940, and recorded on the books as purchases and sales of gas, etc.						
Year	Total MCF	Total sales, Amount	Repurchase, Amount	Difference		
1940 .....	265,444	\$73,644.14	\$67,008.05	\$6,636.09		
265,444 @ \$.02½ = \$6,636.09						

ENTRY NO. 208

619.6 Miscellaneous gas revenues—Gas sales contract adjustments .....			\$41,334.28	
607 Taxes, 1940 .....				\$41,334.28
West Virginia production and sales taxes billed others as provided in sales contracts, etc.				

## ENTRY NO. 211

	Dr.	Cr.
619.3 Management fees and expenses.....	\$122,274.81	
145.4 Other work in progress—Stores suspense.....		\$640.43
610 Rent from gas property.....		12,440.36
733 Operation supervision and engineering.....		8,815.71
734.3 Field measuring and regulating station labor.....		664.83
734.4 Other production labor.....		3,010.11
741 Maintenance of producing gas well equipment.....		189.04
755.1 Purchased gas operating labor.....		5,194.30
759.24 Other transmission system expense.....		1,351.30
762.21 Maintenance of pumping station equipment.....		16.67
781 Customers' billing and accounting.....		588.69
782 Miscellaneous expenses.....		420.32
790 Salaries of general offices and executives.....		15,534.74
791 Other general office salaries.....		62,948.11
793 General office supplies and expenses.....		1,896.41
795 Special services.....		46.20
800.1 Employees' welfare expenses.....		4,081.83
801 Miscellaneous general expenses.....		4,635.76
To adjust the above balance sheet, operating revenue, and operating expense accounts as at Dec. 31, 1940, in order that the actual net expense be reflected, etc.		

## ENTRY NO. 212

146 Other deferred debits.....	\$624,041.30	
797 Regulatory commission expenses.....		\$341,978.25
801 Miscellaneous general expenses.....		282,063.05
To suspend the expenditures incurred during the year 1940 as shown by memorandum accounts for company's reclassification of property and river rate investigation in the general ledger, etc.		

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## ENTRY NO. 213

126.2 Receivables from associated companies, Hope Construction and Refining Company.....	\$119,592.32	
608 Other sales.....	6,000.30	
759.1212 Pumping station fuel.....		\$125,592.62
To charge Hope Construction and Refining Company with the value placed on steam and gas furnished gasoline plants for extraction purposes, year 1940, etc. See gasoline extraction study for details of entries No. 213 to 217, inclusive, etc.		

## ENTRY NO. 214

617.1 Revenue from processed natural gas—Cont. gas.....	\$54,634.16	
617.2 Revenue from processed natural gas—Butane gas.....	25,967.50	
126.2 Receivables from associated companies, Hope Construction and Refining Company.....		\$80,591.66
To credit Hope Construction and Refining Company with the value per books representing royalties, year 1940, etc.		

## ENTRY NO. 215

	Dr.	Cr.
126.2 Receivables from associate companies.....	\$832,851.05	
747.1 Residuals produced—credit.....		\$832,851.05
To record in residuals produced account the revenue from sales of gasoline and butane that were extracted, etc.		

## 42 ENTRY NO. 216

747.2 Residuals operating expenses.....	\$600,361.20	
126.2 Receivables from associated companies Hope Construction and Refining Company.....		\$600,361.20
To record in residuals produced operation account the expenses incident to production and sale of gasoline and butane, etc.		

## ENTRY NO. 217

747.2 Residuals operating expenses.....	\$33,763.75	
126.2 Receivables from associated companies.....		\$33,763.75
To record in residuals produced operation account the return on investment allowed Hope Construction and Refining Company, etc.		

## 43 ENTRY NO. 218

538 Miscellaneous income deductions.....	\$135,167.98	
754.11 Natural gas purchased from affiliated companies.....		\$135,167.98
To eliminate the balance recorded as cost of natural gas purchased from Hope Construction and Refining Company, this balance being amount remaining in Account 754.11 after giving effect to exchange gas adjustment by Entry No. 203.		
	<i>MCF</i>	
Contract No. 456.....	1,052,630	
Exchange gas adjustment <sup>1</sup> .....	265,444	
	787,186	
Contract No. 456 (net).....	41,968	
Contract Nos. 198, 676, 1027, and 1098.....		
	829,154	
Less stipulation, Contract Nos. 198, 1027, and 1098.....	36,296	
Net MCF subject to adjustment.....	792,859	
	<i>Value</i>	
Purchases.....	\$141,176.42	
Exchange gas.....	67,008.05	
	208,184.47	
Less stipulation, Contract Nos. 198, 1027, and 1098... \$6,008.44		
Exchange gas.....	67,008.05	
	73,016.49	
Value subject to adjustment.....	135,167.98	

<sup>1</sup> See Entry No. 203.

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ENTRY NO. 219

	Dr.	Cr.
754.11 Natural gas purchases from affiliated companies.....	\$95,143.08	
538 Miscellaneous income deductions.....		\$95,143.08
To reinstate the amount computed as cost of natural gas purchased from Hope Construction and Refining Company, based on the unit price that was recommended by the Bureau of Engineering. Details as follows:		
	<i>1940</i>	
Total MCF.....	792,859	
Unit price.....	.12	
Amount.....	\$95,143.08	

ENTRY NO. 220

538 Miscellaneous income deductions.....	\$285,310.44	
759.1212 Pumping station fuel.....		\$285,310.44
To eliminate from the operating expenses of the company charges made by Domestic Coke Corporation for coke oven gas used at Hastings and Gallagher Stations, etc.		
	<i>MCF 1940</i>	
Hastings Station.....	1,259,986	
Gallagher Station.....	325,072	
Total MCF.....	1,585,058	
@ \$0.18.....	\$285,310.44	

ENTRY NO. 222

538 Miscellaneous income deductions.....	\$30,842.68	
759.111 Pumping station labor.....		\$19,142.21
759.1211 Pumping station supplies and expenses.....		3,605.78
761.1 Maintenance of pumping station structures.....		4,767.24
762.21 Maintenance of pumping station equipment.....		3,327.45
To eliminate from operating expenses the direct costs arising from the transportation of coke oven gas to Hastings Station, etc.		

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ENTRY NO. 223

538 Miscellaneous income deductions.....	\$16,882.29	
734.2 Field line labor.....		\$525.54
735.2 Field line supplies and expenses.....		56.90
734.3 Field measuring and regulating station—labor.....		1,204.62
735.3 Field measuring and regulating station—supplies and expenses.....		194.54
759.21 Operation of transmission mains—labor.....		1,044.63
759.22 Operation of transmission mains—supplies and expenses.....		89.08
762.1 Maintenance of mains.....		1,104.40
802.3 Maintenance of communication equipment.....		598.29
507 Taxes—1940.....		11,164.29
To eliminate from operating expenses additional expenses and taxes applicable to the transportation of coke oven gas not considered in company Exhibit No. 37., etc.		



## ENTRY NO. 224

		Dr.	Cr.
759.1212 Pumping station fuel.....		\$68,683.83	
538 Miscellaneous income deductions.....			\$68,683.83
To reinstate in operating expenses of the company, the value of coke oven gas used at Hastings Station for boiler fuel, etc.			
MCF.....	1940	1,259,986	
Unit price.....		.05455	
		\$68,683.83	

46 *Statement of Adjustments to Operating Expenses and Taxes*

Property account No.	Original cost of property			Operating expenses account No.	Year	Total operating expenses (stipulation)	Ratio applied	Amount of adjustment
	Total	Used to transport coke oven gas	Ratio					
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
333.1.....	\$11,296,741.40	\$50,476.43	0.004468	734.2	1940	\$117,622.76	0.004468	\$525.54
333.1.....				735.2	1940	12,734.02	.004468	56.90
333.2.....	184,385.03	10,087.67	.054710	734.3	1940	22,018.32	.054710	1,204.62
333.2.....				735.3	1940	3,555.83	.054710	194.54
333.....	14,132,074.72	292,275.72	.020682	759.21	1940	94,025.39	.020682	1,944.63
353.....				759.22	1940	4,307.10	.020682	89.08
353.....				762.1	1940	53,399.10	.020682	1,104.40
378.....	248,975.74	5,626.43	.022598	802.3	1940	26,475.37	.022598	598.29
100.1.....	51,207,620.64	762,592.06	.014892	507	1940	749,683.82	.014892	11,164.29

<sup>1</sup> See the following table.

Property taxes.....	\$814,546.06
Less:	
Reserve Gas Co.....	\$61,882.06
Nongas operations.....	2,980.18
	64,862.24
Net property taxes.....	749,683.82

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## ENTRY NO. 226

		Dr.	Cr.
228 Taxes accrued, Dec. 31, 1940.....		\$16,480.00	
507 Taxes, 1940.....			\$16,480.00
Overaccrual of Federal income tax for year 1940 based upon tentative 1940 return and payment of \$245,880 as of Mar. 15, 1941. Details as follows:			
Total tax accrued per books.....	\$1,000,000.00		
Tentative income-tax return.....	983,520.00		
Overaccrual.....	16,480.00		

## ENTRY NO. 227

	Dr.	Cr.
271 Earned surplus, Jan. 1, 1940.....	\$17,098.98	
507 Taxes, 1940.....		\$17,098.98
Taxes paid in 1940 and charged to 1940 operations applicable to prior years.		
Kind of tax:	<i>Amount</i>	
Capital-stock tax, 1939.....	\$13,015.00	
Federal old age, 1939.....	800.28	
Federal unemployment, 1937.....	787.97	
Federal unemployment, 1938.....	788.07	
Gross sales, 1939.....	550.86	
Penna. corp. net income, 1935.....	361.54	
Penna. corp. net income, 1939.....	786.52	
Penna. foreign franchise, 1939.....	16.29	
Public Service Comm. fee, 1939.....	55.03	
	17,098.98	

## ENTRY NO. 228

507 Taxes, 1940.....	\$312.53	
228 Taxes accrued, Dec. 31, 1940.....		\$312.53
Underaccrual of 1940 West Virginia gross sales taxes based on 1940 final return. Details as follows:		
Total tax per 1940 final return.....	\$442,312.53	
Taxes accrued per books.....	442,000.00	
Underaccrual.....	312.53	

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## ENTRY NO. 236

527 Nonoperating revenue deductions.....	\$3,218.10	
507 Taxes, 1940.....		\$3,218.10
Taxes not applicable to gas operations for year 1940:		
Total taxes paid and accrued.....	\$814,546.06	
Taxes on gas properties.....	811,565.88	
	1 2,980.18	
Tax on interest revenues.....	237.92	
Taxes not applicable to gas operations.....	3,218.10	

<sup>1</sup> This is computed from tax returns to West Virginia Board of Public Works.

*Italic figures denote decrease.*

## ENTRY NO. 237

	Dr.	Cr.	
538 Miscellaneous income deductions.....	\$2,145.75		
801 Miscellaneous general expenses.....		\$2,145.75	
To transfer from the above administrative and general expense account, certain donations made by the company during the year 1940, etc.			
Details as follows:			
Vo. No.:	Amt.	Vo. No.: Amt.	
B-85.....	\$50.00	F-103.....	\$15.00
B-103.....	100.00	G-101.....	385.00
C-104.....	100.00	H-85.....	5.00
C-243.....	5.00	L-101.....	220.00
D-104.....	48.75	L-102.....	25.00
D-200.....	2.00	M-85.....	30.00
E-101.....	10.00	M-101.....	100.00
E-102.....	50.00	M-104.....	1,000.00
			2,145.75

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## ENTRY NO. 238

Nonrecurring expenses.....				\$85,058.27	
792.1 Expenses of general officers.....					\$1,979.60
792.2 Expenses of general office employees.....					23,531.54
793 General office supplies and expenses.....					16,238.48
801 Miscellaneous general expenses.....					33,738.41
803 Rents.....					9,570.24
To set out from operating revenue deductions certain operating expenses of the company that are of a nonrecurring nature. The courses of these expenditures, etc., Details as follows:					
Year	Reference	Description	Amount		
1940	(1) M38.....	Clarksburg moving susp.....	\$532.91		
1940	(1) M332.....	do.....	1,446.69		
1940	(2) M38.....	do.....	11,051.12		
1940	(2) M332.....	do.....	12,480.42		
1940	(3) M332.....	do.....	16,238.48		
1940	(4) D104.....	Proportion of cost World's Fair Ex- position.	1,350.00		
1940	(4) M367.....	Loss on experimental liquifying gas plant.	32,388.41		
1940	(5) Sundry..	Rent at Pitts. office paid P. N. G. Co..	9,570.24		
			85,058.27		

- (1) Account 792.1 Expenses of general officers.
- (2) Account 792.2 Expenses of general office employees.
- (3) Account 793 General office supplies and expenses.
- (4) Account 801 Miscellaneous general expenses.
- (5) Account 803 Rents.

## ENTRY NO. 239

				Dr.	Cr.
Nonrecurring expenses.....				\$4,601.33	
507 Taxes, 1940.....					\$4,601.33
To set out from operating revenue deductions the amount of Pennsylvania State taxes that will not be assessed in future years by virtue of the removal of the company offices from that state, etc. Details as follows:					
Year	Reference	Description	Amount		
1940	M177	Penna. foreign franchise.....	\$1,819.20		
1940	M178	Penna. Corp. Net Income.....	2,782.13		
			4,601.33		

## ENTRY NO. 240

				Dr.	Cr.
Distribution expenses.....				\$13,230.55	
805 Franchise requirements.....					\$13,230.55
To segregate for the purpose of this report certain administrative and general expenses that are exclusively devoted to the distribution and sale of natural gas in the State of West Virginia, etc. Details as follows:					
Year	Reference	Description	Amount		
1940	F45	Gross earnings tax Parkersburg.....	\$9,472.26		
1940	L104	Bond Parkersburg tax.....	125.00		
1940	M244	Gross earnings tax Parkersburg.....	3,633.29		
			13,230.55		

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ENTRY NO. 241

	Dr.	Cr.
Distribution expenses.....	\$148,929.55	
607 Taxes, 1940.....		\$148,929.55
To segregate taxes specifically applicable to the distribution sales in the State of West Virginia for the purpose of this report. The following taxes are removed, etc:		
West Virginia gross sales tax: 1940		
Sales of tangible material—Retail.....	\$503.96	
Gas sales.....	133,338.30	
Rents.....	52.44	
Subtotal.....	133,894.70	
Mercantile tax:		
Various cities.....	19.00	
City license tax:		
Parkersburg.....	10.50	
Weston.....	13.00	
Clarksburg.....	19.25	
Subtotal.....	42.75	
Mannington privilege tax.....	422.50	
West Virginia Pub. Serv. Comm. fee <sup>1</sup> .....	14,550.60	
	148,929.55	

<sup>1</sup> Based on gross intrastate sale of gas.

ENTRY NO. 243

	Dr.	Cr.
Distribution expenses.....	\$89,345.10	
603.1 Depreciation.....		\$89,345.10
To segregate for the purpose of this report the depreciation that applies to the distribution operating property of the company, etc.		

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ENTRY NO. 245

250.1 Reserve for depreciation of gas plant.....	\$1,238,457.19	
603.1 Depreciation.....		\$1,220,073.33
603.2 Amort. and depl. of P. N. G. L. & L. R.....		18,383.86
This adjustment is to reverse the provisions for depreciation and depletion, as recorded on the books of the Company for the year ended Dec. 31, 1940, preparatory to setting up the depreciation and depletion expense as computed by the examiners.		
	Depreciation	Depletion
Amounts adjusted above.....	\$1,220,073.33	\$18,383.86
Amounts applicable to Reserve Gas Company.....	128,967.51	6,816.14
Amounts applicable to distribution system.....	89,345.10	
	1,438,385.94	25,200.00

## ENTRY NO. 246

	Dr.	Cr.
503.1 Depreciation .....	\$1,423,863.16	
503.2 Depletion of P. N. G. L. & L. R. ....	57,084.00	
250.1 Reserve for depreciation of gas plant .....		\$1,423,863.16
250.2 Reserve for depletion of P. N. G. L. & L. R. ....		57,084.00
<p>To set up in the income statement for 1940 the annual depreciation and depletion expense as computed by the F. P. C. examiners.</p> <p>The depreciation expense for the year 1940 has been computed on the investment in plant accounts at Jan. 1, 1940, instead of the average investment for the year. Details of additions and retirements for the year 1940 have not been investigated.</p> <p>53 Depletion expense for the year 1940 has been computed as shown on the attached sheet. The average cost per MCF of gas produced was found for the years 1937, 1938, and 1939 by dividing the annual expense by the annual production. The depletion expense per MCF of gas produced was found to remain practically uniform for the period. Therefore, the average for the above-mentioned years was applied to the estimated production for 1940.</p> <p>The estimate of 26,800,000 MCF of gas produced in 1940 was determined by the Bureau of Engineering, excluding the estimated production from the former Reserve Gas Company properties.</p>		

## DEPLETION EXPENSE FOR THE YEAR ENDED DEC. 31, 1940

	Total 1937-1938-1939	Actual			Estimated 1940
		1937	1938	1939	
Gas produced—MCF.....	51, 106, 896	20, 013, 836	14, 546, 830	16, 546, 230	26, 800, 000
Annual depletion expense:					
Operated acreage.....	\$108, 884. 17	\$40, 703. 86	\$31, 407. 84	\$36, 772. 47	\$57, 084. 00
Average cost per MCF.....	. 00213	. 00203	. 00216	. 00222	. 00213
Field line R/W & constr.....	333, 841. 42	131, 847. 14	98, 836. 35	103, 157. 93	175, 004. 00
Average cost per MCF.....	. 00653	. 00659	. 00679	. 00623	. 00653
Gas well construction.....	546, 112. 41	198, 255. 61	165, 101. 37	182, 755. 43	286, 492. 00
Average cost per MCF.....	. 01069	. 00991	. 01135	. 01105	. 01069
Cost of abandoning.....	201, 816. 68	75, 833. 49	56, 169. 61	69, 813. 58	105, 860. 00
Average cost per MCF.....	. 00395	. 00379	. 00386	. 00422	. 00395
Total depletable plant.....	1, 190, 654. 68	446, 640. 10	351, 515. 17	392, 499. 41	624, 440. 00
Average cost per MCF.....	. 02330	. 02232	. 02416	. 02372	. 0233

	Dr.	Cr.
512 Abandoned leases .....	\$12,422.43	
250.1 Reserve for deprec. of gas plant as of 12/31/41.....		\$12,422.43
To transfer from the above reserve account the recorded losses for abandoned leases during the year 1940. This entry is given the same number as the comparable entry appearing in F. P. C. exhibit number 67A.		



1     **EXHIBIT NO. 83-A.—ALLOCATION OF COST OF SERVICE,  
YEAR 1940, OF THE HOPE NATURAL GAS COMPANY,  
F. P. C. WITNESS LYON**

**WRITTEN EXPLANATORY STATEMENT**

This exhibit has been compiled and is presented to show for the year 1940 alone, information similar to that presented in a previous exhibit entitled "Allocation of Average Annual Cost of Service, Years 1937 to 1940, Inclusive, of the Hope Natural Gas Company."

The sources of information and the method of compilation of the tables in this exhibit have been the same as those of the previous exhibit, except as noted, and all statements made in connection with the previous exhibit apply with equal force to these tables. The working papers supporting the tables in this exhibit are the same as those supporting the previous exhibit covering the four years 1937-1940 inclusive.

The allocation of capacity costs in this exhibit, being for the one year 1940, has been based on the actual peak responsibility on the day of January 18, 1940 and the allocation of the volumetric costs has been based on the volume of deliveries during the calendar year 1940.

This exhibit incorporates, with appropriate notation, an additional minor adjustment relative to the elimination of incidental gas revenues of the former Reserve Gas Company during 1940 not made in the four year allocation, in order that this exhibit be in complete conformity with the exhibit of the accounting examiners of the Commission for the operations of the company during the year 1940 exclusive of the former Reserve Gas Company.

Signed Wm. H. LYON,  
William H. Lyon,

Dated, May 31, 1941, at Washington, D. C.

## HOPE NATURAL GAS COMPANY

TABLE I.—Summary of cost of gas service and comparison with revenues, year 1940

(1)	Produced and purchased gas	Exploration and development	Pumping		Transmission mains regulating and measuring		Distribution Cust. Acctng. and Coll. and sales promotion	Federal income taxes and return @ 6% per annum	Total cost of service	Actual revenue
			Volumetric	Capacity	Volumetric	Capacity				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Total cost of service with income taxes and return segregated:										
West Virginia.....	\$2,071,969.96	\$72,696.73	\$133,662.76	\$88,399.12			\$795,713.55	\$391,942.02	\$3,554,384.13	\$3,459,461.90
East Ohio Gas Company.....	7,143,057.81	250,619.93	1,035,682.46	585,126.22		\$578,553.43		1,764,861.65	11,357,901.50	14,725,648.02
Peoples Natural Gas Company.....	1,773,860.53	62,237.32	183,710.47	177,943.85		184,374.43		457,051.40	2,839,178.00	3,457,207.29
River Gas Company.....	71,365.06	2,503.90	5,912.76	9,222.68		15,958.39		23,649.67	128,612.46	137,150.65
Fayette County Gas Company.....	157,786.90	5,536.08	13,073.00	9,465.28		16,378.18		37,893.48	240,132.92	270,618.42
Manufacturer's Lt. & Ht. Company.....	408,316.23	14,326.10	33,829.92	21,225.65		36,727.63		93,753.40	608,178.93	706,130.48
Total.....	11,626,356.48	407,920.06	1,405,871.37	891,382.80		831,992.06	795,713.55	2,769,151.62	18,728,387.94	22,756,216.76
Total cost of service with income taxes and return not segregated:										
West Virginia.....	2,266,929.61	72,696.73	161,282.50	117,206.80			936,266.49	(1)	3,554,384.13	3,459,461.90
East Ohio Gas Company.....	7,815,175.71	250,619.93	1,249,693.35	775,821.57	356,472.39	910,118.55		(1)	11,357,901.50	14,725,648.02
Peoples Natural Gas Company.....	1,940,769.93	62,237.32	221,671.95	235,936.58	88,524.04	290,038.18		(1)	2,839,178.00	3,457,207.29
River Gas Company.....	78,080.09	2,503.90	7,134.56	12,228.40	3,561.46	25,104.05		(1)	128,612.46	137,150.65
Fayette County Gas Company.....	172,633.69	5,536.08	15,774.37	12,550.07	7,874.31	25,764.40		(1)	240,132.92	270,618.42
Manufacturer's Lt. & Ht. Company.....	446,736.29	14,326.10	40,820.46	28,143.18	20,376.91	57,775.99		(1)	608,178.93	706,130.48
Total.....	12,720,325.32	407,920.06	1,696,377.19	1,181,888.60	476,809.11	1,308,801.17	936,266.49		18,728,387.94	22,756,216.76

NOTE.—West Virginia includes domestic, commercial, industrial, drillers and pumpers, and special nonaffiliated gas utilities.

(1) Included in columns (2)–(8) inclusive.

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## HOPE NATURAL GAS COMPANY

TABLE II.—Statement of Natural Gas Sales Revenues Year 1940

Line No.	Customer	Per books	Accounting adjustments	Less incidental reserve Gas Co. sales <sup>1</sup>	Revenue
	(1)	(2)	(3)	(4)	(5)
1	Domestic and Commercial.....	\$2,069,232.90	-----	\$80,616.09	\$2,048,616.81
2	Industrial.....	1,353,183.76	-----	27.27	1,353,156.49
3	Total dom. com. and ind.....	3,422,416.66	-----	\$80,643.36	3,401,773.30
4	Drillers and pumpers.....	108,713.12	<sup>2</sup> 73,644.14	2,818.00	27,250.98
5	H. C. & R. Co. gasoline plants.....	6,000.30	<sup>3</sup> 6,000.30	-----	-----
6	Special nonaffiliated natural gas utilities.....	30,437.62	-----	-----	30,437.62
7	East Ohio Gas Co.....	14,726,736.17	-----	1,088.15	14,725,648.02
8	Peoples Natural Gas Co.....	3,749,365.65	<sup>4</sup> 292,158.36	-----	3,457,207.29
9	River Gas Co.....	137,150.65	-----	-----	137,150.65
10	Fayette County Gas Co.....	270,618.42	-----	-----	270,618.42
11	Manufacturers Lt. & Ht. Co.....	706,130.48	-----	-----	706,130.48
12	Total gas service revenues.....	<sup>5</sup> 23,152,569.07	<i>371,802.80</i>	<i>24,549.51</i>	22,756,216.76

<sup>1</sup> To eliminate incidental gas service revenues of former Reserve Gas Company in conformity with Schedule No. 4, column (g) of exhibit No. 78.

<sup>2</sup> In accordance with exhibit No. 78 examiner's adjusting entry No. 203.

<sup>3</sup> In accordance with exhibit No. 78 examiner's adjusting entry No. 213.

<sup>4</sup> In accordance with exhibit No. 78 examiner's adjusting entry No. 202.

<sup>5</sup> Exclusive of Northwestern Ohio Natural Gas Co. and Ohio Fuel Gas Co.

*Italic figures denote decrease.*

Reconciliation with total gas sales revenues in exhibit of accounting examiners of the commission:

Total gas sales revenues above.....	\$22,756,216.76
Less customer's forfeited discounts and penalties.....	23,786.74
Total per examiner's exhibit.....	22,732,430.02

## HOPE NATURAL GAS COMPANY

TABLE III

## STATEMENT OF ANNUAL VOLUMES OF SALES DELIVERIES M. C. F.

[On uniform pressure base of 8 oz. + 14.4#/Sq. In.]  
Year 1940

Customers	F. P. C. exhibit No. 70B	Adjustments	Less: incidental reserve Gas Co. sales <sup>1</sup>	Total
(1)	(2)	(3)	(4)	(5)
Domestic and Commercial .....	5,480,252	<sup>2</sup> 216,084	78,150	5,618,186
Industrial .....	5,332,781	<sup>2</sup> 213,307	105	5,545,983
Total dom., com. and ind. ....	10,813,033	<sup>2</sup> 429,391	78,255	11,164,169
Drillers and Pumpers .....	368,004	<sup>3</sup> 265,444	15,779	88,781
H. C. & R. gasoline plants .....	185,745	<sup>4</sup> 185,745		
Special nonaffiliated gas utilities .....	217,853			217,853
East Ohio Gas Company .....	39,548,404		5,135	39,545,269
Peoples Natural Gas Co. ....	9,820,415			9,820,415
River Gas Co. ....	395,090			395,090
Fayette County Gas Co. ....	873,537			873,537
Manufacturers Light & Heat Co. ....	2,260,513			2,260,513
Total .....	<sup>5</sup> 64,482,594	21,798	95,169	64,365,627

## STATEMENT OF PEAK RESPONSIBILITY IN M. C. F. DAILY JAN. 18, 1940

Domestic and commercial .....	37,686	<sup>2</sup> 1,507	( <sup>6</sup> )	39,193
Industrial .....	17,497	<sup>2</sup> 700	( <sup>6</sup> )	18,197
Total dom., com. and ind. ....	55,183	<sup>2</sup> 2,207	( <sup>6</sup> )	57,390
Drillers and pumps .....	844	<sup>3</sup> 574	( <sup>6</sup> )	270
H. C. & R. gasoline plants .....	707	<sup>4</sup> 707	( <sup>6</sup> )	
Special nonaffiliated gas utilities .....	1,255		( <sup>6</sup> )	1,255
East Ohio Gas Co. ....	173,656		( <sup>6</sup> )	173,656
Peoples Natural Gas Co. ....	55,341		( <sup>6</sup> )	55,341
River Gas Co. ....	4,790		( <sup>6</sup> )	4,790
Fayette County Gas Co. ....	4,916		( <sup>6</sup> )	4,916
Manufacturers Light & Heat Co. ....	11,024		( <sup>6</sup> )	11,024
Total .....	<sup>5</sup> 307,716	926		308,642

<sup>1</sup> To eliminate incidental gas deliveries of former Reserve Gas Co. in conformity with Schedule No. 4 column (g) of Exhibit No. 78.

<sup>2</sup> Four percent for distribution system losses.

<sup>3</sup> In accordance with Exhibit No. 78 Examiners' Adjusting Entry No. 203.

<sup>4</sup> In accordance with Exhibit No. 78 Examiners' Adjusting Entry No. 213.

<sup>5</sup> Exclusive of Northwestern Ohio Natural Gas Co. and Ohio Fuel Gas Co.

<sup>6</sup> No adjustment necessary since peaks of former Reserve Gas Co. were not included in F. P. C. exhibit.

Italic figures denote decrease.

## HOPE NATURAL GAS COMPANY

TABLE IV.—Statement of 1940 annual and peak-day pumpage, M. C. F.

Customer	Annual volumes					Peak-day volumes				
	1940 deliveries	Percent of sales pumped	Volume pumped	Number of pumpages	Pumpage	Peak-day deliveries	Percent pumped	Volume pumped	Number of pumpages	Pumpage
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Domestic, commercial and industrial .....	11,164,169	80	8,931,335	1	8,931,335	57,390	80	45,912	1	45,912
Drillers and pumpers.....	88,781					270				
Special nonaffiliate gas utilities.....	217,853					1,255				
East Ohio Gas Company.....	39,545,269	100	39,545,269	134	69,204,221	173,656	100	173,656	134	303,898
Peoples Natural Gas Company.....	9,820,415	100	9,820,415	134	12,275,519	55,341	100	55,341	134	92,419
River Gas Company.....	395,090	100	395,090	1	395,090	4,790	100	4,790	1	4,790
Fayette County Gas Company.....	873,537	100	873,537	1	873,537	4,916	100	4,916	1	4,916
Manufacturers Light & Heat Company.....	2,260,513	100	2,260,513	1	2,260,513	11,024	100	11,024	1	11,024
Total.....	64,365,627		61,826,159	134	93,940,215	308,642		295,639	134	462,959

NOTE 1.—Data in columns (2) and (7) taken from table III.

NOTE 2.—Domestic, Commercial and Industrial includes distribution losses.

Pages 6 to 13 omitted.]

1      **EXHIBIT NO. 90. RATE OF RETURN EARNED ON ORIGINAL COST BASE, YEARS 1937 TO 1940, INCLUSIVE, F. P. C. WITNESS DUNN**

**WRITTEN STATEMENT**

The attached schedules have been prepared to summarize the plant costs, reserves, and operating expenses for the four year period 1937 to 1940, inclusive, to show the profit earned and the rate of return on the original cost base. There are set forth certain rate adjustments proposed by the examiners which have not been made in the underlying exhibits, but are included here for the purpose of summarizing all costs expected to increase or decrease income in the future.

*Return Earned on Original Cost Base.*

Schedule No. 1 shows the average original cost base in the amount of \$31,281,373. This amount includes production, transmission, distribution, and general plant with the related reserves for depreciation and depletion deducted and the allowance for working capital added.

Net Operating Revenues are shown in the amount of \$4,125,399 as the annual average for the four-year period. The determination of net operating revenues, as adjusted, is shown by the income statements summarized on Schedule No. 1A. The expenses of the four-year period are expected to serve as a guide for future operating costs; therefore, certain nonrecurring expenses are not included in Schedule No. 1.

2      *Exploration and Development Costs.*

The actual costs and losses as set forth in accounts 510, 511, and 512 have been included as a deduction from net operating revenues for the four-year period. Due to cancellations of un-operated acreage delay rental cost is expected to be reduced in the future. However, the company is starting a program of exploratory deep drilling, and there is a known loss on the first of these deep wells of approximately \$200,000.00 due to a well completed dry in 1941. For this reason it is believed proper to include the full amount of exploration and development costs as shown.

*Interest on Unoperated Acreage.*

Interest on unoperated acreage has been included as a deduction from net operating revenues. The investment has been classified as Gas Plant Held for Future Use which is not included in Gas Plant in Service. The examiners propose the allowance in operating expenses of interest as a carrying cost of the investment. A rate of 6% has been used pending the decision by the Commission as to a fair rate of interest.

The minor adjustment on Gas Plant Held for Future Use relates to adjusting entries 338 and 342, Exhibit No. 57A. Certain wells and field lines not used in prior years were placed in service in 1940.

It is proposed to amortize property, reclassification and rate case expenditures over a period of ten years, being a period of six years in the future.

3 *Adjustment of Income Taxes.*

The income taxes actually paid were included in the taxes account. This adjustment removes the Federal Income Taxes pending the determination of a fair return by the Commission and the computation of the indicated taxes on income at the latest tax rate.

For Federal Income Tax purposes certain deductions and allowances are made which are not recorded on the books or set forth in the examiners' income statements. To illustrate a method for the Commission to use in estimating an allowance for future income taxes, giving effect to whatever reduction in revenues may be ordered by the Commission, the following tabulation is submitted:

	1937	1938	1939	1940	Average
Income taxes paid.....	\$282,315	\$17,515	\$191,524	\$912,313	\$350,916
Income tax rate.....	14.9386%	16.5%	16.5%	24%	-----
Net taxable income.....	\$1,889,830	\$106,150	\$1,160,733	\$3,901,304	1,739,504
Assumed reduction (for illustration only).....	-----	-----	-----	-----	1,000,000
Revised net taxable income.....	-----	-----	-----	-----	739,504
Tax rate in effect.....	-----	-----	-----	-----	.24
Allowance for income tax (illustrative only).....	-----	-----	-----	-----	177,481

Schedule No. 1 shows the annual average return earned in the amount of \$3,809,201 and the average rate of return earned on the original cost base as 12.18%.

4 *Return Earned on Original Cost Base, Exclusive of Distribution Plant, using Company Method.*

The company's method of determining return applicable to interstate sales avoids an allocation of costs to West Virginia domestic and industrial consumers. The rates to these consumers are subject to West Virginia regulation, and such sales amount to less than 20% of the total.

Company Exhibit No. 37 sets forth certain reasons why the method of crediting the revenue received from the local distribution of gas in West Virginia in excess of specific distribution costs to the production, transmission and general costs, should be adopted.

The return is worked out on the premise that the Company's local West Virginia business is unavoidable in carrying out its major business of exporting gas from West Virginia; and that these local sales being subject to West Virginia regulation, the remainder of the gross revenues therefrom after deducting specific distribution costs, is the full contribution of the West Virginia consumers towards the costs incurred jointly on account of all gas sold. The cost of the gas exported from the state is thus the Company's total production, transmission and general expenses after crediting this remainder of the revenue from local distribution of gas after deducting specific distribution costs.

Schedule No. 2 sets forth the plant costs, revenues, and operating costs which are taken from the other accounting exhibits. Schedule No. 2A shows the gas service revenues other than interstate sales and the specific costs which have been de-  
5 ducted. Return is computed at an assumed 6% on net original cost of distribution plant, including an allowance for working capital.

Schedule No. 1 shows the annual average rate of return earned at 12.18% on the total base as compared with 12.53% on the interstate base, shown by Schedule No. 2. The difference in return earned and the rate is \$104,535, representing the return on distribution plant included in Schedule No. 2.

EDWARD L. DUNN,  
Edward L. Dunn,

*Examiner in Charge of Field Assignment.*

WASHINGTON, D. C., June 2, 1941.

Approved:

W. E. BAKER,  
W. E. Baker,  
*Chief Accountant.*

CHAS. W. SMITH,  
Chas. W. Smith,

*Chief, Bureau of Accounts, Finance and Rates.*



*Rate of Return Earned on Original Cost Base Years 1937 to 1940, Inclusive*

	Year ended Dec. 31				4-year average
	1937	1938	1939	1940	
Original cost of gas plant in service..		\$54,022,699	\$54,020,330	\$55,174,551	\$54,310,070
Reserves for depreciation and de- pletion.....	Same as 1938	24,807,523	25,423,364	26,076,378	25,278,697
Net original cost.....		29,215,176	28,596,966	29,098,173	29,031,373
Working capital.....		2,250,000	2,250,000	2,250,000	2,250,000
Original cost base.....	31,465,176	31,465,176	30,846,966	31,348,173	31,281,373
Net operating revenues.....	4,111,672	2,133,121	3,874,557	6,382,247	4,125,399
<i>Examiners' rate adjustments</i>					
Exploration and development costs..	501,076	612,242	500,344	407,920	505,396
6% interest on unoperated acreage..	35,063	35,063	35,063	35,063	35,063
Adjustment of gas plant held for future use.....				6,619	1,655
Amortization of rate case expenses..	125,000	125,000	125,000	125,000	125,000
Adjustment of income taxes.....	<i>282,315</i>	<i>17,515</i>	<i>191,521</i>	<i>912,313</i>	<i>350,916</i>
Return earned.....	3,732,848	1,378,331	3,405,671	6,719,958	3,809,201
Rate of return earned.....	11.86%	4.38%	11.04%	21.45%	12.18%

*Italic figures denote decrease.*

## HOPE NATURAL GAS COMPANY

Comparative income statement for the years 1937 to 1940, inclusive, as adjusted, showing an average year for the period

Account No.	Account	As adjusted				Average 1937-40
		1937	1938	1939	1940	
(a)	(b)	(c)	(d)	(e)	(f)	(g)
	<i>Gas service revenues</i>					
600.....	Residential sales.....			\$1,500,945.52	\$1,738,754.23	\$1,799,174.80
602.1.....	Commercial sales.....	\$1,761,310.66	\$1,663,638.55	245,974.46	286,075.75	
602.2.....	Industrial sales.....	1,586,031.56	1,008,073.71	1,236,210.19	1,352,796.21	1,295,777.92
603.....	Public street and highway lighting.....	462.96	452.35	308.51	225.20	362.25
604.....	Other sales to public authorities.....	8,290.31	7,796.16	259.39	209.69	4,138.88
605.1.....	Sales to affiliated utilities.....	14,118,030.22	12,254,495.65	13,814,430.85	18,320,005.96	14,626,740.68
605.2.....	Sales to nonaffiliated utilities.....	1,703,524.80	1,531,177.01	1,061,208.85	987,682.89	1,320,898.38
608.....	Other sales.....	60,919.13	47,577.38	39,632.97	46,680.09	48,702.39
	Total gas service revenues.....	19,238,569.64	16,513,210.81	17,898,970.74	22,732,430.02	19,095,795.30
	<i>Other gas revenues</i>					
610.....	Rent from gas property.....	28,455.91	29,326.60	23,426.64	35,833.90	29,260.77
612.....	Customers' forfeited discounts and penalties.....	21,559.35	21,310.58	21,564.78	23,786.74	22,055.37
618.....	Revenue from incidental oil sales.....	6,051.48	2,836.00	6,847.58	8,280.48	6,003.88
619.....	Miscellaneous gas revenues.....	29,193.20	9,172.27	16,856.45	39,269.83	23,622.93
	Total other gas revenues.....	85,259.94	62,645.45	68,695.45	107,170.95	80,942.95
	Total operating revenues.....	19,323,829.58	16,575,856.26	17,967,666.19	22,839,600.97	19,176,738.25

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HOPE NATURAL GAS COMPANY—Continued

Comparative income statement for the years 1937 to 1940, inclusive, as adjusted, showing an average year for the period—Continued

Account No.	Account	As adjusted				Average 1937-40
		1937	1938	1939	1940	
(a)	(b)	(c)	(d)	(e)	(f)	(g)
	<i>Operating revenue deductions</i>					
733-749.....	Natural gas production.....	\$1,108,896.03	\$1,367,876.70	\$1,135,863.59	\$1,214,306.64	\$1,206,235.75
754-757.....	Other production expenses.....	8,160,523.92	7,671,132.50	7,630,871.08	8,493,753.37	7,989,070.22
758-764.....	Transmission expenses.....	1,697,806.20	1,603,808.63	1,432,855.53	1,761,018.71	1,623,872.27
765-777.....	Distribution expenses.....	525,715.29	505,252.04	434,987.02	466,633.17	483,146.88
779-784.....	Customers' accounting and collection expenses.....	101,459.07	111,535.84	158,275.48	154,819.96	131,522.58
785-788.....	Sales promotion expenses.....			5,891.75	6,088.80	2,995.13
790-809.....	Administrative and general expenses.....	913,999.20	886,828.30	808,908.00	839,506.18	862,310.42
503.1.....	Depreciation.....	1,346,944.66	1,262,391.35	1,214,640.95	1,423,863.16	1,311,960.04
503.2.....	Amortization and depletion of P. N. G. L. and L. R.....	40,703.86	31,407.84	36,772.47	57,084.00	41,492.04
504.....	Amortization of other limited term G. I.....		813.44	6,369.47	5,996.02	3,294.73
507.....	Taxes.....	1,318,109.62	1,001,688.19	1,227,673.65	2,034,283.70	1,395,438.79
	Total operating revenue deductions.....	15,212,157.85	14,442,734.83	14,093,108.99	16,457,353.71	15,051,338.85
	Net operating revenues.....	4,111,671.73	2,133,121.43	3,874,557.20	6,382,247.26	4,125,399.40
	Nonrecurring expenses.....	45,285.56	51,120.43	69,256.90	89,659.60	
	Utility income.....	4,066,386.17	2,082,001.00	3,805,300.30	6,292,587.66	4,125,399.40
	<i>Exploration and development costs</i>					
510.....	Delay rentals.....	469,204.33	466,547.55	407,284.24	363,295.21	426,582.84
511.....	Nonproductive well drilling.....	27,743.54	86,461.77	47,895.17	32,152.42	48,563.22
512.....	Abandoned leases.....	4,127.96	59,232.68	45,164.20	12,472.43	30,249.31

	Total exploration and development costs.....	501,075.83	612,242.00	500,343.61	407,920.06	505,395.37
	Net utility income.....	3,565,310.34	1,469,759.00	3,304,956.09	5,884,667.00	3,620,004.03
520-527.....	Other income.....	451,335.62	543,434.23	255,714.43	293,123.06	385,901.83
	Gross income.....	4,016,645.96	2,013,193.23	3,560,671.12	6,177,790.66	4,005,905.86
535-538.....	Income deductions.....	351,919.82	313,607.76	297,332.56	304,133.87	316,748.50
	Net income transferred to surplus.....	3,664,726.14	1,699,585.47	3,263,338.56	5,873,656.79	3,689,157.36

## HOPE NATURAL GAS COMPANY

*Rate of Return Earned on Original Cost Base, Exclusive of Distribution Plant, Using Company Method*

Description	1937	1938	1939	1940	Average 1937-40
(a)	(b)	(c)	(d)	(e)	
Original cost of gas plant in service, exclusive of distribution plant.....	Same as 1938	\$51,207,621	\$51,099,024	\$52,064,557	\$51,394,706
Reserves for depreciation and depletion.....		23,501,356	24,072,167	24,683,271	23,939,538
Net original cost.....		2,706,265	27,026,857	27,381,286	23,455,168
Working capital.....		2,100,000	2,100,000	2,100,000	2,100,000
Original cost base for interstate sales.....	\$29,806,265	29,806,265	29,126,857	29,481,286	29,555,168
<i>Operating revenues from interstate business</i>					
The East Ohio Gas Company.....	12,757,670	11,157,537	12,359,500	14,725,648	12,750,089
The Peoples Natural Gas Company.....	1,244,635	1,019,044	1,371,757	3,457,207	1,773,161
The River Gas Company.....	115,725	77,915	83,174	137,151	103,491
Fayette County Gas Company.....	267,531	263,966	264,725	270,618	266,710
The Manufacturers Light & Heat Company.....	1,425,050	1,258,602	787,738	706,131	1,044,380
Total interstate revenues.....	15,810,611	13,777,064	14,866,894	19,296,755	15,937,831
<i>Operating revenue deductions, exclusive of specific distribution costs</i>					
Natural gas production.....	1,106,896	1,367,877	1,135,864	1,214,307	1,206,236
Other production expenses.....	8,160,524	7,671,133	7,630,871	8,493,753	7,989,070
Transmission expenses.....	1,697,806	1,603,809	1,432,856	1,761,019	1,623,872
Administrative and general expenses.....	913,999	886,828	808,908	839,506	862,311
Depreciation.....	1,346,945	1,262,391	1,214,641	1,423,863	1,311,960
Amortization and depletion of P. N. G. L. & L. R.....	40,704	31,408	36,772	57,084	41,492

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Amortization of other limited-term G. I.....		813	6,369	5,996	3,295
Taxes.....	1,318,110	1,001,688	1,227,674	2,034,284	1,395,439
Total.....	14,584,984	13,825,947	13,493,955	15,829,812	14,443,675
<i>Examiners' rate adjustments</i>					
6% interest on unoperated acreage.....	35,063	35,063	35,063	35,063	35,063
Exploration and development costs.....	501,076	612,242	500,344	407,920	505,395
Amortization of property reclassification and river rate expenditures.....	125,000	125,000	125,000	125,000	125,000
Other revenue.....	<i>85,260</i>	<i>62,645</i>	<i>68,695</i>	<i>107,171</i>	<i>80,943</i>
Adjustment of Federal income taxes.....	<i>282,315</i>	<i>17,515</i>	<i>191,521</i>	<i>912,313</i>	<i>350,916</i>
Adjustment of gas plant held for future use.....				6,619	1,655
Revenue from West Virginia sales.....	<i>2,697,396</i>	<i>2,019,825</i>	<i>2,329,716</i>	<i>2,696,120</i>	<i>2,435,764</i>
Total examiner's rate adjustments.....	<i>2,403,832</i>	<i>1,327,680</i>	<i>1,929,525</i>	<i>3,141,002</i>	<i>2,200,510</i>
Net Operating Income from Interstate Sales.....	3,629,459	1,278,797	3,302,464	6,607,945	3,704,666
Rate of return earned.....	12.18%	4.29%	11.34%	22.41%	12.53%

Italic figures denote decrease.

**HOPE NATURAL GAS COMPANY**  
*Summary of Specific Distribution Costs*

	1937	1938	1939	1940	Average 1937-40
<i>Distribution adjustments</i>					
Accounts 600-608 gas service revenues.....	\$19,238,570	\$16,513,211	\$17,898,971	\$22,732,430	\$19,095,795
Operating revenues from export sale of gas.....	15,810,611	13,777,064	14,866,894	19,296,755	15,937,831
Revenues from sales of gas in West Virginia.....	3,427,959	2,736,147	3,032,077	3,435,675	3,157,964
Distribution expenses.....	445,169	422,985	352,987	377,288	399,605
Customers accounting and collecting expenses.....	101,459	111,536	158,275	154,820	131,522
Sales promotion expenses.....			5,892	6,089	2,995
Depreciation.....	80,556	82,268	82,000	89,345	83,542
Return—6% on net distribution investment <sup>1</sup> .....	103,388	99,534	103,207	112,013	104,536
Total cost of distributing gas in West Virginia.....	730,562	716,323	702,361	739,555	722,200
Balance available for credit to production, transmission, and general expenses.....	2,697,397	2,019,824	2,329,716	2,696,120	2,435,764

<sup>1</sup> Computed as follows:

Date	Original cost	Accumulated	Net cost depreciation	Working capital <sup>2</sup>	Base	Return at 6%
12/31/37.....	\$2,815,078	\$1,241,943	\$1,573,135	\$150,000	\$1,723,135	\$103,388
12/31/38.....	2,815,078	1,306,167	1,508,911	150,000	1,658,911	99,534
12/31/39.....	2,921,306	1,351,197	1,570,109	150,000	1,720,109	103,207
12/31/40.....	3,109,994	1,393,107	1,716,887	150,000	1,866,887	112,013

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\* See the following table.

Distribution materials and supplies .....			\$75,000
Distribution expense .....		\$617,665	
Less:			
Depreciation .....	\$83,542		
Taxes .....	139,081	222,623	
		<hr/>	
		395,042	
Allocation of general .....		121,796	
		<hr/>	
12½% of .....		516,838	64,605
		<hr/>	
Working capital—Distribution system .....			139,605



**HOPE NATURAL GAS COMPANY**  
*Summary of Gas Service Revenues*

Ac- count No.	Account	1937		1938		1939		1940		Average	
		MCF	Amount	MCF	Amount	MCF	Amount	MCF	Amount	MCF	Amount
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
600	Residential sales.....	4,681,117	\$1,761,311	4,415,634	\$1,663,639	3,991,037	\$1,500,946	4,637,223	\$1,738,754	4,785,426	\$1,799,175
602.1	Commercial sales.....										
602.2	Industrial sales.....	6,299,778	1,586,032	3,894,636	1,008,074	4,825,474	1,236,210	5,332,676	1,352,796	5,088,141	1,295,778
603	Public street and highway lighting.....	1,191	463	1,169	452	794	309	584	225	934	362
604	Sales to other public authorities.....	24,358	8,290	22,858	7,796	778	259	629	210	12,155	4,139
	Total distribution.....	11,006,444	3,356,096	8,334,297	2,679,961	9,471,107	2,983,698	10,734,778	3,378,061	9,886,656	3,099,454
605.1	Sales to other gas utilities (affiliated).....	38,911,073	14,118,030	33,409,933	12,254,496	38,009,416	13,814,431	50,503,453	18,320,006	40,208,469	14,626,741
605.2	Sales to other gas utilities (nonaffiliated).....	5,373,272	1,692,581	4,833,549	1,522,568	3,341,153	1,052,463	3,100,790	976,749	4,162,191	1,311,090
	Total interstate.....	44,284,345	15,810,611	38,243,482	13,777,064	41,350,569	14,866,894	53,604,243	19,296,755	44,370,660	15,937,831
605.2	Sales to other gas utilities (nonaffiliated).....	71,882	10,944	55,446	8,609	53,058	8,746	55,726	10,934	59,028	9,808
608	Other sales.....	335,740	60,919	235,608	47,577	194,139	39,633	247,485	46,680	253,243	48,702
	Total miscellaneous.....	407,622	71,863	291,054	56,186	247,197	48,379	303,211	57,614	312,271	58,510
	Total.....	55,698,411	19,238,570	46,868,833	16,513,211	51,068,873	17,898,971	64,642,232	22,732,430	54,569,587	19,095,795

1      **EXHIBIT NO. 92.—COMPARATIVE INCOME STATEMENT  
FOR THE THREE MONTHS ENDED MARCH 31, 1941,  
AND 1940, F. P. C. WITNESS DUNN**

**WRITTEN STATEMENT**

The attached income statement with data on operating revenues has been prepared from records of Hope Natural Gas Company without adjustment. It is presented for comparative purposes to show the results of operations for the latest period available.

The income data for the first three months of 1941 have been compared with those for the first three months of 1940. It is the opinion of the examiner that this comparison, which is made for the purpose of showing the general upward trend of the company's business, is proper for that purpose because there have been no major changes in the sales contracts and plant accounts. A change affecting operations that has been made in 1941 is the installation by The East Ohio Gas Company of a liquefaction plant at Cleveland. This plant can be filled to capacity during a period of low demand and emptied of its contents as need arises. It is reported that the experiment is successful and hence of benefit both to consumers and companies.

The attached statements include the revenues and expenses arising from the properties of the merged Reserve Gas Company. The operating results and properties of that company, by stipulation of counsel, have been excluded from the present investigation of Hope Natural Gas Company. For comparative purposes it is not deemed necessary to make the detailed study required to segregate the former Reserve Gas Company operating results, for the reason that such expenses and revenues are about the same for each period. This is further brought out in Schedule No. 2 which shows the following facts concerning sales to The Northwestern Ohio Natural Gas Company, the customer supplied by the former Reserve Gas Company:

	M. c. f.	Amount
Three months:		
1941.....	1,301,842	\$390,552.60
1940.....	1,334,702	400,410.60

The comparative income statement discloses the continuing upward trend of sales and profits. Operating revenues are up \$1,114,562.24 for the three-month period of 1941 over the corresponding period of 1940. Utility operating income is also higher by the amount of \$591,777.50 or approximately \$200,000.00 per month.

It is not intended that the attached schedules be used for purposes other than to indicate the trend of operations.

EDWARD L. DUNN,

Edward L. Dunn,

*Examiner in Charge of Field Assignment.*

WASHINGTON, D. C., *June 16, 1941.*

Approved:

W. E. BAKER,

W. E. Baker,

CHIEF ACCOUNTANT.

CHAS. W. SMITH,

*Chief, Bureau of Accounts, Finance and Rates.*

3 Docket G-113

HOPE NATURAL GAS COMPANY  
Comparative Income Statement for the 3 Months Ended Mar. 31, 1941 and  
1940

[Prepared from company's financial statements]

Ac- count Num- ber	Particulars	3 months ended Mar. 31	
		1941	1940
501	1—Utility operating income: Operating revenues.....	\$9,174,808.95	\$8,060,246.71
	<i>Operating revenue deductions</i>		
502	2—Operating expenses: Gas purchased.....	2,860,172.08	2,426,452.04
	Other.....	1,631,755.46	1,671,404.82
	Total operating expenses.....	4,491,927.54	4,097,856.86
503.1	Depreciation.....	360,000.00	333,000.00
503.2	Amortization and depletion of productive gas land and land rights.....	6,300.00	6,300.00
504	Amortization of other limited term utility investment.....	1,881.83	1,839.11
507	Taxes.....	606,843.99	473,715.77
510	Delay rentals.....	99,160.68	133,072.47
511	Nonproductive well drilling.....	2,454.91	
	Total operating revenue deductions.....	5,568,568.95	5,045,784.21
	Utility operating income.....	3,606,240.00	3,014,462.50
	3—Other income:		
520	Income from merchandising, jobbing, and contract work.....	121.85	245.69
521	Income from nonutility operations.....	14.79	11.63
522	Revenue from lease of other physical property.....	408.00	328.00
523	Dividend revenues.....	36.00	36.00
524	Interest revenues.....	86,046.63	49,841.91
526	Miscellaneous nonoperating revenues.....	250.23	140.45
527	Nonoperating revenue deductions.....	5.34	7.68
	Total other income.....	86,842.58	150,596.00
	Gross income.....	3,693,082.58	3,065,058.50
	4—Income deductions:		
535	Other interest charges.....	1,693.37	1,516.81
537	Miscellaneous amortization.....	1,185.18	1,185.18
538	Miscellaneous income deductions.....	1,718.37	1,673.07
	Total income deductions.....	4,596.92	4,375.06
	Net income.....	3,688,485.66	3,060,683.44
	5—Disposition of net income:		
	Balance transferred to earned surplus.....	3,688,485.66	3,060,683.44

<sup>1</sup> Error in statement—foots to \$50,611.36—difference not known.

<sup>2</sup> Italic figures denote decrease.

4 Docket G-113

HOPE NATURAL GAS COMPANY  
Comparative Statement of Operating Revenues—Account 501, for the 3  
Months Ended Mar. 31, 1941 and 1940

(Prepared from company's financial statements)

Ac- count num- ber	Particulars	3 months ended Mar. 31					
		1941			1940		
		M. C. F.	Rate	Amount	M. C. F.	Rate	Amount
	Gas sales:						
600	Residential.....	1,917,833	\$0.2691	\$707,863.59	2,098,801	\$0.3684	\$773,294.84
602.1	Commercial.....	312,644	.3694	115,495.06	349,779	.3686	128,916.01
602.2	Industrial.....	1,599,648	.2496	399,222.03	1,406,582	.2545	357,921.55
603	Street and highway lighting.....	133	.3920	52.14	147	.3857	56.70
604	Other sales to public au- thorities.....	129	.3322	42.99	336	.3334	112.01
605.1	Affiliated utilities.....	19,038,949	.3720	7,082,471.84	15,742,759	.3723	5,861,371.69
605.2	Nonaffiliated utilities.....	2,503,036	.3024	756,934.62	2,611,681	.3066	800,726.39
608	Other sales.....	94,623	.2786	26,360.76	158,618	.2197	34,847.32
	Total sales.....	25,466,995	.3569	9,088,443.03	22,368,703	.3557	7,957,246.51
	Other gas revenues:						
610	Rent from gas property.....			7,361.13			7,076.24
612	Customer's forfeited dis- counts and penalties.....			7,949.49			9,042.68
617.1	Revenue from processing natural gas (contract gas).....			21,289.78			20,127.61
617.2	Revenue from processing natural gas—Butane.....			8,750.68			6,965.39
618	Revenue from incidental oil sales.....			2,153.89			2,425.60
619	Miscellaneous gas revenues:						
619.1	Warehouse sales.....			5,908.98			1,495.37
619.2	Unclaimed security de- posits.....			10.59			2.24
619.3	Management fees and ex- penses.....			30,035.71			35,668.04
619.4	Unclaimed checks.....			7.75			1.48
619.5	Shop labor field.....			64.44			43.75
619.6	Gas sales contract adjust- ment.....						17,199.78
619.9	Other.....			2,869.96			2,959.46
	Total other gas revenue.....			86,365.92			103,000.20
	Total operating revenue.....			9,174,808.95			8,060,246.71
605.1	Sales to affiliated natural gas utilities:						
	The East Ohio Gas Com- pany.....	10,628,809	.3850	4,092,091.47	9,763,410	.3850	3,758,912.86
	Do.....	3,193,198	.3100	989,591.38	2,531,912	.3100	784,892.72
	Total.....	13,822,007	.3677	5,081,682.85	12,295,322	.3696	4,543,805.58
	The Peoples Natural Gas Company.....	4,987,408	.2850	1,920,152.09	3,170,376	.3850	1,220,594.76
	The River Gas Company.....	229,534	.3500	80,336.90	277,061	.3500	96,971.35
	Total—as above.....	19,038,949	.3720	7,082,471.84	15,742,759	.3723	5,861,371.69

Italic figures denote decrease.

*Comparative Statement of Operating Revenues—Account 501, for the 3  
Months Ended Mar. 31, 1941 and 1940—Continued*

Ac- count num- ber	Particulars	3 months ended Mar. 31					
		1941			1940		
		M. C. F.	Rate	Amount	M. C. F.	Rate	Amount
605.2	Sales to nonaffiliated natural gas utilities:						
	Fayette County Gas Com- pany.....	374,236	\$0.3150	\$117,884.35	313,771	\$0.3150	\$98,837.87
	Manufacturers Light and Heat.....	748,469	.3150	235,767.74	939,827	.3150	296,045.51
	The Northwestern Ohio Na- tural Gas Company.....	1,301,842	.3000	390,552.60	1,334,702	.3000	400,410.60
	Total—as above.....	2,424,547	.53069	744,204.69	2,588,300	.3073	795,293.98

1 EXHIBIT NO. 107—STATEMENT SHOWING INCREASES IN  
 PAY ROLL DURING YEARS 1940 AND 1941 NOT RE-  
 FLECTED IN OPERATING EXPENSES, HOPE WITNESS  
 CHISLER

Date effective	Monthly increase			Amount not reflected in operating ex- penses during year 1940
	Salaried employees	Wage earners	Total	
1940				
Mar. 1.....	\$220.00		\$220.00	2 months..... \$440.00
June 1.....	205.00		205.00	5 months..... 1,025.00
Sept. 1.....	340.00		340.00	8 months..... 2,720.00
Oct. 1.....	25.00		25.00	9 months..... 225.00
Nov. 1.....	630.00	\$5,232.91	5,862.91	10 months..... 58,629.10
Dec. 1.....	295.00		295.00	11 months..... 3,245.00
1941				
Mar. 1.....	360.00		360.00	12 months..... 4,320.00
June 1.....	4,272.50	8,563.41	12,835.91	12 months..... 154,030.92
Total amount not reflected in operating expenses.....				224,635.02
Less: Amount applicable to capital construction.....				22,463.50
Amount applicable to production, transmission, and general expenses.....				202,171.52

1 EXHIBIT NO. 111.—PROPERTY RECLASSIFICATION AND  
F. P. C. RATE INVESTIGATION EXPENSE, HOPE WIT-  
NESS CHISLER

Year	Account No. 801—Property reclassification expense	Account No. 797—Regulatory commission expense (F. P. C. rate investigation)	Total
1938 (F. P. C. Ex. 62-A, page 32).....	\$52,151.00	\$1,532.57	\$53,683.57
1939 (F. P. C. Ex. 62-A, page 32).....	228,054.26	315,066.86	543,121.12
1940 (F. P. C. Ex. 78, page 40).....	282,063.05	341,978.25	624,041.30
1941 (first 4 months).....	49,161.27	32,891.45	82,052.72
Actual expenditures to Apr. 30, 1941.....	611,429.58	691,469.13	1,302,898.71
To completion—Estimate.....	63,570.42		63,570.42
To completion of hearings before F. P. C.—estimate.....		133,530.87	133,530.87
Total cost.....	675,000.00	825,000.00	1,500,000.00

(367)



1     **EXHIBIT NO. 66.—DETERMINATION OF COMPOSITE  
SERVICE LIVES OF GASOLINE AND BUTANE PROP-  
ERTY OF THE HOPE CONSTRUCTION AND REFINING  
COMPANY, F. P. C. WITNESS SOYSTER**

[Pages i-iv omitted]

**WRITTEN STATEMENT**

**PURPOSE**

The purpose of this work is to determine the annual rates of accrual for the depreciation, and the composite service lives, of the properties used by Hope Construction and Refining Company in the manufacture and marketing of gasoline, butane, and other byproducts derived from natural gas.

**SCOPE**

The properties under consideration, and for which service lives and annual rates have been determined, are only those in the state of West Virginia, which are carried on the books of the Hope Construction and Refining Company as gasoline investment and butane investment.

The Commission's accounting study of these properties has taken into consideration only the recent history of operations of these properties, namely for 1937, 1938, and 1939 (the last three years for which the records of the Company were complete). In this study of service lives there have likewise been taken into consideration only properties which have been carried on the books of the Company during the same three years. All plants included, with the exception of Littleton, have been used exclusively to process gas of the Hope Natural Gas Company.

2

**GENERAL STATEMENT**

For definitions of the terms used in this study, reference is made to an exhibit introduced in these proceedings by another member of the engineering staff of the Commission, which is entitled "Determination of Composite Service Lives of the Hope Natural Gas Company Property by Primary Accounts."

The first commercial installation in the United States, of facilities for the extraction of gasoline and other hydrocarbons from natural gas by the oil absorption process was at the Hastings gasoline plant. The Company has only one plant at which butane and other liquefied petroleum gases are made. It is located adjacent to the Hastings gasoline plant, and is practically inseparable from it. These two plants and the five other gasoline plants in the first list given below, were the only plants found to be operating when I made the inspection during the latter half of January 1941.

All West Virginia plants under consideration in this study which were in operation prior to 1920, were built by Hope Natural Gas Company and were operated by that company until transferred in that year to Hope Construction and Refining Company. The respective dates of construction, daily capacity, and operating status are as follows:

3	Name of plant	Original construction	Present capacity, gal./day	Status of property as of Dec. 31, 1939
	Hastings gasoline.....	1914	40,000	Operating.
	Hastings butane.....	1918	20,000	Do.
	Waverly gasoline.....	1915	5,000	Do.
	Kennedy gasoline.....	<sup>1</sup> 1917	20,000	Do.
	Bristol gasoline.....	1918	8,000	Do.
	Goff gasoline.....	1919	2,500	Do.
	Cornwell gasoline.....	1926	12,000	Shut down temporarily. <sup>2</sup>

<sup>1</sup> Purchased from Reserve Gas Co., Dec. 31, 1938.

<sup>2</sup> Resumed operations October 1940.

Other West Virginia gasoline property on the Company's books as of December 31, 1939, is as follows:

Name of plant	Original construction	Purchased	Shut down	Status of property as of Dec. 31, 1939
Wright gasoline.....	1916	-----	1935	Boiler plant in use, gaso. plant dismantled.
Ellenboro gasoline.....	1916	-----	1931	Partly dismantled.
Salem gasoline.....	1922	<sup>1</sup> 1929	1939	Do.
Littleton gasoline.....	1924	-----	1932	Retired in 1937.
Evans gasoline.....	1926	-----	1931	Dismantled.
Other property:				
General investment.....	1916	-----	-----	In use.
Anshutz loading station.....	-----	<sup>2</sup> 1926	-----	Do.
Perrine loading station.....	-----	<sup>2</sup> 1926	-----	Dismantled.

<sup>1</sup> Purchased from Godfrey L. Cabot, Inc.

<sup>2</sup> Purchased from Carter Oil Company.

4 All gathering and compressing of gas delivered to the gasoline plants is done by the Hope Natural Gas Co. The Hope Construction and Refining Company's gasoline and butane activities are limited to the extraction and marketing of these products. The gasoline plants, with the one exception of the Waverly plant, are built on sites adjacent to compressor stations of the Hope Natural Gas Co.

At Hastings and Cornwell, steam for gasoline plant use is received from gas-fired boilers of the Hope Natural Gas Co.

Due to the location of the plants involved in these determinations, and the fact that they treat gas from many production sources, it has not been practicable to relate the service life of any of the properties to a particular gas field or known source of supply.

Consequently the service lives and annual rates of accrual for depreciation have been more particularly related to the necessity for these gasoline extraction facilities in relation to the property of the Hope Natural Gas Co.

5

#### METHOD

At the beginning of these investigations a survey was made in the field covering all the principal extraction plants and other gasoline and butane properties of the Hope Construction and Refining Company, located in the State of West Virginia.

In the process of the survey, notes were made of the apparent age of the properties, the condition of maintenance, comparative working conditions and service requirements. Operating data were noted showing temperatures, pressures, rates of flow, quantity of gas handled, and products extracted. Operating conditions were discussed with those responsible for the operation and maintenance of the property, and information was secured relative to the adequacy of the facilities in use.

Opportunity was afforded, during the process of the survey, to inspect and study the Brave gasoline plant, situated at the site of the Brave Compressor Station of the Peoples Natural Gas Company on the Pennsylvania side of the West Virginia-Pennsylvania State line. This plant, originally constructed in 1915, is owned and operated by the Hope Construction and Refining Company, and is under the same general supervision as the plants in West Virginia. It has a present daily capacity of 20,000 gallons of gasoline. In 1940, sixty percent of the gas treated by this plant came through lines of the Hope Natural Gas Company in the State of West Virginia. Except for the inclusion of a more

recent type of absorption equipment, the Brave plant is similar in character of construction and operation to the other plants of this Company involved in this discussion. The data on this plant serve as valuable support in the determination of service lives of the plants in West Virginia, although not used in the determination. For this reason this investigation was extended to include the Brave gasoline plant.

An analysis was made of the plant and investment of each of the several plants. The items of property were segregated into approximately forty separate groups or retirement units. Each group of property such as absorbers, boilers, rectifiers, tanks, etc., is composed of similar units and is set up with the related book costs. Due consideration was given to the net salvage value. An average service life with corresponding straight-line rate of accrual was determined for each of these groups of property at each plant.

In arriving at a composite service life and rate applicable  
7 to all plants, a composite life and rate was first determined for each plant and loading station which has been carried on the books of the Company during the past three years. From these the composite service life and rate of accrual was determined for all plants.

The Kennedy plant was considered individually, for the reason that it was owned and operated from 1917 to the end of 1938 by another company.

The average service lives of a number of classes of property in the several plants have been established with reasonable accuracy. For certain other classes of equipment, however, such as absorbers, rectifiers, stills, and fractionators, obsolescence, rather than physical deterioration, is the most important factor in the determination of service life.

Obsolescence in these plants is forcefully indicated by the high rate of steam consumption when compared with gasoline production. At Hastings and Cornwell plants, where the steam used is measured, the consumption is shown to be more than double that of more efficient plants for which data are available.

In order to determine the service lives of facilities which have  
8 been in use for some time it is necessary to estimate only the remaining life expectancy. This is the measure of the time from the date of consideration until it is unprofitable to continue the property longer in service. Improvements in the art of gasoline extraction have produced plants of greatly reduced in-

stalled cost as well as operating costs and at the same time much improved extraction efficiencies. Careful consideration of these facts has been applied in these determinations.

#### CONCLUSION

After taking into consideration all relevant factors, both functional and physical, the composite service life of all of the gasoline and butane properties of the Hope Construction and Refining Company in the State of West Virginia (with the exception of the Kennedy plant), was determined to be 20.9 years. The corresponding annual straight-line rate is 4.79 percent. The composite service life for the Kennedy gasoline plant was determined to be 24.0 years, and its corresponding annual straight-line rate, 4.16 percent.

On the following page of this exhibit is shown a tabulation of data for individual plants. These data are the basis for the composite figures above quoted.

(Signed) CHAS. J. SOYSTER,  
Chas. J. Soyster,  
*Associate Engineer.*

Date April 5, 1941, Washington, D. C.

9

#### SUMMARY BY PLANTS

Tabulation of Composite Service Lives and Rates of Depreciation Accrual Determined for Gasoline and Butane Property in the State of West Virginia of the Hope Construction and Refining Company:

Property	Adjusted book cost as of Dec. 31, 1939	Composite service life (years)	Annual straight-line rate, %
Hastings gasoline.....	\$690,868.99	23	4.35
Butane investment.....	261,663.62	25	3.98
Waverly gasoline.....	171,297.29	23	4.30
Cornwell gasoline.....	185,026.10	27	3.65
Bristol gasoline.....	163,581.60	23	4.33
Goff gasoline.....	106,010.86	21	4.82
Wright gasoline.....	112,729.53	21	4.73
Littleton gasoline.....	<sup>1</sup> 196,342.58	11	8.80
Salem gasoline.....	22,706.50	16	6.44
Evans gasoline.....	16,384.99	10	9.78
Ellenboro gasoline.....	10,003.92	18	5.59
Anshutz loading station.....	23,142.39	24	4.19
Perrine loading station.....	44,973.63	23	4.41
General investment.....	20,105.00	21	4.79
Total.....	2,024,837.00	20.9	4.79
Kennedy gasoline.....	170,726.82	24	4.16
Total West Virginia gasoline and butane.....	2,195,563.82		

<sup>1</sup> When retired in 1937.

1     **EXHIBIT NO. 63.—REVENUE, EXPENSES, AND NET INVESTMENT OF HOPE CONSTRUCTION AND REFINING COMPANY PERTAINING TO GASOLINE EXTRACTION CONTRACT WITH HOPE NATURAL GAS COMPANY, THREE YEARS ENDED DECEMBER 31, 1939, F. P. C. WITNESS BLEASE**

**WRITTEN STATEMENT**

The Federal Power Commission, under date of October 14, 1938, issued an order of investigation into and concerning all rates, charges, classifications, rules, regulations, practices or contracts of Hope Natural Gas Company. In accordance therewith, an examination of the accounts and records of Hope Construction and Refining Company has been made, and, as a result, this report on the earnings and investment of the gasoline department is submitted.

*Purpose of this Exhibit.*

By contract dated June 30, 1920 (retroactive to January 1, 1920) Hope Construction and Refining Company agreed to process the natural gas of Hope Natural Gas Company passing through the pipe lines at the gasoline plants, and to extract therefrom gasoline and other products on a royalty basis. This contract specified that Hope Natural Gas Company was to receive one-fourth ( $\frac{1}{4}$ ) of the gasoline and other products extracted, but was to bear one-fourth ( $\frac{1}{4}$ ) of transportation costs to market.

Other provisions in this contract specified that all natural gas passing through the pipe lines at the gasoline plants was to be processed and returned without diminution in pressure, volume, and heating value, and that Hope Natural Gas Company  
2     was to furnish free water, steam, and electrical current, except at plants already equipped with their own supply.

A supplementary contract dated August 1, 1923, revised the royalty to be received by Hope Natural Gas Company to one-eighth ( $\frac{1}{8}$ ) of the gasoline and other products extracted, but with other provisions to remain the same.

This one-eighth royalty has continued to date and is being currently booked.

Hope Natural Gas Company Exhibit No. 37, Rate Statement, by George I. Rhodes, page 7, states "Such a low royalty is not appropriate in the eastern territory where prices received for gasoline and for field sales of gas are higher than in the midwest and accordingly in this exhibit the gasoline and butane royalties have been increased to the original fraction of  $\frac{1}{4}$  of the gross. This is a fair royalty."

Hope Natural Gas Company and Hope Construction and Refining Company are admittedly affiliated companies.

There are presented herein details of Hope Construction and Refining Company's investment in plant, for gasoline and other product extraction, devoted to processing Hope Natural Gas Company gas, and the earnings from these plants, in order to give the Commission factual data for determination of the proper credit to Hope Natural Gas Company for gasoline and other products extracted from its gas.

### 3 *Scope of this Exhibit.*

Hope Construction and Refining Company owns and operates oil and gas wells, lines, and appurtenant facilities in addition to its gasoline extraction plants. Also in addition to the gasoline and butane extraction plants in West Virginia devoted exclusively to processing gas of Hope Natural Gas Company, Hope Construction and Refining Company owns and operates gasoline plants in Pennsylvania and Ohio. These plants are known as the Brave, Imperial, and Jennings Guffey in Pennsylvania, and the Ludlow in Ohio. Of these, only the Brave plant in Pennsylvania processes gas originating from Hope Natural Gas Company's wells in West Virginia.

This exhibit has been confined principally to Hope Construction and Refining Company's investment in and earnings from its West Virginia gasoline and butane operations.

#### *A—Revenues and Expenses—All Departments.*

In addition to the gasoline extraction contract mentioned above, there exists a contract known as the "Service Agreement" between Hope Natural Gas Company and Hope Construction and Refining Company. The agreement was dated June 30, 1937 (renewed March 1, 1940). In this agreement Hope Natural Gas Company proposes to furnish at cost: (1) General administrative services, (2) general supervisory services, (3) general accounting services, (4) general engineering, (5) telephone and telegraph service, (6) annuities and benefits department services, (7) deple-

4 tion department services, (8) depreciation department services, (9) medical and health services, and (10) stationery department services. The bases for allocation of these services appear reasonable and the Examiners have taken no exception to either the amounts or methods of allocation.

Schedule No. A-1, "Earnings Statement, per Books," years 1937, 1938, and 1939, presents a condensed earnings statement of all departments of Hope Construction and Refining Company; oil, gasoline, butane, and gas. This statement was taken from the books of the company and has not been adjusted. The revenues, operating expenses, depreciation and depletion, taxes, and net operating revenues for each department are shown. It is of interest to note that the oil department shows a loss for the years 1938 and 1939, and that the gas department shows a loss for 1937, 1938, and 1939, while the gasoline and butane departments provide a profit for each year shown.

*Gasoline Department Earnings—All States.*

Schedule No. A-2, "Gasoline Department Earnings Statement, per Books," presents a condensed earnings statement of the gasoline department, and includes operations of all plants. This statement was taken from the books of the company and has not been adjusted. It shows for the years 1937, 1938, and 1939 the gasoline sales by gallons and dollars, a condensed summary of the gasoline expenses, and the net earnings of the gasoline department, which is in agreement with the gasoline department net earnings shown on Schedule No. A-1.

5 Schedule No. A-2a, "Revenue from Gasoline Sales by Plants," years 1937, 1938, and 1939, supports and is in agreement with the "Sales" shown on Schedule No. A-2. Schedule No. A-2a shows the gasoline sales for the three years, divided between states and plants, showing also the revenue received from purchased gasoline. This statement was taken from the books and records of the company and is unadjusted.

Schedule No. A-2b, "Gasoline Department Expenses," years 1937, 1938, and 1939, supports and is in agreement with the "Total Expenses" shown on schedule No. A-2. This statement was prepared from the books and records of the company in such detail as the accounts were kept. It will be noted that the primary purpose is to determine the cost of gasoline manufactured and the cost of gasoline sold, while there has been no segregation between operating and maintenance expenses.



*Earnings Statement—Adjusting Entries.*

Adjusting entries have been made for the West Virginia gasoline department earnings and for the butane department earnings.

Entry No. 1 reverses the royalty paid to Hope Natural Gas Company for the years 1937, 1938, and 1939, and to Reserve Gas Company for 1939. This royalty has been computed at  $\frac{1}{8}$  of the net sales and charged to gasoline and butane expense under account "Contract Gas." This reversal has been made in order to arrive at an earnings base on which a royalty or other credit may be computed.

6 Entry No. 2 reverses the charge for vent gas returned to Hope Natural Gas Company for the years 1937, 1938, and 1939. According to the Commission engineers, this vent gas is the property of Hope Natural Gas Company and no charge should have been made therefor by Hope Construction and Refining Company. Hope Construction and Refining Company records this charge in a compound journal entry. The company assumes that the vent gas returned is equal in value to the boiler gas and steam furnished by Hope Natural Gas Company to the gasoline plants, excepting the Goff plant, where the vent gases are metered. The entries recorded each month charge "Fuel and Power" with the boiler gas and steam consumed, and credit "Vapor Fuel Earnings" which is netted against "Contract Gas" on the earnings statements. The difference between the charge and credit, due to the Goff plant (See Fuel and Power Schedule No. A-3b), is credited to Hope Natural Gas Company. Hope Natural Gas Company records this net difference as a credit to "Miscellaneous Earnings."

If a complete reversal of the compound entry were made, namely, to reverse also the fuel charge, the gasoline earnings would be overstated, inasmuch as the cost of gasoline boiler fuel would be borne by Hope Natural Gas Company's gas compressor stations.

7 Entry No. 3 substitutes depreciation expense computed on rates furnished by the Commission engineers for the depreciation expense recorded on the books of account. It has been the company's policy to record depreciation expense on a straight line basis. The rates used on gasoline property have been 3% since 1934 (5% from 1920 to 1934) and 5% on butane property. The rate used in this study, as furnished by the Com-

mission engineers is 4.79% for both classes of property (See Schedules Nos. B-3 and B-5).

In addition, it has been the company's policy to charge or credit expenses under the accounts "Plant and Equipment Retirement" or "Profit or Loss from Sale of Capital Assets" with a calculated profit or loss resulting from the retirement of a capital asset. This profit or loss is computed by charging these accounts with the cost of the equipment retired or sold, and crediting the accounts with the salvage thereon and with the depreciation applicable thereto. The depreciation applicable thereto is the ratio which the total accumulated reserve bears, at the beginning of the year, to the total investment by departments.

All of these entries have been set up by accounts and by years and have been posted to the appropriate adjustment columns on the West Virginia gasoline department, and the butane department earnings and expense schedules, Nos. A-3 and A-4.

*West Virginia Gasoline Department Earnings Statement—Schedule No. A-3 and Butane Department Earnings—Schedule No. A-4.*

In addition to being departmentalized, the revenue and expenses of Hope Construction and Refining Company are segregated between states. These segregations are accomplished by assigning directly to the proper department and state expenses as are readily identified as being applicable thereto, such as direct labor, 8 materials, fuels, transportation expenses, rentals, etc.

Some expenses not readily assignable are allocated on the basis of gross investment; these are general office salaries and expenses, legal expenses, benefit plan expense, thrift plan expense and other miscellaneous expenses. Taxes are allocated on various bases; income tax on net earnings, franchise, capital stock, property taxes on gross investment, social security taxes on payrolls, etc. Depreciation, during the years included in this exhibit, is assigned directly to the depreciable property on which calculated. Gasoline depreciation is calculated at 3% of depreciable property and butane depreciation at 5%. Of the total thus calculated, 95% is deemed applicable to manufacturing facilities and 5% to shipping, handling, and storage facilities.

The amounts and bases of such allocations appear reasonable and the Examiners have made no adjustments by reason of these allocations.

Butane is extracted at only one plant, Hastings, located in West Virginia. All revenues from butane are allocated to the West Virginia district, but some of the expenses are allocated on the company's books to other states. An examination of these expenses indicates that they are primarily concerned with marketing butane produced at the Hastings plant, and as such, should be considered applicable to the revenue from that plant. In this exhibit the total net revenue from butane, including all expenses, has been presented rather than that of West Virginia only.

9 The revenues and expenses shown on the West Virginia gasoline department earnings statement for the year 1939 include revenues and expenses applicable to the Kennedy plant, operated in West Virginia and processing gas of Reserve Gas Company. This plant was purchased by Hope Construction and Refining Company from Reserve Gas Company on December 31, 1938. Though Reserve operated under its corporate identity during the year 1939, its common stock was owned by Hope Natural Gas Company. Reserve was merged with Hope Natural Gas Company on December 30, 1939, thus the fields from which Reserve drew its gas in 1939, will, in the future, be a part of the holdings of Hope Natural Gas Company.

Schedule No. A-3, "West Virginia Gasoline Department Earnings Statement," years 1937, 1938, and 1939, presents the sales, expenses, and net earnings for the years indicated. The schedule is further grouped to show these items as reflected on the books of the company, the Examiners' adjustments thereto, and the accounts as adjusted. The net effect of the Examiners' adjusting entries on the West Virginia gasoline earnings is a decrease, as follows:

Particulars	1937	1938	1939
Net earnings, per books.....	\$273,899.40	\$168,823.51	\$210,157.38
Examiners' adjustments.....	<i>*65,875.05</i>	<i>96,144.06</i>	<i>78,197.46</i>
Adjusted earnings.....	208,024.37	72,679.45	132,019.92

\* Italic figures denote decrease.

Schedule No. A-3a supports and is in agreement with "Total Expenses" shown on Schedule No. A-3. This schedule presents the operating expenses in detail and, similar to Schedule 10 No. A-3, is divided to show expenses per books, adjustments thereto and the expenses as adjusted for the years indicated.

Schedule No. A-3b supports and is in agreement with the

"Fuel and Power" account shown on Schedule No. A-3a. This schedule is divided to show by years the amount and type of charge entering the fuel account of each plant. The column headed "Excess of Boiler Fuel over Vapor Fuel Returned" represents the net credit to Hope Natural Gas Company for the difference between boiler fuel furnished and the vapor fuel returned. This has been discussed above in Examiners' Adjusting Entry No. 2.

Schedule No. A-4, "Butane Department Earnings Statement," years 1937, 1938, and 1939, is similar in form and content to Schedule No. A-3. However, the net effect of the Examiners' adjustments of the Butane department earnings is an increase, as follows:

Particulars	1937	1938	1939
Net earnings, per books.....	\$181,786.70	\$110,546.45	\$165,720.09
Examiners' adjustments.....	23,862.82	17,488.10	26,443.65
Adjusted earnings.....	205,649.52	128,034.55	192,163.74

Schedule No. A-4a, "Butane Department Earnings," years 1937, 1938, and 1939, supports and is in agreement with "Total Expenses" shown on Schedule No. A-4. This schedule is similar in form and content to Schedule No. A-3a.

11 The earnings of Hope Construction and Refining Company applicable to the extraction of by-products from gas of Hope Natural Gas Company, as outlined above, are as follows:

**HOPE CONSTRUCTION AND REFINING COMPANY**  
*Summary of West Virginia Gasoline and Butane Earnings*  
*Years 1937, 1938, 1939*

Particulars	1937	1938	1939
Net earnings, per books:			
West Virginia gasoline department.....	\$273,899.40	\$168,823.51	\$210,157.38
Butane department.....	181,786.70	110,546.45	165,720.09
Total.....	455,686.10	279,369.96	375,877.47
Examiners' adjustments:			
West Virginia gasoline department.....	65,875.03	96,144.06	78,137.46
Butane Department.....	23,862.82	17,448.10	26,443.65
Total.....	42,012.21	78,655.96	51,693.81
Net earnings, as adjusted:			
West Virginia gasoline department.....	208,024.37	72,679.45	132,019.92
Butane department.....	205,649.52	128,034.55	192,163.74
Total.....	413,673.89	200,714.00	324,183.66

*B.—Investment and Depreciation Reserve.*

The books of account reflect investment in gasoline and butane plants by plants, but the reserve for depreciation is kept only by departments. In order to ascertain the investment and related reserve for depreciation the balances in plants were listed and this exhibit deals with all West Virginia plants, active or inactive, that have appeared in the gasoline investment ledger within the 12 past five years (1935 to 1939, inclusive). These are termed herein as "currently active West Virginia plants."

Hope Natural Gas Company sold all of its gasoline and butane investment to Hope Construction and Refining Company as of June 30, 1920 at net book cost. Several of the plants dealt with in this exhibit were constructed prior to 1920 and from the period of construction to June 30, 1920, were the property of Hope Natural Gas Company. These are the Bristol, Ellenboro, Goff, Hastings, Waverly, and Wright plants and certain investments termed as General.

This study traces each plant to its origin and no adjustments are made by reason of title transfer.

All credits appearing in the plant accounts were analyzed and the retirements of plant and salvage applicable thereto are summarized on Schedules Nos. B-1b, sheet 1, and B-1b, sheet 2, respectively. These sheets show the retirements and salvage, by years and by plants, of the currently active gasoline plants. Schedule No. B-1a shows the investment as of December 31, by plants and by years, 1914 to 1939, inclusive, in the currently active West Virginia plants.

*Currently Active West Virginia Plants.*

Schedules Nos. B-1b (1) and B-1a have been posted to a summary Schedule No. B-1, "Investment in Currently Active 13 West Virginia Plants, Excluding Kennedy Plant" in the appropriate column under caption "Investment per Books." In Schedule No. B-1 is a column for Examiners' adjustments and the adjusted investment in currently active West Virginia plants is extended to the right in four columns.

The adjustments appearing in Schedule No. B-1 are five in number, and are listed and described by individual entries shown on Schedule No. B-2, "Gasoline Investment—Adjusting Entries."

The adjusted gasoline investment shown on Schedule No. B-1 is posted to the first four columns on Schedule No. B-3 "Investment in Currently Active West Virginia Plants—Excluding Ken-

nedly Plant, and Related Reserve for Depreciation." The cost of the sites on which the plants were built was carried on the books of account as gasoline investment to 1937, but in 1938 was transferred to balance sheet account No. 302-3, "Other Lands, Leases, and Easements."

This cost, as carried on the gasoline investment ledger is shown on Schedule No. B-3 for the purpose of arriving at the depreciable plant balance. It has been assumed in this study that all gasoline investment, except the sites, is depreciable, and that the additions and retirements were incurred as of June 30 of each year. Thus the average balance less the cost of sites is listed under column headed "Average Depreciable Balance" on Schedule No. B-3.

14 To this balance is applied the depreciation rate supplied by the Commission engineer to arrive at the annual depreciation shown on Schedule No. B-3 under "Computed Reserve for Depreciation—Provision" column. Also under this "Computed Reserve for Depreciation" are columns for "Net Salvage" to which are posted the figures from Schedule No. B-1b, sheet 2, previously discussed, and for "Retirements" which are taken from similar column on Schedule No. B-1. The result is that the provision, plus salvage, less retirements, equals the balance of the reserve for depreciation applicable to the currently active West Virginia plants.

*Investment in Kennedy Gasoline Plant and Related Reserve for Depreciation—Schedule No. B-4.*

The Kennedy plant was acquired by Hope Construction and Refining Company as of December 31, 1938, from Reserve Gas Company. The investment on the books of Reserve Gas Company on that date was as follows:

Book cost.....	\$256,722.59
Reserve for depreciation.....	182,322.43
	74,400.16
Book value.....	74,400.16

Hope Construction and Refining Company recorded the purchase on the books of account as follows:

Dr. Gasoline investment.....	\$170,000.00
Property purchased account (Reserve Gas Company) .....	170,000.00
Cr. Reserve Gas Company.....	\$170,000.00
Property purchased account.....	170,000.00

15 For the purpose of this study the investment is deemed to be that carried on the books of Reserve Gas Company, and the related reserve for depreciation is computed with rates furnished by the Commission engineer on book balances from the date of construction to December 31, 1939, in the form and manner described for the other West Virginia plants.

Inasmuch as the revenues from this plant appear on the earnings statement for only the year 1939, the investment, reserve for depreciation and annual provision are also included in the summaries in this exhibit for only the year 1939.

*Butane Investment and Related Reserve for Depreciation—  
Schedule No. B-5.*

Schedule No. B-5 presents the butane investment and its related reserve for depreciation. Both the investment and its reserve have been prepared and computed in the same manner as that previously discussed for currently active West Virginia plants.

Schedule No. B-6 and Schedule No. B-6a are summaries. No. B-6 summarizes the investment and retirement reserve for the currently active West Virginia plants, the Kennedy plant, and the butane property as of December 31, 1937, 1938, and 1939, as shown on Schedules Nos. B-3, B-4, and B-5, respectively. Schedule No. B-6a is a condensed summary of the average investment, reserve, and net investment for each of those years.

16 The average net investment as shown on Schedule No. B-6a for each year is as follows:

<i>Year</i>	<i>Amount</i>
1937.....	\$681, 131. 57
1938.....	591, 177. 88
1939.....	563, 227. 65

*C—Working Capital.*

The working capital requirements of Hope Construction and Refining Company necessary for the conduct of its West Virginia gasoline and butane operations is estimated to be \$80,000.00. This is the total of the inventory of gasoline and butane products, merchandise and forty-five days of adjusted operating expenses after deduction of taxes and depreciation, as follows:

Particulars	1937	1938	1939	Average
Adjusted gasoline expenses.....	\$480,329.66	\$411,972.84	\$479,039.13	\$457,113.88
Adjusted butane expenses.....	85,826.39	65,348.53	89,484.04	80,219.65
Total.....	566,156.05	477,321.37	568,523.17	537,333.53
Less—taxes and depreciation.....	124,953.21	96,342.61	154,187.93	125,161.25
Net.....	441,202.84	380,978.76	414,335.24	412,172.28
45/360 of above.....	55,150.36	47,622.35	51,791.90	51,521.54
Gasoline and butane products.....	17,936.27	30,313.28	17,715.00	22,000.18
Butane merchandise.....	3,124.12	3,340.21	4,364.45	3,609.59
Automotive equipment.....				2,120.80
Total.....				79,252.11
Say.....				80,000.00

Depreciation has been eliminated because it does not require a cash outlay. Taxes, with minor exceptions, are not payable until the year following that to which applicable.

No allowance has been made for prepayments since this item is relatively small and is more than offset by accounts payable. No allowance has been made for bank balances, inasmuch as the collection of taxes in advance of payment tends to build cash funds and also because the forty-five day lag in expenses is greater than is normally incurred in collection of revenue. The average balance, years 1937, 1938, 1939, in the gasoline and butane accounts receivable for the month of December represents only 19.63 days of the average sales for those years.

*D—Appendix—Balance Sheet and Balance Sheet Details.*

There is included in this exhibit Hope Construction and Refining Company's comparative balance sheets for the years 1937, 1938, and 1939 as Schedule No. D-1. The individual items on the balance sheet are analyzed in supporting schedules numbered D-1a to D-1g, inclusive. The amounts appearing on all of these schedules were taken from the books and records of the company and have not been adjusted.



*Conclusion.*

The results of the foregoing statements are summarized as follows:

Particulars	1937	1938	1939
Average net investment.....	\$681,131.57	\$591,177.88	\$563,227.65
Working capital.....	80,000.00	80,000.00	80,000.00
Total.....	761,131.57	671,177.88	643,227.65
Earnings at 6% on above investment.....	45,667.89	40,270.67	38,593.66
Net earnings, as adjusted.....	413,673.89	200,714.00	324,183.66
Excess of adjusted earnings over 6% of average investment.....	368,006.00	160,443.33	285,590.00

18 It is recommended that the accompanying entries (pages 19 to 21) be reflected in the Commission's rate study, in order that Hope Natural Gas Company may receive the proper credit for the products extracted from its gas. The credit to Hope Natural Gas Company is the excess of earnings after allowing Hope Construction and Refining Company all costs incurred in connection with the extraction of gasoline and other products plus a reasonable profit. It is recommended that the Commission determine the reasonable rate of return to be applied to the net original cost of Hope Construction and Refining Company property devoted to this phase of its operations. Pending a determination by the Commission, return has been computed herein at 6%.

ERNEST B. BLEASE,  
Ernest B. Blease,  
*Senior Examiner of Accounts.*

EDWARD L. DUNN,  
Edward L. Dunn,  
*Examiner in Charge of Field Assignment.*

CLARKSBURG, WEST VIRGINIA, March 12, 1941.

Approved:

W. E. BAKER,  
W. E. Baker,  
*Chief Accountant.*

CHAS. W. SMITH,  
Chas. W. Smith,

*Chief, Bureau of Accounts, Finance and Rates.*

[Pages 19 to 30 omitted.]

## HOPE CONSTRUCTION AND REFINING COMPANY

## West Virginia Gasoline Department Earnings Statement Per Books and as Adjusted Years 1937, 1938, and 1939

Particulars	Per books			Examiners' adjustments			As adjusted		
	1937	1938	1939	1937	1938	1939	1937	1938	1939
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
<b>Sales:</b>									
Gallons sold.....	13,915,175	11,682,889	16,755,531	-----	-----	-----	13,915,175	11,682,889	16,755,531
Average price per gallon.....	\$0.0495	\$0.0415	\$0.0365	-----	-----	-----	\$0.0495	\$0.0415	\$0.0365
Amount.....	\$688,354.03	\$484,652.29	\$611,059.05	-----	-----	-----	\$688,354.03	\$484,652.29	\$611,059.05
<b>Expenses:</b>									
Production expense:									
Contract gas.....	\$82,257.14	\$58,593.34	\$73,563.76	<del>\$82,076.76</del>	<del>\$58,593.34</del>	<del>\$73,563.76</del>	\$180.38	-----	-----
Less: Vapor fuel earnings.....	<del>158,144.82</del>	<del>127,771.12</del>	<del>117,640.58</del>	138,144.22	127,771.12	117,640.58	-----	-----	-----
Net cost of gas purchased.....	<del>55,887.08</del>	<del>69,177.78</del>	<del>44,076.82</del>	56,067.46	69,177.78	44,076.82	180.38	-----	-----
Labor.....	51,528.46	50,386.47	50,198.33	-----	-----	-----	51,528.46	\$50,386.47	\$50,198.33
Fuel and power.....	147,686.82	135,224.89	124,730.63	-----	-----	-----	147,686.82	135,224.89	124,730.63
Other production expenses.....	73,052.09	75,377.62	81,253.50	-----	-----	-----	73,052.09	75,377.62	81,253.50
Total direct production expense.....	216,380.29	191,811.20	212,105.64	56,067.46	69,177.78	44,076.82	272,447.75	260,988.98	256,182.46
Overhead.....	30,134.25	21,830.18	24,380.17	-----	-----	-----	30,134.25	21,830.18	24,380.17
Taxes.....	8,234.42	7,267.83	6,632.16	-----	-----	-----	8,234.42	7,267.83	6,632.16
Depreciation.....	49,427.10	44,821.37	49,667.37	18,343.85	21,655.83	26,258.49	67,770.95	66,477.20	75,925.86
Total indirect production expense.....	87,795.77	73,919.38	80,679.70	18,343.85	21,655.83	26,258.49	106,139.62	95,575.21	106,938.19
Total production expense.....	304,176.06	265,730.58	292,785.34	74,411.31	90,833.61	70,335.31	378,587.37	356,564.19	363,120.65

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Gasoline purchased.....	14,757.64	16,243.12	8,778.08				14,757.64	16,243.12	8,778.08
Inventory fluctuations.....	<i>6,342.97</i>	<i>12,644.62</i>	11,362.77				<i>6,342.97</i>	<i>12,644.62</i>	11,362.77
Total cost o gasoline sold.....	312,590.73	269,329.08	312,926.19	74,411.31	90,833.61	70,335.31	387,002.04	360,162.69	383,261.50
Shipping, handling, and storage expenses.....	44,593.18	39,557.43	39,249.80	965.45	1,139.76	1,382.13	45,558.63	40,697.19	40,631.93
Administrative and general expenses.....	35,095.69	13,238.08	18,137.47				35,095.69	13,238.06	18,137.47
Federal income tax.....	16,000.00		29,333.60				16,000.00		29,333.60
Other miscellaneous charges and credits.....	6,175.03	<i>6,295.81</i>	1,254.61	<i>2,501.73</i>	4,170.69	6,420.02	<i>3,326.70</i>	<i>2,125.12</i>	7,674.63
Total expense.....	414,454.63	315,828.78	400,901.67	65,875.03	96,144.06	78,137.46	480,329.66	411,972.84	479,639.13
Net earnings.....	273,899.40	168,823.51	210,157.38	<i>65,875.03</i>	<i>96,144.06</i>	<i>78,137.46</i>	208,024.37	72,679.45	132,019.92

Italic figures denote decrease.

[Pages 32 to 33 omitted.]

## HOPE CONSTRUCTION AND REFINING COMPANY

## Butane Department earnings statement per books and as adjusted years 1937, 1938, and 1939

Particulars	Per books			Examiners' adjustments			As adjusted		
	1937	1938	1939	1937	1938	1939	1937	1938	1939
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
<b>Sales:</b>									
Gallons sold.....	4,394,314	3,417,713	5,173,305				4,394,314	3,417,713	5,173,305
Average price per gallon.....	\$0.0663	\$0.0566	\$0.0544				\$0.0663	\$0.0566	\$0.0544
Amount.....	\$291,475.91	\$193,383.08	\$281,647.78				\$291,475.91	\$193,383.08	\$281,647.78
<b>Expenses:</b>									
<b>Production expense:</b>									
Contract gas.....	\$23,559.07	\$16,990.54	\$25,915.65	<i>\$23,559.07</i>	<i>\$16,990.54</i>	<i>\$25,915.65</i>			
Labor.....	4,010.49	4,418.41	4,261.70				\$4,010.49	\$4,418.41	\$4,261.70
Other production expenses.....	5,350.35	3,648.55	4,883.35				5,350.35	3,648.55	4,883.35
Total direct production expense.....	32,919.91	25,057.50	35,060.70	<i>23,559.07</i>	<i>16,990.54</i>	<i>25,915.65</i>	9,360.84	8,066.96	9,145.05
Overhead.....	3,568.76	2,649.93	2,995.31				3,568.76	2,649.93	2,995.31
Taxes.....	1,843.68	1,570.94	1,659.90				1,843.68	1,570.94	1,659.90
Depreciation.....	12,170.89	12,333.84	12,375.54	<i>471.42</i>	<i>507.38</i>	<i>501.83</i>	11,699.47	11,826.46	11,873.71
Total indirect production expense.....	17,583.33	16,554.71	17,030.75	<i>471.42</i>	<i>507.38</i>	<i>501.83</i>	17,111.91	16,047.33	16,528.92
Total production expense.....	50,503.24	41,612.21	52,091.45	<i>24,030.49</i>	<i>17,497.92</i>	<i>26,417.48</i>	26,472.75	24,114.29	25,673.97
Inventory fluctuation.....	<i>2,979.86</i>	<i>302.27</i>	<i>2,625.51</i>				<i>2,979.86</i>	<i>302.27</i>	<i>2,625.51</i>
Total—cost of butane sold.....	47,523.38	41,309.94	49,465.94	<i>24,030.49</i>	<i>17,497.92</i>	<i>26,417.48</i>	23,492.89	23,812.02	23,048.46
Shipping, storage, and handling.....	34,560.92	26,481.01	30,633.32	<i>24.82</i>	<i>26.68</i>	<i>26.33</i>	34,536.10	26,454.33	30,006.99
Marketing expense.....	8,119.19	8,269.24	8,580.47				8,119.19	8,269.24	8,580.47
Administrative and general expense.....	8,411.17	6,629.73	9,562.63				8,411.17	6,629.73	9,562.63
Federal income tax.....	11,000.00		18,333.00				11,000.00		18,333.00
Other miscellaneous charges and credits.....	74.55	146.71	<i>47.67</i>	192.49	36.50	.16	267.04	183.21	<i>47.51</i>
Total expense.....	109,689.21	82,836.63	115,927.69	<i>23,862.82</i>	<i>17,488.10</i>	<i>26,443.65</i>	84,826.39	65,348.53	89,484.04
Net earnings.....	181,786.70	110,546.45	165,720.09	23,862.82	17,488.10	26,443.65	205,649.52	128,034.55	192,163.74

Italic figures denote decrease. [Pages 35 to 45 omitted.]

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HOPE CONSTRUCTION AND REFINING COMPANY

Investment in currently active West Virginia plants—Excluding Kennedy Plant and related reserve for depreciation—Period 1914 to 1939, inclusive

Year	Adjusted gasoline plant investment				Cost of sites	Average depreciable balance	Computed reserve for depreciation				
	Balance Jan. 1	Additions	Retirements	Balance Dec. 31			Balance Jan. 1	Provision 4.79%	Net salvage	Retirements	Balance Dec. 31
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
1914		\$173,106.87	\$458.80	\$172,648.07	\$698.00	\$85,975.04		\$4,118.20	\$263.06	\$458.80	\$3,922.46
1915	\$172,648.07	5,737.42	5,813.79	172,571.70	698.00	171,911.89	\$3,922.46	8,234.58	4,764.18	5,813.79	11,107.43
1916	172,571.70	140,687.01	1,202.19	312,056.52	4,624.75	239,652.73	11,107.43	11,479.37	935.76	1,202.19	22,320.37
1917	312,056.52	52,107.52	700.00	363,464.04	5,972.75	332,461.53	22,320.37	15,924.91	575.00	700.00	38,120.28
1918	363,464.04	473,725.55	85,463.01	751,726.58	7,697.75	550,760.06	38,120.28	26,381.41	77,411.49	85,463.01	56,450.17
1919	751,726.58	161,335.52	8,037.66	905,024.44	6,896.75	821,078.26	56,450.17	39,329.65	5,252.23	8,037.66	92,994.39
1920	905,024.44	67,224.03	4,023.72	968,224.75	5,684.50	930,333.97	92,994.39	44,563.00	2,472.45	4,023.72	136,006.12
1921	968,224.75	3,417.69	17,320.70	947,486.36	5,688.50	952,169.05	136,006.12	45,608.90	10,700.72	17,320.70	174,995.04
1922	947,486.36	33,339.37	2,605.53	978,220.20	5,688.50	957,164.78	174,995.04	45,848.19	1,559.23	2,605.53	219,796.93
1923	978,220.20	62,621.04	4,412.96	1,036,428.28	5,688.50	1,001,635.74	219,796.93	47,978.35	2,934.36	4,412.96	266,296.68
1924	1,036,428.28	252,758.56	20,453.42	1,268,733.42	12,513.50	1,143,479.85	266,296.68	54,772.68	14,953.05	20,453.42	315,568.99
1925	1,268,733.42	36,196.15	4,377.26	1,300,552.31	12,413.50	1,272,179.37	315,568.99	60,937.39	1,810.13	4,377.26	373,939.25
1926	1,300,552.31	330,123.69	11,155.56	1,619,520.44	12,413.50	1,447,622.88	373,939.25	69,341.14	903.72	11,155.56	433,028.55
1927	1,619,520.44	38,023.23	1,997.16	1,655,546.51	12,413.50	1,625,119.97	433,028.55	77,843.25	815.64	1,997.16	509,690.28
1928	1,655,546.51	1,232.14	10,474.38	1,643,839.99	12,413.50	1,637,279.75	509,690.28	78,425.70	994.65	10,474.38	578,636.25
1929	1,643,839.99	96,611.48	13,171.15	1,727,280.32	12,413.50	1,673,146.66	578,636.25	80,143.73	10,483.31	13,171.15	656,092.14
1930	1,727,280.32	64,853.40	33,257.89	1,758,875.83	12,413.50	1,730,664.57	656,092.14	82,898.83	11,704.40	33,257.89	717,437.48
1931	1,758,875.83	27,809.17	50,364.76	1,736,320.24	12,413.50	1,735,184.53	717,437.48	83,115.34	18,515.21	50,364.76	768,703.27
1932	1,736,320.24	8,842.86	129,191.88	1,615,971.22	12,413.50	1,663,732.23	768,703.27	79,692.77	1,482.55	129,191.88	720,686.71
1933	1,615,971.22	3,239.83	8,970.78	1,610,240.27	12,413.50	1,600,692.25	720,686.71	76,673.16	4,710.55	8,970.78	793,099.64
1934	1,610,240.27	12,303.49	6,081.56	1,616,462.20	12,413.50	1,600,937.73	793,099.64	76,684.92	2,408.39	6,081.56	866,111.39
1935	1,616,462.20	4,483.88	91,997.71	1,528,948.37	12,413.50	1,560,291.79	866,111.39	74,737.98	12,162.08	91,997.71	861,013.74
1936	1,528,948.37	7,845.82	8,223.22	1,528,570.97	12,413.50	1,516,346.17	861,013.74	72,632.98	3,713.43	8,223.22	929,136.93
1937	1,528,570.97	4,063.19	51,456.22	1,473,046.56	10,588.50	1,489,307.77	929,136.93	71,337.84	24,039.43	51,456.22	973,057.98
1938	1,473,046.56	3,079.58	16,830.61	1,459,295.53		1,460,876.80	973,057.98	69,976.00	5,154.67	16,830.61	1,031,358.04
1939	1,459,295.53	1,254.31	28,088.98	1,429,952.34		1,444,623.94	1,031,358.04	69,197.49	12,814.53	28,088.98	1,085,281.08
Total	(Schedule B-1)	2,046,083.24 (Schedule B-1)	616,130.90 (Schedule B-1)	1,429,952.34 (Schedule B-1)	(Schedule B-3a)			1,467,877.76	233,534.22 (Schedule B-1b)	616,130.90 (Schedule B-1)	1,085,281.08

Italic figures denote decrease.

[Page 47 omitted.]

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HOPE CONSTRUCTION AND REFINING COMPANY

Investment in Kennedy Gasoline Plant and Related Reserve for Depreciation—Period 1915 to 1939, Inclusive

Year	Investment				Cost of sites	Average depreciable balance	Computed reserve for depreciation				
	Balance Jan. 1	Additions	Retirements	Balance Dec. 31			Balance Jan. 1	Provision 4.16%	Net salvage	Retirements	Balance Dec. 31
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
1915		\$830.30		\$830.30		\$415.15		\$17.27			\$17.27
1916	\$830.30	90,222.48	\$11.00	91,041.78	\$286.00	45,793.04	\$17.27	1,904.99	\$4.40	\$11.00	1,915.66
1917	91,041.78	55,311.24	1,305.74	145,047.28	286.00	117,758.53	1,915.66	4,898.75	1,096.16	1,305.74	6,604.83
1918	145,047.28	35,812.84	1,595.93	179,264.19	1,600.00	161,212.74	6,604.83	6,706.45	1,007.74	1,595.93	12,723.09
1919	179,264.19	41,833.25	2,286.89	218,810.55	1,600.00	197,437.37	12,723.09	8,213.39	1,658.97	2,286.89	20,308.56
1920	218,810.55	<i>6,066.28</i>	8,360.54	204,383.73	286.00	210,654.14	20,308.56	8,763.21	5,518.08	8,360.54	26,229.31
1921	204,383.73	845.14	55.10	205,173.77	286.00	204,492.75	26,229.31	8,508.90	30.00	55.10	34,711.11
1922	205,173.77	4,281.51	122.58	209,332.70	286.00	206,967.23	34,711.11	8,609.84	54.03	122.58	43,252.40
1923	209,332.70	2,441.84		211,774.54	286.00	210,267.62	43,252.40	8,747.13			51,999.53
1924	211,774.54	5,459.34	504.12	216,729.76	286.00	213,966.15	51,999.53	8,900.99		504.12	60,396.40
1925	216,729.76	12,510.48		229,240.24	286.00	222,699.00	60,396.40	9,264.28			69,660.68
1926	229,240.24	918.99	130.00	230,029.23	286.00	229,348.74	69,660.68	9,540.91	104.00	130.00	79,175.59
1927	230,029.23	747.97		230,777.20	286.00	230,117.21	79,175.59	9,572.88			88,748.47
1928	230,777.20	1,006.20		231,783.40	286.00	230,994.30	88,748.47	9,609.36			98,357.83
1929	231,783.40	619.08		232,402.48	286.00	231,806.94	98,357.83	9,643.17			108,001.00
1930	232,402.48	15,097.31	3,472.71	244,027.08	286.00	237,928.78	108,001.00	9,897.84	2,443.07	3,472.71	116,869.20
1931	244,027.08	2,362.73		246,389.81	286.00	244,922.45	116,869.20	10,188.77			127,057.97
1932	246,389.81	57.14		246,446.95	286.00	246,132.48	127,057.97	10,239.11			137,297.08
1933	246,446.95	1,059.75		247,506.70	286.00	246,689.83	137,297.08	10,262.30			147,559.38
1934	247,506.70	437.63	399.93	247,544.40	286.00	247,239.55	147,559.38	10,285.17	319.94	399.93	157,764.56
1935	247,544.40	5,133.05	2,014.39	250,663.06	286.00	248,817.73	157,764.56	10,350.82	493.40	2,014.39	166,594.39
1936	250,663.06	8,083.43	136.08	258,810.41	286.00	254,350.73	166,594.39	10,580.99	100.55	136.08	177,139.86
1937	258,810.41	718.68	2,723.46	256,805.63	286.00	257,322.02	177,139.85	10,704.60	843.69	2,723.46	185,964.68
1938	256,805.63	116.96		256,722.59		256,521.11	185,964.68	10,671.28			196,635.96
1939	256,722.59	2,194.15	40.08	258,876.66		257,799.62	196,635.96	10,724.46	1.87	40.08	207,322.21
Total		282,035.21	23,158.55	258,876.66				216,804.86	13,675.90	23,158.55	207,322.21

Italic figures denote decrease.

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## Butane Investment and Related Reserve for Depreciation Period 1918 to 1939, Inclusive

Year	Butane investment				Average de- preciable balance	Computed reserve for depreciation				
	Balance Jan. 1	Additions	Retirements	Balance Dec. 31		Balance Jan. 1	Provision 4.79%	Salvage	Retirements	Balance Dec. 31
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
1918.....		\$1,942.44		\$1,942.44	\$971.22		\$46.52			\$46.52
1919.....	\$1,942.44	3,897.31		5,839.75	3,891.09	\$46.52	186.38			232.90
1920.....	5,839.75	32,465.89	\$254.94	38,050.70	21,945.22	232.90	1,051.18	\$203.95	\$254.94	1,233.09
1921.....	38,050.70	12,130.42	201.49	49,979.63	44,015.16	1,233.09	2,108.33	164.78	201.49	3,304.71
1922.....	49,979.63	5,220.26		55,199.89	52,589.76	3,304.71	2,519.05			5,823.76
1923.....	55,199.89	15,737.64		70,937.53	63,068.71	5,823.76	3,020.99			8,844.75
1924.....	70,937.53	14,261.37	267.87	84,931.03	77,934.28	8,844.75	3,733.05	280.00	267.87	12,589.93
1925.....	84,931.03	13,669.49	1,537.21	97,063.31	90,997.17	12,589.93	4,358.76	190.75	1,537.21	15,602.23
1926.....	97,063.31	14,341.51	931.48	110,473.34	103,768.33	15,602.23	4,970.50	718.87	931.48	20,360.12
1927.....	110,473.34	4,364.33	88.18	114,749.49	112,611.41	20,360.12	5,394.09	119.70	88.18	25,785.73
1928.....	114,749.49	25,143.27	<i>117.63</i>	140,010.39	127,379.44	25,785.73	6,101.48	<i>200.00</i>	<i>117.63</i>	31,804.84
1929.....	140,010.39	35,006.42	<i>84.19</i>	175,101.00	157,555.69	31,804.84	7,546.92	<i>60.00</i>	<i>84.19</i>	39,375.95
1930.....	175,101.00	49,451.73		224,552.73	199,826.87	39,375.95	9,571.71			48,947.66
1931.....	224,552.73	36,039.67	510.28	260,082.12	242,317.42	48,947.66	11,607.00	457.50	510.28	60,501.88
1932.....	260,082.12	6,248.64	313.34	266,017.42	263,049.77	60,501.88	12,600.08	275.00	313.34	73,063.62
1933.....	266,017.42	11,695.76	277.07	277,436.11	271,726.77	73,063.62	13,015.71	308.75	277.07	86,111.01
1934.....	277,436.11	2,230.52	326.48	279,340.15	278,388.13	86,111.01	13,334.79	315.28	326.48	99,434.60
1935.....	279,340.15	3,698.23	27,188.79	255,849.59	267,594.87	99,434.60	12,817.79	22,982.42	27,188.79	106,046.02
1936.....	255,849.59	898.73	2,127.31	254,621.01	255,235.36	108,046.02	12,225.77	1,460.83	2,127.31	119,605.31
1937.....	254,621.01	5,714.51	750.80	259,584.72	257,102.87	119,605.31	12,315.23	590.17	750.80	131,759.91
1938.....	259,584.72	731.96	113.74	260,202.94	259,893.83	131,759.91	12,448.91	91.48	113.74	144,186.56
1939.....	260,202.94	1,534.92	74.24	261,663.62	260,933.28	144,186.56	12,498.70	40.52	74.24	156,651.54
Total.....		296,425.02	34,761.40	261,663.62			163,472.94	27,940.00	34,761.40	156,651.54

Italic figures denote decrease.



HOPE CONSTRUCTION AND REFINING COMPANY  
 Summary of Gasoline and Butane Investment as of December 31, 1937, 1938, and 1939

	Gasoline investment			Butane investment	Total investment considered	Other States	Total per books
	Other West Virginia plants	Kennedy plant	Total West Virginia				
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
<i>Year 1939</i>							
Investment, per books.....	\$1,566,830.30	\$170,726.82	\$1,737,557.12	\$261,663.62	\$1,999,220.74	\$526,594.65	\$2,525,815.39
Examiners' adjustments.....	<i>136,877.96</i>	88,149.84	<i>48,728.12</i>	-----	<i>48,728.12</i>	-----	-----
Investment, as adjusted.....	1,429,952.34	258,876.66	1,688,829.00	261,663.62	1,950,492.62	-----	-----
Reserve for depreciation, per books.....	-----	-----	-----	-----	-----	-----	1,874,788.10
Reserve for depreciation, computed.....	1,085,281.08	207,322.21	1,292,603.29	156,651.54	1,449,254.83	-----	-----
Net investment, adjusted.....	344,671.26	51,554.45	396,225.71	105,012.08	501,237.79	-----	651,027.29
<i>Year 1938</i>							
Investment, per books.....	1,573,466.99	-----	1,573,466.99	260,202.94	1,833,669.93	-----	2,636,011.24
Examiners' adjustments.....	<i>114,171.46</i>	-----	<i>114,171.46</i>	-----	<i>114,171.46</i>	-----	-----
Investment, as adjusted.....	1,459,295.53	-----	1,459,295.53	260,202.94	1,719,498.47	-----	-----
Reserve for depreciation, per books.....	-----	-----	-----	-----	-----	-----	1,879,505.35
Reserve for depreciation, computed.....	1,031,358.04	-----	1,031,358.04	144,186.56	1,175,544.60	-----	-----
Net investment, adjusted.....	427,937.49	-----	427,937.49	116,016.38	543,953.87	-----	756,505.89
<i>Year 1937</i>							
Investment, per books.....	1,587,218.02	-----	1,587,218.02	259,584.72	1,846,802.74	-----	2,473,907.90
Examiners' adjustments.....	<i>114,171.46</i>	-----	<i>114,171.46</i>	-----	<i>114,171.46</i>	-----	-----
Investment, as adjusted.....	1,473,046.56	-----	1,473,046.56	259,584.72	1,732,631.28	-----	-----
Reserve for depreciation, per books.....	-----	-----	-----	-----	-----	-----	1,819,098.72
Reserve for depreciation, computed.....	973,057.98	-----	973,057.98	131,759.91	1,104,817.89	-----	-----
Net investment, adjusted.....	499,988.58	-----	499,988.58	127,824.81	627,813.39	-----	654,809.18

Italic figures denote decrease.

## HOPE CONSTRUCTION AND REFINING COMPANY

*Average Net Investment in West Virginia Gasoline and Butane Property*

Details from adjusted balances	West Virginia gasoline	Butane	Total
(a)	(b)	(c)	(d)
<i>Year 1937</i>			
<b>Investment:</b>			
Balance Jan. 1.....	\$1,528,570.97	\$254,621.01	\$1,783,191.98
Balance Dec. 31.....	1,473,046.56	259,584.72	1,732,631.28
<b>Total</b> .....	<b>3,001,617.53</b>	<b>514,205.73</b>	<b>3,515,823.26</b>
<b>Average</b> .....	<b>1,500,808.76</b>	<b>257,102.87</b>	<b>1,757,911.63</b>
<b>Reserve for depreciation:</b>			
Balance Jan. 1.....	929,136.93	119,605.31	1,048,742.24
Balance Dec. 31.....	973,057.98	131,759.91	1,104,817.89
<b>Total</b> .....	<b>1,902,194.91</b>	<b>251,365.22</b>	<b>2,153,560.13</b>
<b>Average</b> .....	<b>951,097.45</b>	<b>125,682.61</b>	<b>1,076,780.06</b>
<b>Net investment</b> .....	<b>549,711.31</b>	<b>131,420.26</b>	<b>681,131.57</b>
<i>Year 1938<sup>1</sup></i>			
<b>Investment:</b>			
Balance Jan. 1.....	1,473,046.56	259,584.72	1,732,631.28
Balance Dec. 31.....	1,469,884.03	260,202.94	1,730,086.97
<b>Total</b> .....	<b>2,942,930.59</b>	<b>519,787.66</b>	<b>3,462,718.25</b>
<b>Average</b> .....	<b>1,471,465.29</b>	<b>259,893.83</b>	<b>1,731,359.12</b>
<b>Reserve for depreciation:</b>			
Balance Jan. 1.....	973,057.98	131,759.91	1,104,817.89
Balance Dec. 31.....	1,031,358.04	144,186.56	1,175,544.60
<b>Total</b> .....	<b>2,004,416.02</b>	<b>275,946.47</b>	<b>2,280,362.49</b>
<b>Average</b> .....	<b>1,002,208.01</b>	<b>137,973.23</b>	<b>1,140,181.24</b>
<b>Net investment</b> .....	<b>469,257.28</b>	<b>121,920.60</b>	<b>591,177.88</b>
<i>Year 1939<sup>1</sup></i>			
<b>Investment (including Kennedy plant):</b>			
Balance Jan. 1.....	1,726,606.62	260,202.94	1,986,809.56
Balance Dec. 31.....	1,699,417.50	261,663.62	1,961,081.12
<b>Total</b> .....	<b>3,426,024.12</b>	<b>521,866.56</b>	<b>3,947,890.68</b>
<b>Average</b> .....	<b>1,713,012.06</b>	<b>260,933.28</b>	<b>1,973,945.34</b>

See footnote at end of table.

*Average Net Investment in West Virginia Gasoline and Butane Property—  
Continued*

Details from adjusted balances	West Virginia gasoline	Butane	Total
(a)	(b)	(c)	(d)
<i>Year 1939</i> <sup>1</sup>			
<b>Reserve for depreciation (including Kennedy):</b>			
Balance Jan. 1.....	\$1,227,994.00	\$144,186.56	\$1,372,180.56
Balance Dec. 31.....	1,292,603.29	156,651.54	1,449,254.83
<b>Total</b> .....	<b>2,520,597.29</b>	<b>300,838.10</b>	<b>2,821,435.39</b>
<b>Average</b> .....	<b>1,260,298.64</b>	<b>150,419.05</b>	<b>1,410,717.69</b>
<b>Net investment</b> .....	<b>452,713.42</b>	<b>110,514.23</b>	<b>563,227.65</b>

<sup>1</sup> Includes \$10,588.50 in gasoline investment for cost of sites carried on books in account No. 302-3—Other Lands, Leases, and Easements.

[Pages 52 to 64 omitted.]

**1 EXHIBIT NO. 127.— COMPARISON OF METHODS AND RESULTS OF COMMISSION STAFF'S RECOMMENDATION AND COMPANY'S WITNESSES' RECOMMENDATIONS FOR PROPER CREDIT ON ACCOUNT OF GASOLINE AND BUTANE EXTRACTION, F. P. C. WITNESS BLEASE**

	Reference	Year				Reference to 1940
		1937	1938	1939	1940	
Computed credit to Hope Natural Gas Company:						
Average gasoline and butane plant investment.....	Ex. 63, p. 51.....	\$1,757,911.63	\$1,731,359.12	\$1,973,945.34	\$1,955,758.13	Ex. 78, p. 31.
Average reserve or depreciation.....	do.....	1,076,780.06	1,140,181.24	1,410,717.69	1,473,029.02	Do.
Average net investment.....	do.....	681,131.57	591,177.88	563,227.65	482,729.11	Do.
Less: Kennedy plant net investment, per stipulation.....	Ex. 78, p. 32.....			55,820.54	46,532.13	Ex. 78, p. 32.
Balance of net investment.....		681,131.57	591,177.88	507,407.11	436,196.98	
Working capital.....	Ex. 63, p. 16.....	80,000.00	80,000.00	80,000.00	80,000.00	Ex. 78, p. 31.
Total West Virginia gasoline and butane net investment.....		761,131.57	671,177.88	587,407.11	516,196.98	
Return at 6% on above investment.....		45,667.89	40,270.67	35,244.43	30,971.82	
Gasoline and butane net earnings, adjusted.....	Ex. 63, p. 17.....	413,673.89	200,714.00	324,183.66	232,490.65	Ex. 78, p. 27, 28.
Less: Kennedy plant net earnings, per stipulation.....	Ex. 78, p. 32.....			51,126.82	13,834.22	Ex. 78, p. 32.
Balance of West Virginia gasoline and butane earnings.....		413,673.89	200,714.00	273,056.84	218,656.43	
Excess of above earnings over 6% of net investment, recommended as proper credit to Hope Natural Gas Company, by Commission staff.....		368,006.00	160,443.33	237,812.41	187,684.61	
Additional adjustments recommended on Hope Natural Gas Company books of account:						
Reversal of $\frac{1}{4}$ royalty.....	Ex. 63, p. 19.....	105,635.83	75,583.88	86,764.27	80,591.66	Stipulation.
Reversal of vent gas charge (excess of vent gas over recorded amounts on books).....	do.....	138,144.22	127,771.12	117,640.58	119,592.32	Ex. 78, p. 29.
Additional net adjustment over amount recorded on books.....		32,508.39	52,187.24	30,876.31	39,000.66	
Total adjustments (increase of credit to Hope Natural Gas Company over recorded credits).....		400,514.39	212,630.57	268,688.72	226,685.27	

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**EXHIBIT NO. 127.— COMPARISON OF METHODS AND RESULTS OF COMMISSION STAFF'S RECOMMENDATION  
AND COMPANY'S WITNESSES' RECOMMENDATIONS FOR PROPER CREDIT ON ACCOUNT OF GASOLINE  
AND BUTANE EXTRACTION, F. P. C. WITNESS BLEASE—Continued**

	Reference	Year				Reference to 1940
		1937	1938	1939	1940	
Recorded credits on Hope Natural Gas Company's books:						
Difference between vent gas charge and fuel expense .....	{ Ex. 63, p. 33..... Ex. 63, p. 6..... }	\$4,286.10	\$2,196.60	\$4,403.67	\$6,000.30	Ex. 78, p. 41.
Royalty received, ¼ of net sales .....	Ex. 63, p. 19 .....	105,635.83	75,583.88	86,764.27	80,591.66	Stipulation.
Total recorded credit .....		109,921.93	77,780.48	91,167.94	86,591.96	
Total credit recommended by commission examiners (sum o adjust- ments plus booked credits) .....		510,436.32	290,411.05	359,856.66	313,277.23	
Company witness, George I. Rhodes' adjustment to ¼ of net sales of gasoline and butane as proper royalty .....	Ex. 37, p. 21, 28, 37.	105,635.83	75,583.88	86,764.27	80,591.66	Computed here, not shown in Ex. 37 or 1940.
Recorded credits (as above) .....		109,921.93	77,780.48	91,167.94	86,591.96	
Total credit recommended by Rhodes .....		215,557.76	153,364.36	177,932.21	167,183.62	
Difference (commission staff over Rhodes) .....		294,878.56	137,046.69	181,924.45	146,093.61	
Vent gas returned not adjusted by Rhodes .....	Ex. 63, p. 19 .....	138,144.22	127,771.12	117,640.58	119,592.32	
Net difference (commission staff over Rhodes) .....		156,734.34	9,275.57	64,283.87	26,501.29	

Italic figures denote decrease.

WRITTEN STATEMENT

*Introduction.*

I have been instructed to prepare an exhibit setting forth the more important facts relative to general economic and financial conditions which should be considered in arriving at a fair and reasonable rate of return for Hope Natural Gas Company.

*Definition of "Rate of Return."*

The "return" received by a public utility consists of the amount of revenue remaining after deduction of necessary and reasonable operating expenses, rents, taxes, and depreciation and amortization accruals, but before provision for interest, dividends, or additions to corporate surplus. This "return" is ordinarily conceived of as the product of a "rate base" times a given "rate of return." Conversely, the "rate of return" may be defined as that percentage rate which, when applied to the rate base, will yield the total, over-all return for the particular utility.

*Statement of Principles.*

It is generally conceded that the basic principles to be considered in determining the reasonableness of a particular rate of return were stated by the Supreme Court in the general rule laid down in the Bluefield decision as follows:

5 "What annual rate will constitute just compensation depends upon many circumstances and must be determined by the exercise of a fair and enlightened judgment, having regard to all relevant facts. A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no right to profits such as are realized or

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<sup>1</sup>Pages 1 to 3 and Appendix pages 1 to 51 omitted.

anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. A rate of return may be reasonable at one time and become too high or too low by changes affecting opportunities for investment, the money market and business conditions generally.

Another fundamental principle was stated by the Supreme Court in *United Railways v. West* in the following words: "What will constitute a fair return in a given case is not capable of exact mathematical demonstration."

Although other factors doubtless have been considered by various courts and commissions, the underlying principles to be considered in connection with the problem of rate of return are probably nearly all covered in the above citations from holdings of the Supreme Court.

*Method of Presentation of Data.*

Based on consideration of the underlying principles set forth above, I have made certain studies and have prepared this written statement, which constitutes Volume I of this exhibit, and  
6 have prepared or directed and supervised the preparation of certain charts and schedules which have been assembled in two bound volumes constituting Volumes II and III of this exhibit.

Volume II of this exhibit contains data on general interest rates and yields, utility interest rates and yields, and recent financing, general economic conditions, comparative stability of earnings of public utilities and other forms of enterprise, local conditions in the general area of ultimate consumption of natural gas supplied through the facilities of the company involved in the present proceedings, and data reflecting the present situation with respect to idle investment funds and the factors contributing thereto. Volume III of this exhibit contains general statistics pertaining to the natural gas industry and, in addition, presents facts concerning the ownership, issuance, prices and yields of securities of natural gas companies.

As above indicated, the data in Volumes II and III of this exhibit are presented through the medium of charts and schedules. In order to facilitate the reading of the charts, the charts

are accompanied by schedules which contain the data on which the charts are based. For example, where a schedule number appears on the same line as a chart number in the Table of Contents, the schedule and chart should be read in conjunction with one another. In certain instances a schedule number appears without a related chart number, in which case the schedule should be read alone.

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## STATEMENT ON VOLUME II OF EXHIBIT

From the Table of Contents of Volume II of this exhibit, it will be seen that the charts and schedules contained therein are arranged in several groups or sections. These sections, in the order of their appearance, are as follows:

1. General Interest Rates and Yields; which relates to yields on investments in bonds of domestic corporations and Treasury bonds, and interest rates on 4-6 months commercial paper and 60-90 day time loans.

2. Utility Interest Rates and Yields and Recent Financing; pertaining to interest rates and yields on utility securities and containing information on recent financing by public utilities in general and, in addition, data compiled separately covering new financing by electric utilities during the period from 1935 through February 1941.

3. Economic Conditions; which gives a general picture of economic conditions both currently and for the period since 1920 as indicated by indexes of wholesale commodity prices, general business activity and, for the period since 1929, data on national income.

4. Comparative Risk; this section giving an indication of the relative risks of public utilities as compared with other forms of enterprise.

5. Local Conditions; containing data on rediscount rates of the various Federal Reserve Banks, and averages of rates charged customers by banks in principal cities of the country. This section also contains data comparing economic conditions throughout the Nation in recent years with those in the States of Ohio, Pennsylvania, and West Virginia, and contiguous territory.

6. Idle Money Factors; which relates to the present situation respecting the volume of idle investment funds and the factors contributing to the growth of such funds in recent years.



*General Interest Rates and Yields.*

Moody's Investors Service publishes a considerable amount of financial data and its publications are accepted and relied upon generally for purposes such as are now being considered.

8 Chart 1 shows Moody's composite bond yield average based on 120 domestic corporation bonds which carry the four highest bond ratings assigned by Moody's publication. The chart also shows the average yield for the 30 bonds included in each of the four rating groups, namely; Aaa, Aa, A, and Baa. There are not always 120 bonds in Moody's compilation for reasons which will be explained below.

*Chart 1.*—Chart 1 reflects the range of bond yield averages since 1920. The composite average yield for all bonds included in the data had reached by the end of the 1936 the lowest level recorded since 1920, namely, 3.67%. After rising during 1937 and the early part of 1938 to 4.50% in April 1938, a decline took place which by August 1939 had carried the composite average down to the 1936 low point. The month of September 1939 witnessed a sharp rise resulting from the outbreak of war in Europe. The composite average moved from 3.67% to 3.95% in that month. Between September 1939 and the year-end, the average declined to the August level. Except for the rise which occurred in May 1940 following the invasion of the Low Countries, the year 1940 witnessed a continuous decline in the composite average, the yield reaching a record low point of 3.36% at the year-end. In February 1941 the yield rose slightly to 3.40% and stood at 3.39% in March and was 3.40% on April 18, 1941, the latter two figures not being shown on the chart.

Since Chart 1 shows the individual rating group averages from which the composite average is derived, it can be seen that by December 1940 the average yields for bonds of Aaa, Aa, and A rating, after advancing about 0.10% in May and June, had also declined to record low levels, these being considerably  
9 lower than the levels established in 1936. For example the low points in 1936 as compared with the yields shown for December 1940, are as follows: Aaa bonds, 1936, 3.10%, December 1940, 2.71%; Aa bonds, 1936, 3.28%, December 1940, 2.92%; A bonds, 1936, 3.78%, December 1940, 3.36%. The first two months of 1941 witnessed moderate rises in yields on Aaa and Aa bonds, continuing into March and April, the yield on April 18, 1941 being 2.83% on Aaa bonds and 3.03% on Aa bonds, with little change occurring in yield on A bonds.

The risk factor associated with bonds of Baa rating is reflected by the more pronounced rise in the average yield on such bonds commencing in the latter part of 1937 and culminating in the early part of 1938 than was the case with respect to bonds of higher rating. The 1936 low point for Baa bonds was 4.52%, the yield subsequently rising to 5.16% in September 1937 and to 6.47% in April 1938. The yield declined rapidly during the remainder of 1938 to 5.27% in December 1938. During 1939 the average yield on Baa bonds declined still further but in December 1939, at 4.92%, was still 0.40% above the 1936 low point, in contrast with the experience of bonds of higher grade. The average yield on Baa bonds continued to decline during the first four months of 1940, but in May increased sharply by 0.20% and in June advanced 0.17%, resulting in a rise of 0.37% over the April average. This rise compares with that of about 0.10% in the average yield for the higher grade bonds in the same two-months period. From June to December 1940 the Baa average yield reflected a much more substantial decline than was recorded for higher grade bonds with the result that the December average of 4.45% was 0.07% below the 1936 low point, a decline of 0.47% from the average for December 1939. In January 1941 the Baa average declined still further to 4.38% and, following a slight increase in February, stood at 4.31% on April 4 and 4.35% on April 18, 1941. The latter figure is 0.10% lower than that for December 1940 in contrast with the moderate increase in 1941 above noted with respect to yields on Aaa and Aa bonds.

Inspection of Chart 1 will reveal the virtual collapse of the bond market which occurred in 1931 and the continuation of an extreme degree of weakness thereafter for the greater part of three years. In this period bonds most severely affected were those regarded as subject to greater investor risk. It will be observed, for example, that while the yields for Baa and A bonds reached 11.63% and 8.5%, respectively, in this period, the highest yield recorded for Aa bonds was 6.60% and for Aaa bonds was only 5.41%.

The data upon which Chart 1 is based appear in Schedule 1 which will be found immediately following the chart. Page 1 of Schedule 1 contains the composite monthly and annual average yields for each year commencing with the year 1920 on 120 domestic corporation bonds, including bonds of the four highest Moody bond rating groups, namely: Aaa, Aa, A, and Baa. Simi-

larly, Page 2 contains the average yield on bonds of Aaa rating, Page 3 on bonds of Aa rating, Page 4 on bonds of A rating and Page 5 on bonds of Baa rating. Each rating group includes, so far as they are available for inclusion, 30 domestic corporation bonds. A footnote on Page 5 indicates the source from which the data were taken. The lines on the chart can be readily associated with the data contained in the schedule. For example, Page 3 of Schedule 1 shows that the yield on 11 30 domestic corporation bonds of Aa rating was 3.00% in February 1941, as reflected on Chart 1.

Page 6 of Schedule 1 describes the mathematical basis of the yield computations. Monthly yield averages are unweighted arithmetic averages of daily yields computed on the basis of closing prices and calculated to maturity dates. For each rating group the average is based on the bonds included in that group and the composite average is the average of the four rating group averages. Commencing on Page 6 and continuing on Page 7 of Schedule 1 will be found the key to Moody's bond ratings. For example, bonds of Aaa rating are those judged as representing bonds of the best quality, generally referred to as "gilt edge" because they carry the smallest degree of investment risk. Such bonds are characterized by security of principal, and interest payments thereon are protected by large or exceptionally stable margins, changes in which are most unlikely to impair the fundamentally strong position of such issues. Bonds of Aa rating rank high but lack one characteristic or another of the highest type of bond investment. Together with the Aaa group they comprise what are generally known as high-grade bonds. Bonds carrying the A rating possess many favorable investment attributes and are to be considered as higher medium grade obligations. Baa bonds are those considered as lower medium grade obligations, i. e., they are neither highly protected nor poorly secured; such bonds, besides lacking outstanding investment characteristics, in fact exhibit speculative characteristics as well.

Pages 8 to 11, inclusive, of Schedule 1 contain lists of the bonds currently used in Moody's bond yield averages according to rating groups. Aaa bonds, grouped according to classification as Industrials, Railroads, and Public Utilities, are listed on Page 8, Aa bonds are similarly listed on Page 9, A bonds on Page 10 and Baa bonds on Page 11. It will be noted that the lists of Industrial Aaa, Aa and A bonds contain fewer than ten bonds, there being only four bonds in the Aaa group, three in the Aa group, and nine in the A group. Similarly, there

are only five Railroad bonds in the Aaa group and eight in the Aa group. Moody's explanation, as given on Page 6 of Schedule 1, is that it has not been possible since 1933 to find a sufficient number of representative bonds for these rating groups. However, as previously indicated, the averages for these groups are given equal weighting in combining them with other group averages.

*Chart 2.*—The purpose of the next two charts is to show that the trend of bond yields is not an isolated phenomenon but is part of the movement of interest rates in general, as indicated by the broadly similar patterns observed in the trend of interest rates on 4-6 months commercial paper and on 60-90 day time loans, as well as in the yields on U. S. Treasury bonds. In other words, the purpose of these two charts is merely to furnish added data regarding the movement of interest rates as such, and not to offer short-term money rates or yields on Treasury Bonds as a measure of a proper rate of return.

Chart 2 shows interest rates on 4-6 months commercial paper and 60-90 day time loans and is based on averages computed by Standard Statistics Company from data appearing in the Commercial and Financial Chronicle. The 4-6 months paper is issued by such seasonal borrowers as Armour's and Swift's and is sold to banks through dealers. The 60-90 day time loans represent bank loans to New York Stock Exchange brokers and are secured by mixed collateral. Although the 4-6 months paper, contrary to expectation, currently carries a lower rate than the shorter-term time loans, there are two factors which may be assumed to effect a higher rate for 60-90 day loans than for 4-6 months paper. These are, first, that the rate for 60-90 day loans is assumed to be more or less fixed by agreement between banks and, second, that a service charge element is presumed to exist by reason of the allowance of substitutions of collateral in connection with brokers' loans.

Current interest rates on both types of loans are extremely low as compared with the levels existing during the period 1920 to 1929. For example, by reference to Schedule 2 it may be seen that the rate on 60-90 day time loans varied from 8.72% in 1920 to as low as 2.52% in 1924 and rose to 8.94% in 1929. The average for that ten-year period was 5.40%, as compared with 1.43% for the eleven years following 1929. The rate on 60-90 day time loans now stands at 1.25%, but for a brief period was 0.50% in 1932 and 0.25% in 1935.

On 4-6 months commercial paper, the average rate for the ten-year period 1920-1929 was 5.01%, while since 1929 the rate has averaged 1.54%. The rate on this type of paper remained unchanged at 0.75% from November 1938 through January 1940, but in March 1940 declined to 0.63%. Since the latter date the rate has remained unchanged.

*Chart 3.*—Chart 3 shows the yield on U. S. Treasury Bonds due or callable after twelve years, as computed by the U. S. Treasury

Department for the period since 1920. This chart portrays  
14 a somewhat similar situation as that shown on Charts 1 and  
2, the trend being generally downward in recent years.

The low point for the period 1920-1937 was reached in February 1937 with a yield of 2.46%, as indicated in Schedule 3. Increasing by April 1937 to 2.80%, the yield subsequently declined, reaching a new low of 2.13% in June 1939. In September 1939, as in the case of domestic corporation bonds, the yield on U. S. Treasury Bonds rose to the highest level of the year, 2.65%, but subsequently declined and for the month of December 1939 was 2.35%. The decline continued in 1940 and in March and April the yield average 2.25%. An increase of 0.13% occurred in May 1940, in line with the increase previously noted for corporate bonds in the Aaa, Aa, and A groups, but subsequently this increase was more than cancelled, a decline of 0.50% taking place between June 1940 and the year-end when the yield stood at 1.89%, the lowest figure on record. An abrupt rise in yield occurred in January 1941, the last month shown on the chart. This rise continued, resulting in an average of 2.10% for the following month. However, in March the yield declined to 2.01% and for the week ended April 26, 1941, at 1.91%, was very close to the record low point of 1.89%.

Undoubtedly the lower yield reflected for Treasury bonds in comparison with Moody's average yield on corporation bonds of Aaa rating may be attributed to the low risk associated with these securities and to the fact that income derived therefrom is in part exempt from taxation.

From the data presented in this section, it is apparent that bond yields and interest rates, generally, have reached the lowest levels witnessed in many years; in fact, they probably have not been lower at any time in the history of the country.

15 *Utility Interest Rates and Yields and Recent Financing.*

This section deals with the cost of money as indicated by bond yields, preferred stock yields, and common stock earnings-price ratios, with particular reference to public utilities.

*Chart 4.*—Chart 4 shows Moody's bond yield averages commencing with the year 1934, based on 40 public utility bonds according to Moody's bond ratings. Comparison of Chart 4 with Chart 1 reveals that yields on public utility bonds have followed the same generally downward trend in recent years reflected by yields on 120 domestic corporation bonds (Industrials, Railroads, and Public Utilities). It will also be observed that public utility bond yields were at the lowest levels on record at the close of 1940.

It is of interest to note from inspection of the annual averages shown on Pages 1 and 2 of Schedule 4, which immediately follows Chart 4, that the average yield on public utility bonds in each rating group declined substantially between 1934 and 1940, the comparative yields and declines being as follows:

Rating	1934 average	1940 average	Decline since 1934
	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
Aaa.....	3.92	2.77	1.15
Aa.....	4.66	2.92	1.74
A.....	5.55	3.24	2.31
Baa.....	7.49	4.05	3.44

Relatively, these declines range from 29.3% for Aaa bonds to 45.9% for Baa bonds, indicating that investors in public utility bonds have more recently been willing to accept a relatively lower rate of compensation than in 1934 in proportion to the degree of risk assumed.

16 Another method of measuring the willingness of investors in public utility bonds to accept relatively less compensation in proportion to the degree of risk assumed is to compare the ratio of the yield on Baa bonds to that on Aaa bonds. Such ratios computed for the years 1934 to 1940, inclusive, and for the month of February 1941 are as follows:

Period	Baa yield	Aaa yield	Ratio of Baa to Aaa yield
	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
Year 1934.....	7.49	3.92	1.91
Year 1935.....	5.56	3.52	1.58
Year 1936.....	4.67	3.21	1.45
Year 1937.....	5.09	3.21	1.59
Year 1938.....	5.26	3.03	1.74
Year 1939.....	4.50	2.88	1.56
Year 1940.....	4.05	2.77	1.46
Feb. 1941.....	3.90	2.76	1.41

From the foregoing, it appears that in 1934 the yield demanded by investors on Baa bonds was 1.91 times that required on Aaa bonds. The ratio declined to 1.45 in 1936, increased to 1.74 in 1938, and dropped back to 1.56 in 1939. In 1940 the ratio stood at 1.46 and in February 1941 was 1.41, or somewhat below the previous low level for the period established in 1936.

The 1941 curves on Chart 4 reflect increases in yields on all classes of public utility bonds in January and February, such increases being particularly noticeable with respect to bonds in the two lower rating groups, namely, A and Baa. However, figures for March and April 1941, not shown on the chart, indicate that such increases have not continued, the yields on April 4, 10, and 18, 1941, compared with those for the month of February, being as follows:

17	Rating	Month of February	Apr. 4, 1941	Apr. 10, 1941	Apr. 18, 1941
		<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
	Aaa.....	2.76	2.75	2.76	2.75
	Aa.....	2.88	2.90	2.91	2.89
	A.....	3.20	3.15	3.15	3.13
	Baa.....	3.90	3.86	3.88	3.86

*Chart 5.*—Chart 5 shows Moody's bond yield averages for the period since 1920 based on 120 domestic corporation bonds representative of three industry groups, namely: Railroads, Public Utilities, and Industrials. The general trends reflected in this chart are similar to those described in connection with the previous charts. Starting from the low point for all groups reached in 1936, the average yields increased until midyear of 1938. The rise in yield for railroad bonds in this period was much more abrupt than in the case of public utilities and industrials and carried the yield on railroad bonds to 5.75%, public utility yields increasing only to 4.11% and industrials to 3.55%. From these points the trend toward lower yields has continued with minor interruptions for all groups, but only in the case of public utilities and industrials have the yields established new low levels. For example, the August 1939 figures were 3.40% (1936—3.69%) for public utilities and 3.21% (1936—3.37%) for industrials. Railroad yields in August averaged 4.41%, which was still considerably higher than the 3.95% yield recorded for January 1937, reflecting the greater degree of risk attaching to railroad securities from the viewpoint of investors. The rise in yields which oc-

curred in September 1939 had been cancelled before the year-end, and subsequently through April 1940 all yields registered further declines, public utility and industrial bond yields falling to the then lowest levels on record, while railroad bond yields still remained 0.38% above the January 1937 low point.

In May and June, following the invasion of the Low Countries, an abrupt rise in yields of all bonds occurred, but this rise was subsequently cancelled, railroad bond yields declining through January 1941 to 3.96%, or within a fraction of the lowest level recorded since 1920, while public utility and industrial bond yields had receded to all-time lows at the close of 1940. The December 1940 averages, as shown in Schedule 5, Pages 1, 2, and 3, were as follows: Industrials 2.93%; Public Utilities 3.13%; and Railroads 4.03% (January 1941, 3.96%). The most recent yields available at the present writing, those of April 18, 1941, show moderate changes compared with year-end averages, as follows: Industrials 3.06%; Public Utilities 3.16%; and Railroads 3.97%.

By inspection of the annual averages shown on Page 2 of Schedule 5, it will be seen that the average yield on 40 public utility bonds declined from 6.30% in 1932 to 4.43% in 1935, and leveled off at approximately 3.90% during the years 1936, 1937, and 1938. In 1939 the average was lower, at 3.48%, than for any year since 1920, while the average for 1940, 3.25%, was well below that for 1939.

Chart 5 indicates that since 1933 the experience of the industrial group has been somewhat more favorable than that of the public utility group, but this is probably due in part to the limited number of industrial bond issues available for inclusion in the two highest Moody bond rating groups.

*Chart 6.*—Chart 6 shows annually, for the period since 1921, Moody's weighted averages of yields on newly issued domestic bonds of industrials, railroads, and utilities. The averages shown are based on yields on newly issued bonds, calculated to maturity and weighted by the amounts of all new issues floated in any given classification or period. The classification "utility bonds," which includes bonds of light, power, and gas utilities, consists wholly of operating companies. The yields indicated in Chart 6 are not, of course, representative of bonds of the same companies or issues at any one date or during any given period.



The chart shows a generally downward trend since 1921 for all classes of companies in yields on newly issued bonds. The trend was interrupted in 1929 and 1932, but commencing in 1933 and continuing until about 1936 the downward trend was greatly accelerated. In 1937 and 1938 the yields leveled off somewhat, but in 1939 a substantial decline occurred, particularly in yields on new railroad and industrial bond issues. The 1939 decline in yield on newly issued light, power, and gas utility bonds was fractional, but nevertheless brought that yield also to the lowest point reached throughout the entire period since 1921. There has been superimposed on Chart 6 from Schedule 10 the average yield on newly issued bonds of electric operating utilities beginning with the year 1935, which shows a somewhat more favorable market for bonds of electric operating utilities than those of light, power, and gas utilities combined.

The chart indicates that from 1921 through 1932 the market for new utility bonds appears to have been somewhat less favorable than for railroad bonds. In 1933, however, this position was reversed and except in the years 1937 and 1938, utility bonds were marketed from 1933 through 1939 on more favorable terms than railroad bonds. It also appears that from 1921 through 1938 the market for new utility bond issues was consistently more favorable than for industrial issues. A reversal of this situation occurred in 1939 when the average yield on new utility bond issues was 3.45%, as compared with 3.09% on new industrial issues. In this connection, however, attention is directed to Page 1 of Schedule 10 where it is indicated that in 1939 a substantially larger proportion of electric operating utility bond issues consisted of lower medium grade bonds of Baa rating than was the case in prior years, which would appear to account, at least in part, for the failure of the yield on new utility bond issues to follow the yield on industrial issues in that year.

The rapid decline in the yield on newly issued domestic bonds, particularly noticeable since 1934, suggested that the decline could be attributed not only to the course of the bond market itself but also to the quality of the offerings. This assumption is confirmed by comparison of the average yield for newly issued utility bonds with the average yield on utility bonds then outstanding of the three highest Moody bond rating groups, i.e., Aaa, Aa, and A. The line superimposed on Chart 6, showing the average annual yield from 1934 to 1939 on 30 utility bonds carrying these Moody ratings, very closely conforms to that showing the

yield on newly issued utility bonds, except in 1939 for the reason above noted, and indicates that a very large proportion of the utility bonds offered during that period consisted of higher grade bonds.

Before proceeding to a discussion of Schedule 7 and subsequent schedules which contain certain data with respect to yields on securities of electric operating utilities, it would be desirable to point out that such data are not intended to serve as criteria of market conditions directly affecting the securities of natural gas companies; nevertheless, because of the prominent position of both the natural gas and electric utility industries as important components of the nation's public utility industry and because both industries have exhibited a marked rapidity of growth in recent years, it is believed that the presentation of data with respect to yields on securities of electric operating utilities will afford a perspective which will be of assistance in connection with a study of yields on securities of natural gas companies.

The following data with respect to the natural gas and electric utility industries, derived respectively, from "Annual Statistics of the Natural Gas Industry in 1939, Statistical Bulletin No. 41, October, 1940," issued by the American Gas Association, and "The Electric Light and Power Industry in the United States, Year 1939, Publication No. H 2, March 1940," issued by the Edison Electric Institute, clearly demonstrate the magnitude of the growth experienced by both industries since 1929:

## NATURAL GAS INDUSTRY

Particulars	Year 1939	Year 1929	Increase since 1929	
			Amount	Percent
Number of customers.....	7,454,000	5,896,000	1,558,000	26.4
M. C. F. sales <sup>1</sup> .....	1,328,243	991,036	337,207	34.0
Revenues <sup>1</sup> .....	\$448,859	\$376,250	\$72,609	19.3

## ELECTRIC UTILITY INDUSTRY

Number of customers.....	29,104,185	24,150,183	4,954,002	20.5
Kwh. sales <sup>1</sup> .....	106,086,983	75,294,467	30,792,516	40.9
Revenues <sup>1</sup> .....	\$2,293,644	\$1,938,520	\$355,124	18.3

<sup>1</sup> Thousands (000) omitted.

22 It may also be noted that the two industries exhibit a certain similarity in the proportion of revenues derived

from domestic and commercial customers on the one hand and from industrial customers on the other, as indicated in the following comparison of revenues from sales to customers in 1939 by customer groups:

## NATURAL GAS INDUSTRY

Particulars	Domestic	Commercial	Industrial	Total
Revenues <sup>1</sup> .....	<sup>2</sup> \$255,805	\$50,362	<sup>3</sup> \$142,692	\$448,859
Percent of total.....	57.0%	11.2%	31.8%	100.0%

## ELECTRIC UTILITY INDUSTRY

Particulars	Domestic	Commercial	Industrial	Total
Revenues <sup>1</sup> .....	<sup>4</sup> \$889,584	<sup>5</sup> \$647,671	<sup>6</sup> \$756,389	\$2,293,644
Percent of total.....	38.8%	28.2%	33.0%	100.0%

<sup>1</sup> Thousands (000) omitted.

<sup>2</sup> Includes house heating.

<sup>3</sup> Includes gas sold to electric utilities but excludes gas sold in the field and to carbon black manufacturers.

<sup>4</sup> Includes farm customers.

<sup>5</sup> Small light and power.

<sup>6</sup> Large light and power and all other.

The above summary discloses that approximately one-third of all operating revenues of both the natural gas and electric utility industries is derived from industrial customers, the remaining two-thirds representing revenues from domestic and commercial customers. In the latter category, however, it will be noted that 57% of natural gas revenues are derived from domestic (including house heating) customers, as compared with 38.8% in the case of electric revenues, the proportion of revenues from commercial customers being 11.2% for the natural gas industry and 28.2% for the electric utility industry.

*Schedule 7.*—This schedule reflects annual yields on a group of electric operating utility preferred stocks during the period of twelve years from 1920 to 1940, inclusive, based on averages of yearly high and low market quotations. The 16 issues included in this exhibit comprise all electric operating utility preferred stocks shown in Schedule 19 of a Federal Communications Commission publication issued June 15, 1938, for which preferred dividends and prior requirements were earned in excess of 1.50 times in 1938, and for which market quotations for each year in the period 1929–1940 were available. The title of the publication referred to is “The Problem of the ‘Rate of Return’ in Public Utility Regulation”.

Schedule 7 reflects an upward trend through 1933 in yields demanded by investors on preferred stocks, and a downward trend in the years 1934, 1935 and 1936. After 1936 investors' demands fluctuated within a narrow range at approximately the 1936 level. Expressed in terms of an index based on the 1929 average of the yields on the 16 preferred stocks as equal to 100%, the average yield advanced to 106 in 1931, to 117 in 1932, and to 140 in 1933. The average declined to 125 in 1934 and to 103 in 1935. The average in 1936 was about 15 points lower at 88 and, with minor fluctuations in the years 1937, 1938 and 1939, stood at 85.5 in 1940.

Expressed in terms of percent yield, the unweighted arithmetic average yield on the 16 preferred stocks increased from 5.74% to 8.04% between 1929 and 1933, declined to 5.10% between 1933 and 1936, and was 5.19% for 1937, 5.27% for 1938, 4.96% for 1939 and 4.91% for 1940.

*Schedule 7-A.*—This schedule reflects yields on electric operating utility preferred stocks and number of times preferred dividends and prior requirements are earned based on averages of high and low market quotations for the first two months of 1941, with earnings coverage based on income for the latest twelve months for which reported. Schedule 7-A contains a list of 21 preferred stocks and, as indicated in the footnote, includes all presently outstanding electric operating utility preferred stocks shown in Schedule 19 of the previously mentioned publication of the Federal Communications Commission, for which preferred dividends and prior requirements were earned in excess of 1.50 times in 1938.

Examination of this schedule will show that of the 21 preferred stocks listed, three issues were selling to yield from 3.81% to 4.00% to investors, two issues to yield between 4.00% and 4.25%, six issues to yield between 4.25% and 4.50%, three issues to yield from 4.50% to 5.00%, four issues to yield between 5.00% and 5.50%, and three issues to yield 5.66%, 6.05% and 6.07%, respectively. In no instance did any issue sell on a basis to yield in excess of 6.07%. Eleven of the twenty-one issues reflected yields of 4.50% or lower on the basis indicated. With respect to nine of these eleven issues, preferred dividends and prior requirements were earned 2.20 times or more, and with respect to six of the ten issues yielding in excess of 4.50% such requirements were earned less than two times.

The unweighted arithmetic average of yields on the 21 preferred stock issues shown in Schedule 7-A is 4.72%, as compared with the 1940 average of 4.91% for the 16 issues shown in Schedule