

**REPORT ON  
THE COLUMBIA RIVER  
POWER SYSTEM**

**FISCAL YEAR 1945**

Department of the Interior

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**U. S. DEPARTMENT OF THE INTERIOR  
BONNEVILLE POWER ADMINISTRATION**

UNITED STATES DEPARTMENT OF THE INTERIOR

**REPORT ON  
THE COLUMBIA RIVER  
POWER SYSTEM**

CONSISTING OF THE BONNEVILLE POWER ADMINISTRATION  
AND POWER COMPONENTS OF  
THE BONNEVILLE DAM PROJECT AND  
THE COLUMBIA BASIN PROJECT (GRAND COULEE DAM)

**Fiscal Year 1945**

PREPARED BY  
THE BONNEVILLE POWER ADMINISTRATION  
811 NORTHEAST OREGON STREET  
PORTLAND 8, OREGON

LETTER OF TRANSMITTAL  
TO THE SECRETARY OF THE INTERIOR

The Honorable,  
The Secretary of the Interior,  
Washington, D. C.

My dear Mr. Secretary:

Transmitted herewith is a report showing the results of operations of the Bonneville Power Administration from July 1, 1938 to June 30, 1945. The report conforms with the requirements of Section 9 (c) of the Bonneville Project Act.

Included in the report are certified financial statements for the Columbia River power system consisting of the Bonneville Power Administration, Department of the Interior, and the power components of the Bonneville Dam Project, built and operated by the Corps of Engineers, U. S. Army, and the Columbia Basin Project (Grand Coulee Dam), built and operated by the Bureau of Reclamation, Department of the Interior, as of June 30, 1945.

This report, as certified by Arthur Andersen & Co., accountants and auditors, states that our power operations are recorded "in conformity with generally accepted accounting principles consistently applied and in accordance with the uniform system of accounts prescribed by the Federal Power Commission pursuant to the Federal Water Power Act." This system of accounts is used generally throughout the electric utility industry.

On a cost accounting basis, all costs of the federal government chargeable to power in accordance with present applicable laws have been covered by power revenues under the basic \$17.50 per kilowatt-year rate structure from the beginning of operations to June 30, 1945 and net revenues (after depreciation and interest) of \$11,572,052.69 have accrued from power operations as of that date. Present indications are that approximately \$6,200,000 will be added to these net revenues for the fiscal year ending June 30, 1946.

This financial statement is submitted in accordance with the requirements of Section 9 (c) of the Bonneville Project Act that "The Administrator shall file with the Congress, through the Secretary of the Interior, a financial statement . . . ."

The Act also requires the filing of "a complete report as to the transmission and sale of electric energy generated at the Bonneville Project during the preceding governmental fiscal year." The report conforms to this requirement of the Act and includes our similar activities under Executive Order No. 8526 for the Columbia Basin Project (Grand Coulee Dam).

With the end of the war and reconversion to peacetime activities, it seemed appropriate and desirable to carry all phases of the report back to the beginning of operation of the project for purposes of comparison with previous years.

This report together with the report on repayment of operating expenses and construction costs of the Bonneville Power Administration, the Bonneville Dam Project and the Columbia Basin Project, submitted to you under letter of February 1, 1946, provides the basic data for a full appraisal of the financial feasibility of the three projects under present applicable laws. These two reports indicate that the Administration will meet all of its financial obligations under these laws with a surplus of \$160,000,000 as reasonable margin for contingencies.

Sincerely yours,

/S/ PAUL J. RAVER  
Administrator

## TABLE OF CONTENTS

	Page
LETTER OF TRANSMITTAL.....	3
REVENUES.....	5
ENERGY PRODUCTION.....	9
TRANSMISSION SYSTEM.....	13
POWER FOR WAR.....	17
FINANCIAL RETURNS.....	20
RECONVERSION.....	24
POWER FOR PEACE.....	25
WHOLESALE RATES.....	31
COST ALLOCATION AND REPAYMENT.....	33
PERSONNEL.....	38
LITIGATION.....	39
AUDITORS' REPORT AND FINANCIAL STATEMENTS.....	41

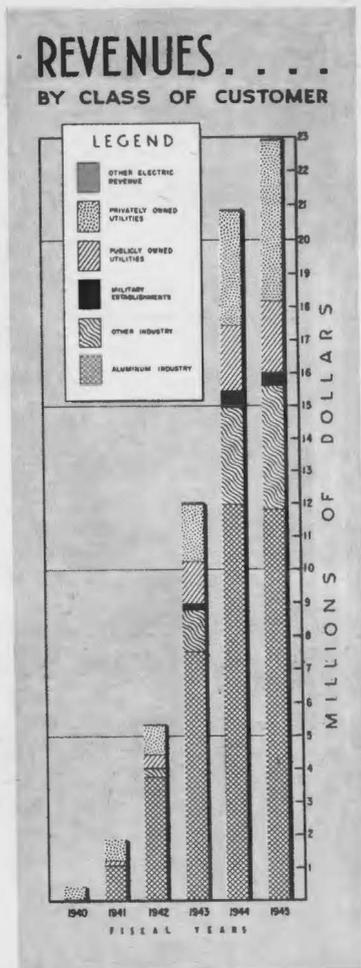
### TABLES

Table I	Revenues by Class of Customer.....	6
Table II	Electric Energy Sales by Class of Customer.....	7
Table III	Generation at Bonneville and Grand Coulee Dams 1938-1945.....	10
Table IV	Bonneville Power Administration Electric Energy Account, Fiscal Year Ending June 30, 1945.....	11
Table V	Relationship of System Energy Requirements and Maximum Demands of Principal Pacific Northwest Power Distributors to Power and Energy Obtained from the Bonneville Power Administration.....	19
Table VI	Columbia River Power System Condensed Statement of Combined Revenues and Expenses Allocated to Power.....	21
Table VII	Summary of Revenues and Repayment over 75-Year Repayment Period, Bonneville Power Administration, Bonneville Dam Project and Columbia Basin Project.....	35



*Bonneville Dam*

# REVENUES



Revenues from sales of Bonneville and Grand Coulee power to 79 wholesale customers hit a new peak for the fiscal year 1945 in the amount of \$22,990,018. Revenues by fiscal years from the beginning of power sales operations to date are shown in Table I.

Total revenues for all operations to June 30, 1945, were \$63,577,242. During the same period the Administration collected and deposited in the United States Treasury power revenue receipts totaling \$56,617,598 and general fund receipts of \$355,698. The difference between the total revenues and total receipts deposited with the United States Treasury is made up of accounts receivable and accrued unbilled revenues totaling \$5,934,704, for which payment has been authorized or made subsequent to the close of the fiscal year, and miscellaneous adjustments.

### Energy Deliveries

Energy deliveries from the Bonneville and Grand Coulee projects over the Administration's transmission system for the fiscal year 1945 amounted to 8,513,125,169 kilowatt-hours. Energy deliveries by fis-

TABLE I  
REVENUES BY CLASS OF CUSTOMER<sup>1</sup>  
Fiscal Years 1939-1945

Class of Customer	1940 and Prior	1941	1942	1943	1944	1945	Total to 6/30/45
<b>Industry:</b>							
Aluminum . . . . .	\$ . . . . .	\$1,075,809	\$3,770,767	\$ 7,514,122	\$11,989,735	\$11,838,156	\$36,188,589
Other Industry . . . . .	275	12,899	243,726	1,284,588	2,976,947	3,780,727	8,299,162
Military Establishments . . . . .		254	11,860	182,156	472,789	390,742	1,057,801
Publicly Owned Utilities . . . . .	12,347	119,659	411,146	1,230,740	1,994,750	2,141,635	5,910,277
Privately Owned Utilities . . . . .	413,922	686,882	882,820	1,767,866	3,401,042	4,752,021	11,904,553
Other Electric Revenue . . . . .		120	27,692	41,646	60,665	86,737	216,860
<b>Total Operating Revenue . . . . .</b>	<b>\$ 426,544</b>	<b>\$1,895,623</b>	<b>\$5,348,011</b>	<b>\$12,021,118</b>	<b>\$20,895,928</b>	<b>\$22,990,018</b>	<b>\$63,577,242</b>

<sup>1</sup> Includes sales under exchange agreements.

cal years from the beginning of operations to date are shown in Table II. Total energy deliveries for the period were 25,979,057,078 kilowatt-hours.

On the basis of energy deliveries, the Bonneville-Grand Coulee power system compares favorably with the Tennessee Valley Authority and was the third largest power system in the United States. Energy deliveries of the T.V.A. power system amounted to 10,314,745,700 kilowatt-hours during fiscal year 1945.

A maximum load occurred on the system in January 1945 (see chart) with a sixty-minute peak of 1,427,000 kilowatts, exceeding the rated generating capacity of 1,326,400 kilowatts by 7.6 per cent.

Generator and transmission system loads to meet war demands for energy were heavy throughout the fiscal year. In fact, throughout much of the period of peak war production the system operated under severe overloads. The line between Grand Coulee dam and Seattle, for instance, which has a normal capacity of 170,000 kilowatts, during certain periods delivered as high as 220,000 kilowatts.

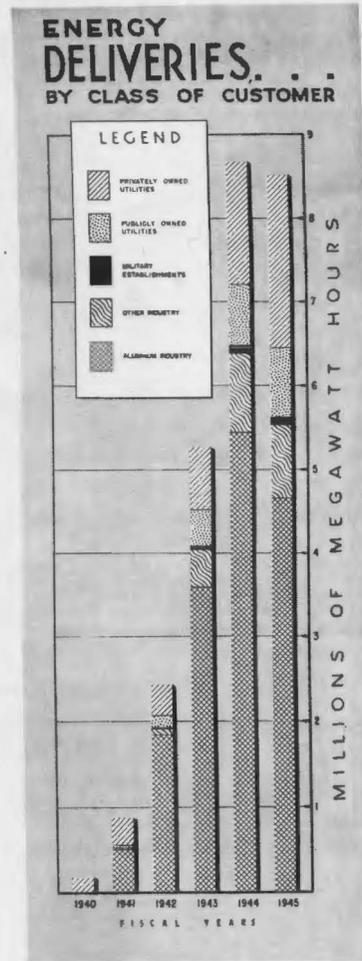


TABLE II  
ELECTRIC ENERGY SALES BY CLASS OF CUSTOMER<sup>1</sup>  
Fiscal Years 1939-1945

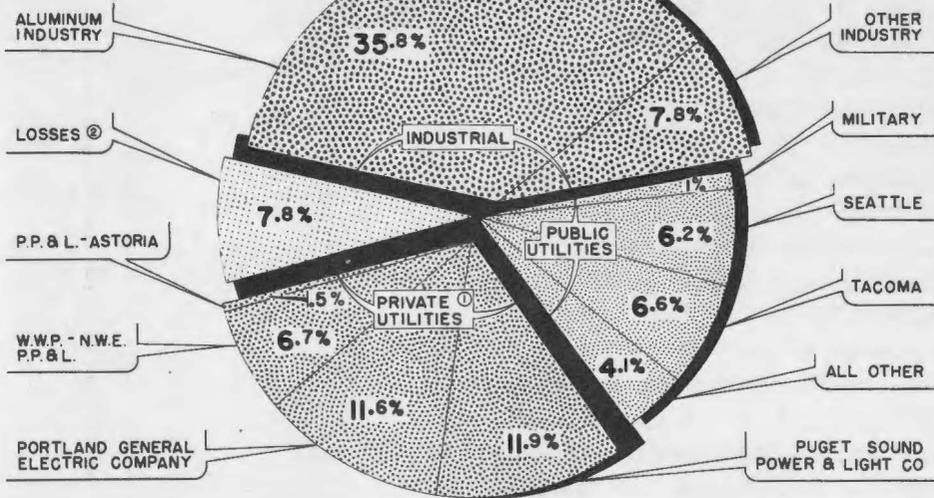
Class of Customer	1939 MWH	1940 MWH	1941 MWH	1942 MWH	1943 MWH	1944 MWH	1945 MWH	Total to 6/30/45 MWH
<b>Industry:</b>								
Aluminum .....			522,982	1,845,249	3,588,848	5,453,893	4,667,381	16,078,353
Other Industry .....		21	4,790	76,580	464,309	934,588	878,896	2,359,184
Military Establishments .....			18	2,575	42,887	87,889	85,828	219,197
Publicly Owned Utilities .....	7	3,101	32,134	142,491	435,289	727,642	823,817	2,164,481
Privately Owned Utilities .....	30,036	188,806	317,713	357,704	739,076	1,467,304	2,057,203	5,157,842
<b>Total .....</b>	<b>30,043</b>	<b>191,928</b>	<b>877,637</b>	<b>2,424,599</b>	<b>5,270,409</b>	<b>8,671,316</b>	<b>8,513,125</b>	<b>25,979,057</b>

<sup>1</sup> Includes sales under exchange agreements.

# DISPOSITION OF POWER DURING PEAK HOUR

BPA PEAK DEMAND:  
1,427,000 KW

4:00 TO 5:00 P.M.  
JANUARY 4, 1945



① Deliveries for own use

② Includes station use



*Grand Coulee Dam*

# **ENERGY PRODUCTION**

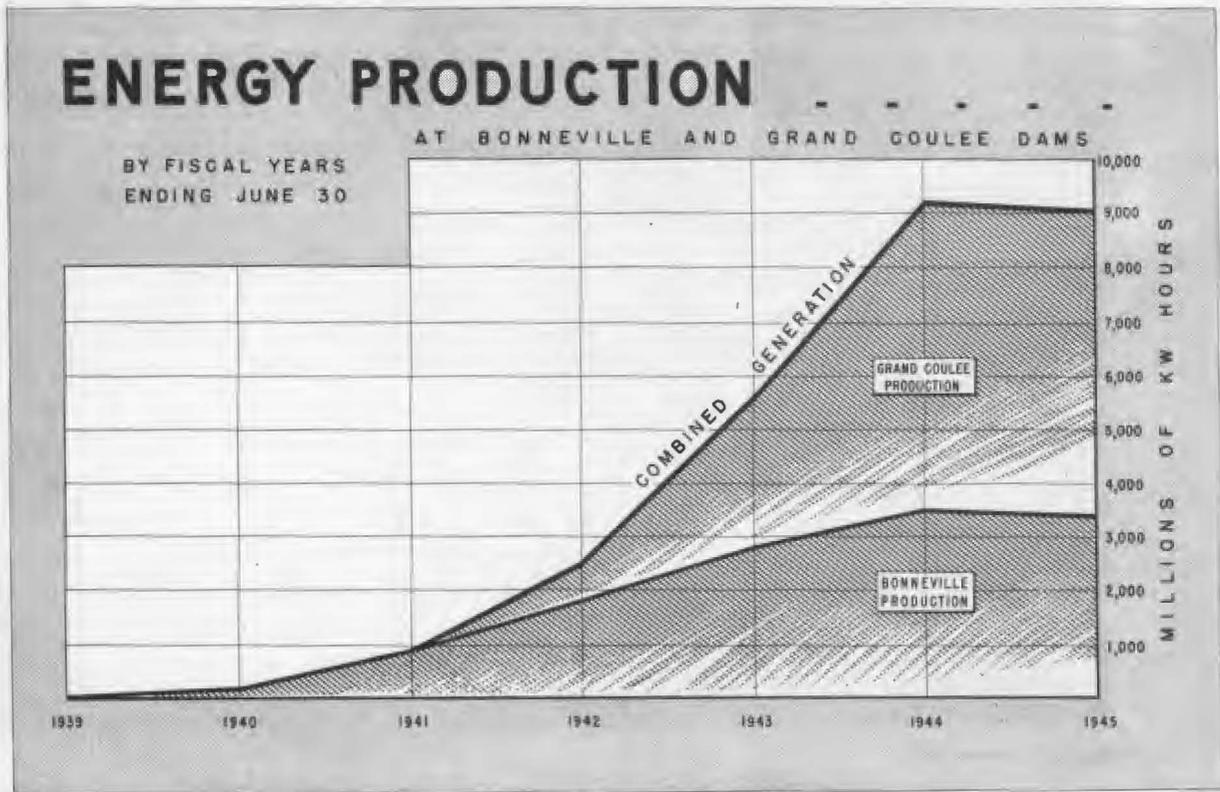
Energy production at the Bonneville and Grand Coulee plants for the fiscal years 1939 to 1945 is shown in Table III.

The difference between the energy production figures shown and the energy delivery figures previously summarized is accounted for by transmission system losses which averaged 6.2 per cent for the period, exchange sales and other factors set forth in the accompanying detailed energy account for fiscal year 1945 (Table IV). During fiscal year 1945, the Grand Coulee power plant became the greatest single power producer in the nation.

Installed capacity at the Bonneville and Grand Coulee plants was unchanged during the fiscal year 1945, remaining at a total of 1,326,400 kilowatts.

TABLE III  
**BONNEVILLE POWER ADMINISTRATION**  
**GENERATION AT BONNEVILLE AND GRAND COULEE DAMS**  
**1938-1945**

Fiscal Years Ending June 30	Bonneville Dam Generation KWH	Grand Coulee Dam Generation KWH	Total Generation for BPA KWH
1939	34,874,138	.....	34,874,138
1940	208,426,077	.....	208,426,077
1941	894,177,000	7,455,000	901,632,000
1942	1,807,309,000	741,844,249	2,549,153,249
1943	2,801,480,400	2,816,955,729	5,618,436,129
1944	3,488,873,992	5,750,949,460	9,239,823,452
1945	3,391,127,400	5,660,445,960	9,051,573,360
Total . . . .	12,626,268,007	14,977,650,398	27,603,918,405



# INSTALLED GENERATOR CAPACITY

## BONNEVILLE AND GRAND COULEE HYDROELECTRIC PLANTS

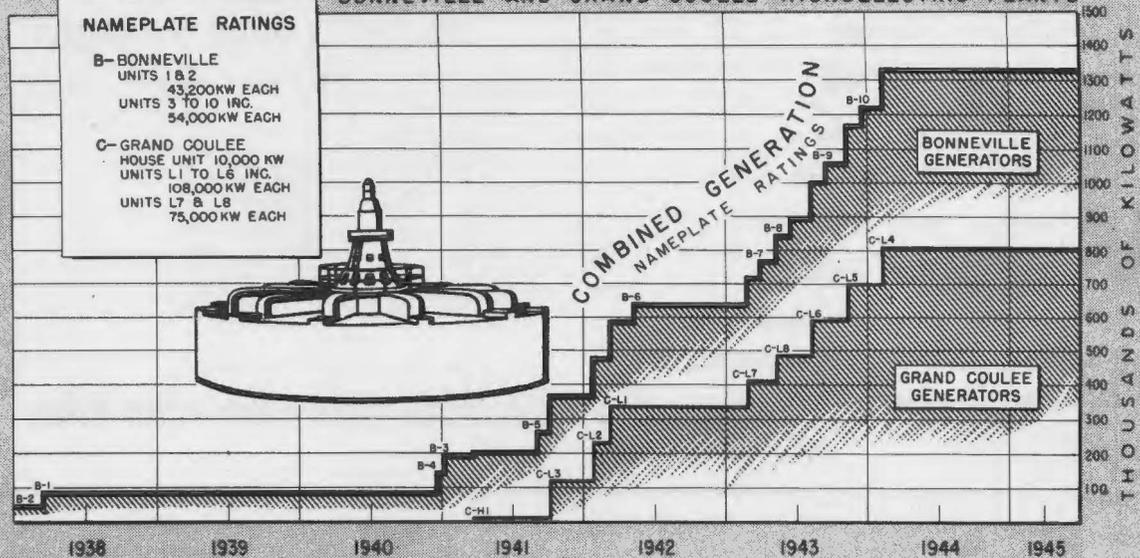


TABLE IV

### BONNEVILLE POWER ADMINISTRATION

#### ELECTRIC ENERGY ACCOUNT

Fiscal Year Ending June 30, 1945

#### Energy Received—KWH

Energy Generated for BPA:

Bonneville.....	3,391,127,400
Grand Coulee.....	5,660,445,960
<b>Total.....</b>	<b>9,051,573,360</b>

Power Purchased and

Interchanged In..... 206,348,942

**Total Received..... 9,257,922,302**

#### Energy Delivered—KWH

Sales.....	8,513,125,169
Power Interchanged Out.....	156,433,000
Used by Administration.....	11,132,079
<b>Total Delivered.....</b>	<b>8,680,690,248</b>

**Energy Losses..... 577,232,054**  
 % of Total Energy Received... 6.2

#### Maximum Demand on Bonneville and Grand Coulee Plants—KW

January 4, 1945, 4-5 p.m..... 1,427,000

#### Load Factor—

Total Generated for BPA..... 72.4%

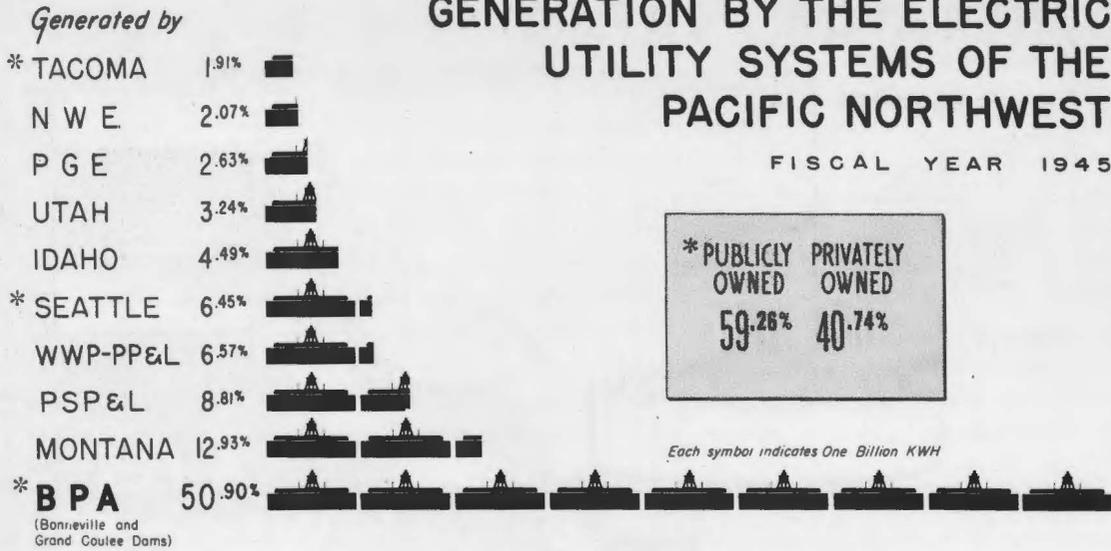
The accompanying chart shows growth of generating capacity (name plate rating) in the Bonneville and Grand Coulee plants from the fiscal year 1939 through the fiscal year 1945.

Energy production from the Bonneville and Grand Coulee plants exceeded the combined production of all other power production plants of utility systems in the Pacific Northwest region.

The combined output of the publicly-owned Bonneville-Grand Coulee power system and the Seattle and Tacoma systems was approximately 60 per cent of the total generation of the utilities in the Northwest states of Washington, Oregon, Idaho, Montana and Utah during the fiscal year 1945.

# GENERATION BY THE ELECTRIC UTILITY SYSTEMS OF THE PACIFIC NORTHWEST

FISCAL YEAR 1945





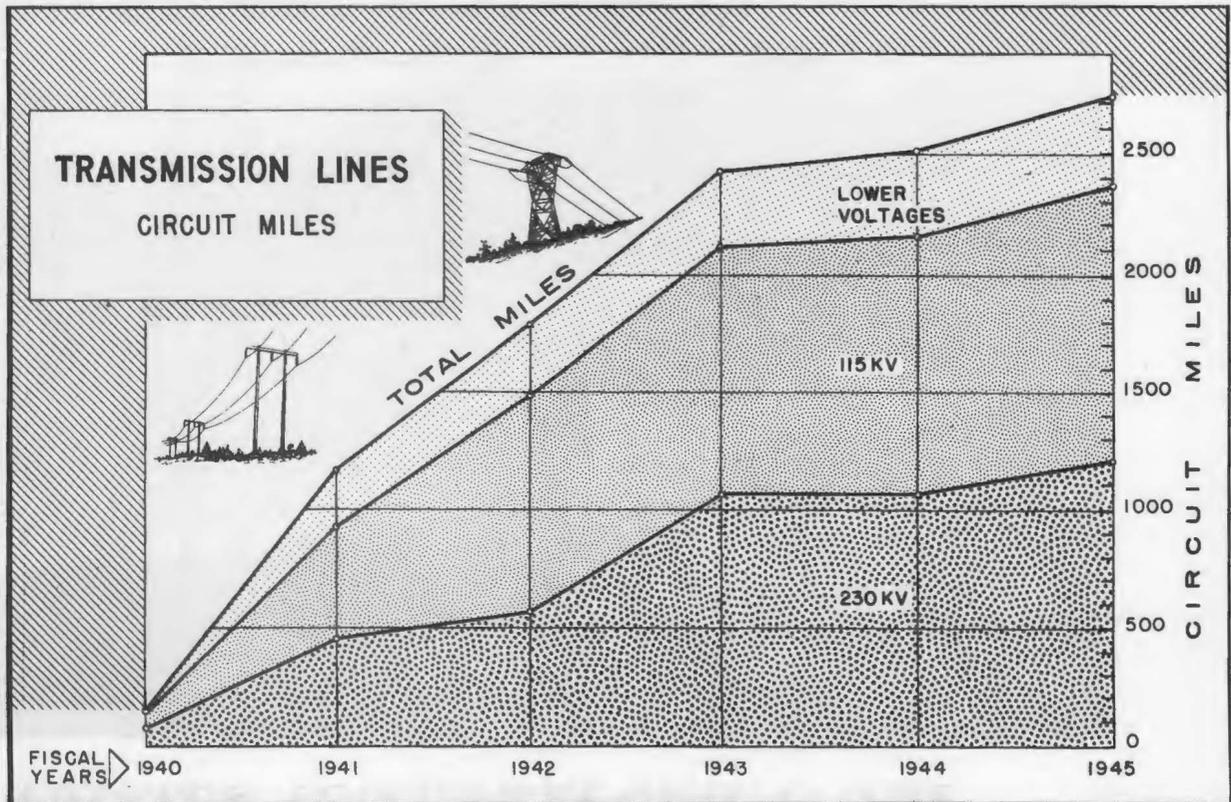
# **TRANSMISSION SYSTEM**

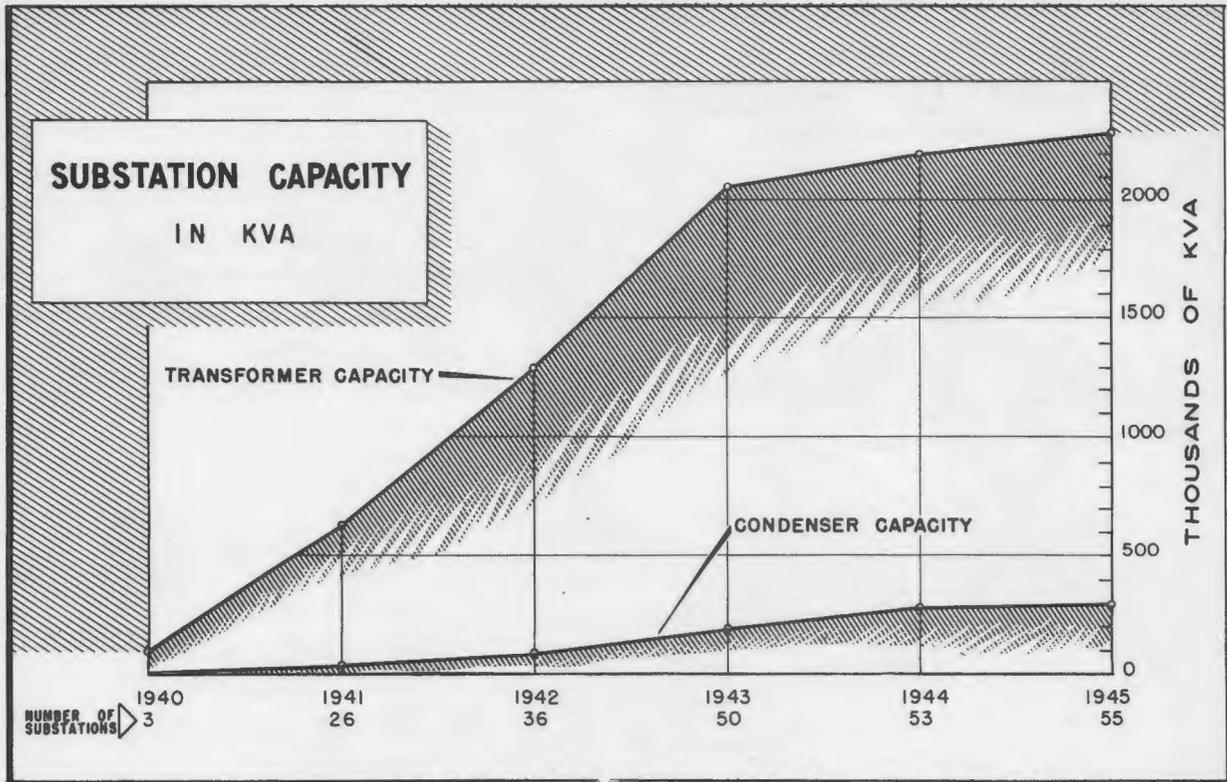


Delivery of large blocks of Bonneville-Grand Coulee power and coordination of energy production of all plants in the Pacific Northwest region was largely made possible by the basic network of high voltage transmission lines of the Bonneville Power Administration.

On June 30, 1945, this system consisted of 2,736.8 circuit miles of transmission lines and 55 substations. The map on page 29 shows the extent of the system at that time.

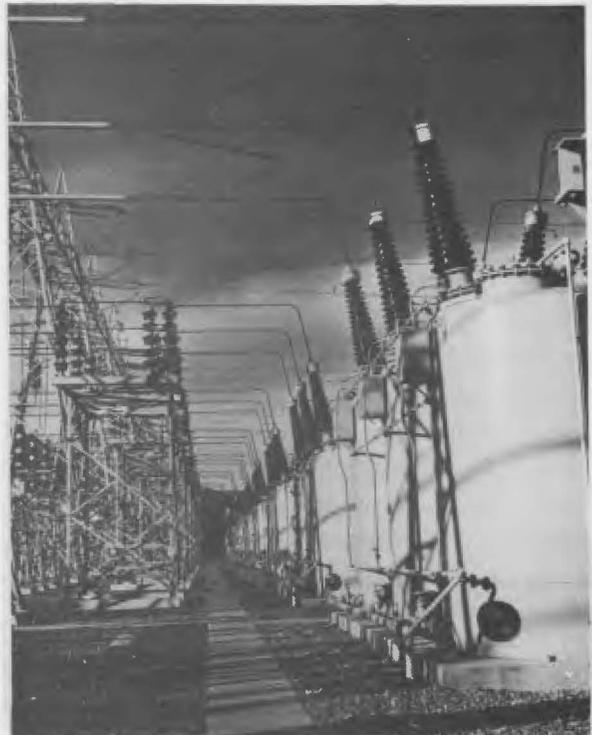
The backbone of the system was a basic 230-kv loop tying together the Bonneville and Grand Coulee plants with the major load centers in the Portland, Seattle and Spokane areas and interconnecting with other publicly and privately-owned utility systems in the region. The Administration's 115-kv and lower voltage lines



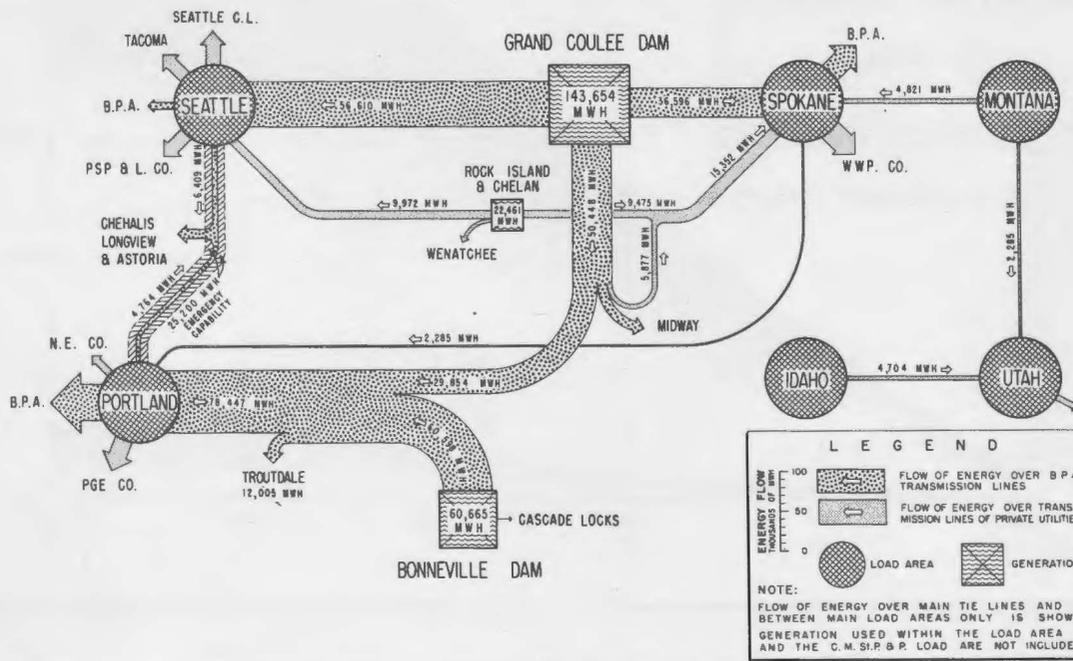


emanate from the 230-kv substations on this basic network.

The Bonneville Power Administration system on June 30, 1945, had 82 per cent of the region's 230-kv lines, which are the most significant from a standpoint of regional integration. The publicly-owned systems of the Bonneville Power Administration, Seattle, Tacoma and other public agencies had 100 per cent of the 230-kv lines with approximately 60 per cent of energy production. The preponderance of publicly-owned high-voltage transmission lines in the Northwest, particularly the Bonneville-Grand Coulee system, made possible the successful coordinated operation of all the power systems in the region. For all practical purposes, this was and is the now famous "Northwest Power Pool."



NORTHWEST POWER POOL  
**FLOW OF ENERGY**  
 PEAK WEEK ENDING JANUARY 4, 1945



Without these publicly-owned high-voltage lines there would have been no power pool of any significance, with due respect to the splendid contributions made by the privately-owned utility systems.

The three principles of coordinated operation were (1) meeting peak loads for war, (2) displacing fuel-fired steam and (3) conserving water in reservoirs. No curtailment was experienced, all loads were met, fuel was conserved. During the last war year, displacement of oil-fired

steam energy in the Seattle and Portland areas alone, through utilization of Bonneville-Grand Coulee power, conserved approximately 4,045,000 barrels of oil. Coordinated operation also made possible maximum use of water for all purposes.

The above chart shows graphically and to scale the flow of energy during the week of peak power deliveries ending June 4, 1945 between the interconnected systems of the public and private power agencies of the Northwest.



*The Hanford Project*

**POWER FOR WAR**



During fiscal year 1945, Northwest plants produced more than one-third of the nation's entire aluminum output. The 503,144,000 pounds of aluminum produced with the aid of Columbia river power in this 12-month period was sufficient to produce 10,000 B-29s or 150,000 fighter planes.



Bonneville-Grand Coulee power made a major contribution to development of the atomic bomb. Location of the Hanford Engineer Works in the Pacific Northwest was determined primarily by the availability of large quantities of hydro-electric power and pure, cold water from the Columbia River.



Large quantities of Bonneville-Grand Coulee power were used in Northwest production of ships for war. During fiscal year 1945 alone, 181 ships were built in the Pacific Northwest shipyards. These included 54 Victory cargo ships, 62 troop ships, 63 tankers, and 2 aircraft carriers.



Direct use of power from the Bonneville-Grand Coulee system by the United States Army in seven establishments amounted to 40,427,000 kilowatt-hours during fiscal year 1945.



Naval establishments used 45,401,000 kilowatt-hours of Bonneville-Grand Coulee power during fiscal year 1945.



War industries served directly by the Bonneville Power Administration during fiscal year 1945 accounted for an over-all consumption of 5,546,277,000 kilowatt-hours of Columbia river energy.

The tremendous increase in energy production and transmission facilities was used to provide power for war. During fiscal year 1945, over 65 per cent of the sales of the Administration went directly to industries producing war materials, including a number of new war plants constructed in the area by the federal government because large blocks of hydro-electric power could be made available from Bonneville and Grand Coulee. On June 30, 1945, Bonneville-Grand Coulee power was being supplied directly to 19 new industrial plants.

Bonneville-Grand Coulee power was helping all other major publicly and privately-owned utility systems in the region carry their own war loads. Table V shows the per cent of peak load and per cent of energy supplied from the Bonneville-Grand Coulee plants to other systems during the fiscal year 1945. Without Bonneville-Grand Coulee power these systems could not have carried their own loads. Thus the government's hydro plants carried the bulk of the war risk in power investment for war production.

# ENERGY DELIVERIES.... FISCAL YEAR ENDING JUNE 30, 1945

## DIRECT WAR LOAD

ALUMINUM



OTHER INDUSTRY\*



TOTAL **66.2%** OR 5,632,105 MWH

## NON-MILITARY

PRIVATE UTILITIES



PUBLIC UTILITIES



TOTAL **33.8%** OR 2,881,020 MWH

EACH SYMBOL REPRESENTS 2% OF TOTAL ENERGY DELIVERIES, OR 170,262 MWH  
 ● INCLUDES ARMY AND NAVY

TABLE V

### RELATIONSHIP OF SYSTEM ENERGY REQUIREMENTS AND MAXIMUM DEMANDS OF PRINCIPAL PACIFIC NORTHWEST POWER DISTRIBUTORS TO POWER AND ENERGY OBTAINED FROM THE BONNEVILLE POWER ADMINISTRATION

Year Ended June 30, 1945

PART A. ENERGY RATIOS	Distributor	Total Energy Requirements of Net System <sup>1</sup> Kwh	Energy Received from Bonneville Power Administration	
			Kwh	% of Total Requirements
	Portland General Electric Company .....	1,437,124,800	982,621,000	68.4%
	Puget Sound Power and Light Company .....	2,168,455,200	657,830,000	30.3
	Ebasco Companies <sup>2</sup> .....	2,174,486,400	353,600,000	16.3
	Pacific Power and Light Company—Astoria Division...	48,360,300	43,784,000	90.5
	Seattle City Light Department .....	1,022,102,400	148,959,000	14.6
	Tacoma Municipal Light Department .....	900,352,800	314,658,000	34.9
	Total .....	7,750,881,900	2,501,452,000	32.3

PART B. MAXIMUM DEMAND RATIOS	System Maximum Demand Kw	Maximum Demand on Bonneville Power Administration		
		Kw	Ratio to System Maximum Demand <sup>3</sup>	
	Portland General Electric Company .....	264,000	185,000	70.1%
	Puget Sound Power and Light Company .....	378,100	164,000	43.4
	Ebasco Companies <sup>2</sup> .....	367,000 <sup>4</sup>	142,000	38.7
	Pacific Power and Light Company—Astoria Division...	8,850	7,800	88.1
	Seattle City Light Department .....	204,000	117,000	57.4
	Tacoma Municipal Light Department .....	153,000	122,000	79.7

<sup>1</sup> Transfers of energy among members of power pool are netted; data are taken from weekly reports of coordinated operations—Northwest Interconnected Systems. Data for Astoria Division of Pacific Power and Light Company are taken from printometer readings and Company's annual report to the Federal Power Commission.

<sup>2</sup> Consists of the Washington Water Power Company, Northwestern Electric Company, and Main System of Pacific Power and Light Company.

<sup>3</sup> The maximum demand on BPA is non-coincidental with system maximum demand.

<sup>4</sup> Non-coincidental total of 114,600 for Northwestern Electric Company and 252,400 for the other two companies.

# FINANCIAL RETURNS



*Pacific Northwest Shipyard*

Revenues of the Bonneville Power Administration for fiscal year 1945 and for the period from commencement of operation to June 30, 1945, exceeded by a comfortable margin the cost of producing, transmitting and marketing power on a standard cost accounting basis. The costs include all expenses of operation and maintenance, interest at the rate of 2.5 per cent per annum, and depreciation. In addition, revenues were applied to advance amortization of plant investment (i.e., additional amortization in excess of that provided by depreciation expense reservations) and to irrigation subsidy in the form of payment of operating expenses allocated to irrigation.

The accompanying statement of revenues and expenses, Table VI, is a condensation of the more detailed statement appearing in the Auditors' Report, which is reproduced as part of this report. The statement shows that aggregate revenues of \$63,577,242.20 for the period from commencement of operation to June 30, 1945 have covered all costs, including operation, maintenance, depreciation and interest at 2.5 per cent, chargeable to power with a surplus of \$11,572,052.69.

Of this amount, \$531,632.50 was used to cover expenses at Grand Coulee Dam allocated to irrigation (see Note 6, Schedule 3, of Auditors' Report); and \$3,522,622.94 was applied to advance amortization (i.e., in addition to the \$10,361,155.21 provided for depreciation) of power investment, leaving net unapplied revenues of \$7,517,797.25 as of June 30, 1945.

The source of the revenue dollar and its disposition are indicated in the accompanying pie charts based on 1945 data. Aluminum and other war industries accounted for a substantial portion of revenues. Some of the aluminum and other industrial plants were in operation prior to the war and will continue in operation, thus forming an important base for a permanent power market.

In 1945 approximately 37 cents out of each revenue dollar were available as surplus net revenues. This surplus, together with that anticipated in fiscal year 1946, will be drawn upon to carry operations over the postwar revenue recession resulting from the loss of temporary war loads. It is estimated that revenues will return to the 1945 level about 1950.

TABLE VI

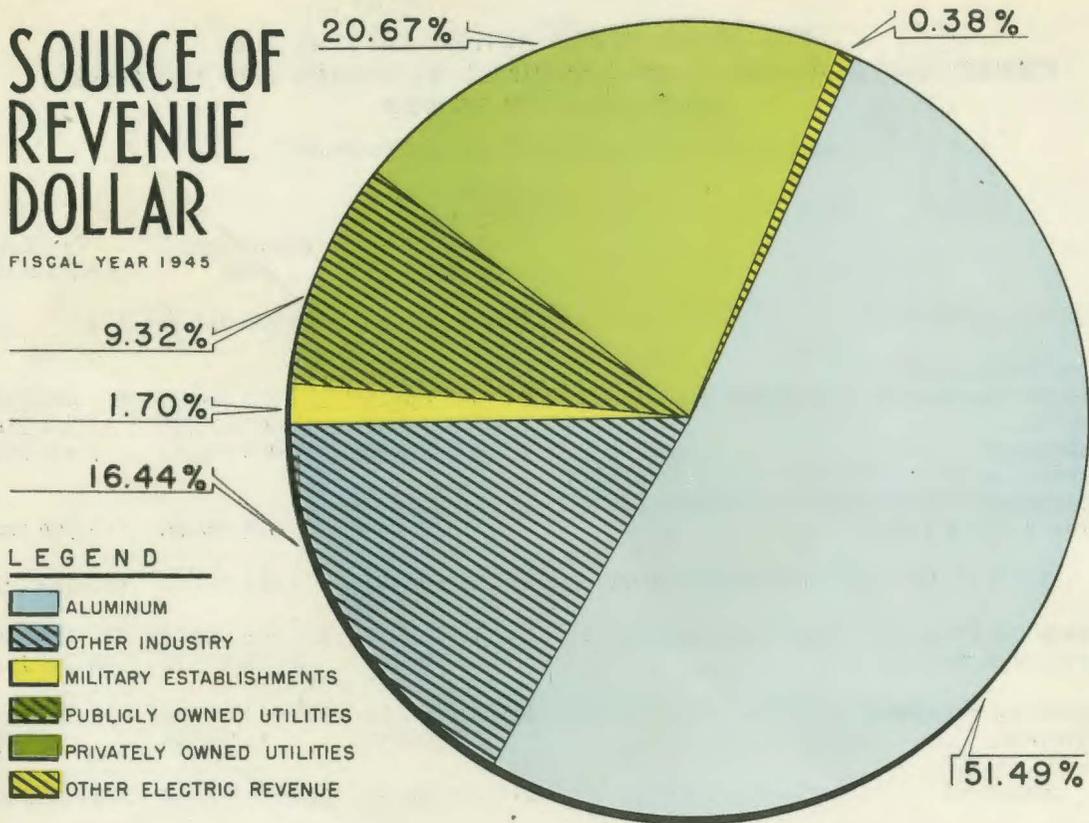
**COLUMBIA RIVER POWER SYSTEM  
CONDENSED STATEMENT OF COMBINED REVENUES AND EXPENSES  
ALLOCATED TO POWER**

(See Auditors' Report for Statement in Detail)

	Period from Beginning of Operations to June 30, 1944	Fiscal Year 1945	Total to June 30, 1945
Total Operating Revenues.....	\$40,587,223.85	\$22,990,018.35	\$63,577,242.20
Revenue Deductions:			
Power Purchased from non-federal sources.....	\$ 697,136.20	\$ 207,094.91	\$ 904,231.11
Operation.....	9,753,080.37	3,807,130.07	13,560,210.44
Maintenance.....	1,896,001.40	999,059.77	2,895,061.17
Provision for rental, installation and removal of generating facilities leased from Central Valley Project (Shasta Dam).....	1,216,500.00	973,200.00	2,189,700.00
Total Deductions before Depreciation.....	\$13,562,717.97	\$ 5,986,484.75	\$19,549,202.72
Net Operating Revenues before Depreciation.....	\$27,024,505.88	\$17,003,533.60	\$44,028,039.48
Depreciation Expense.....	7,321,447.96	3,039,707.25	10,361,155.21
Net Operating Revenues.....	\$19,703,057.92	\$13,963,826.35	\$33,666,884.27
Other Income.....	8,604.92	13,361.44	21,966.36
Sub-total.....	\$19,711,662.84	\$13,977,187.79	\$33,688,850.63
Interest and Other Deductions:			
Interest Expense, Net.....	\$16,118,261.45	\$ 5,338,346.41	\$21,456,607.86
Miscellaneous Income Deductions.....	659,985.10	204.98	660,190.08
Total Interest and Other Deductions.....	\$16,778,246.55	\$ 5,338,551.39	\$22,116,797.94
Net Revenues from Power Operations.....	\$ 2,933,416.29	\$ 8,638,636.40	\$11,572,052.69
Net Revenues Applied to Repayment of Expenses Allocated to Irrigation at Columbia Basin Project	354,322.23	177,310.27	531,632.50
Combined Surplus Net Revenues.....	\$ 2,579,094.06	\$ 8,461,326.13	\$11,040,420.19
Amounts Applied to Amortization in Addition to Provisions for Depreciation:			
Bonneville Dam Project.....			\$ 909,899.44
Columbia Basin Project.....			2,571,421.24
Bonneville Power Administration.....			41,302.26
Total Amounts Applied to Advance Amortization.....			\$ 3,522,622.94
Unapplied Net Revenues as of June 30, 1945.....			\$ 7,517,797.25

# SOURCE OF REVENUE DOLLAR

FISCAL YEAR 1945



*Footnotes on Disposition of the Revenue Dollar for Fiscal Year 1945 —*

**GENERATION EXPENSE:** *Includes the expenses at Bonneville and Grand Coulee dams for operation, maintenance and general administration allocated to power operations.*

**PURCHASED POWER:** *Cost of power obtained by the Bonneville Power Administration from non-federal sources.*

**TRANSMISSION EXPENSE:** *Includes all expenses of the Bonneville Power Administration for operation, maintenance, marketing and administration.*

## **INTEREST AND OTHER DEDUCTIONS NET:**

*Includes interest at 2½% on the investment at the dams allocated to power and the investment in the transmission system, plus miscellaneous income deduction items, less a nominal amount of miscellaneous income.*

**DEPRECIATION:** *Depreciation of the property of Bonneville Power Administration, consisting principally of transmission plant, has been computed on the straight-line method, based upon the estimated service lives of the various classes of property as determined by engineering studies; such studies contemplate the maximum economic life of the land rights and clearing costs to be one hundred years.*

# DISPOSITION OF REVENUE DOLLAR

FISCAL YEAR 1945

2.24% GRAND COULEE DAM

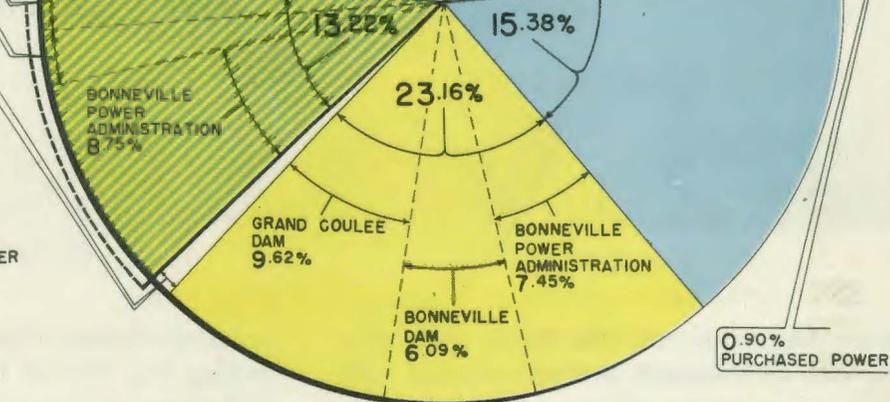
2.23% BONNEVILLE DAM

0.77% IRRIGATION EXPENSE ABSORBED BY POWER REVENUES

## LEGEND

-  TRANSMISSION EXPENSE
-  GENERATION EXPENSE
-  INTEREST AND OTHER DEDUCTIONS, NET
-  SURPLUS
-  DEPRECIATION

AVAILABLE FOR REPAYMENT OF FEDERAL INVESTMENT.. 50.02%



Depreciation of the power facilities at the two dam projects has been computed on the compound interest method using an interest factor of  $2\frac{1}{2}\%$  and based upon the estimated service lives of the various classes of property as determined by engineering studies, except that no service life has been estimated longer than one hundred years. Depreciation of general plant at Grand Coulee Dam (which is charged to clearing accounts and redistributed to construction and other accounts) has been computed substantially on a straight-line method based upon the estimated service lives of the various classes of plant.

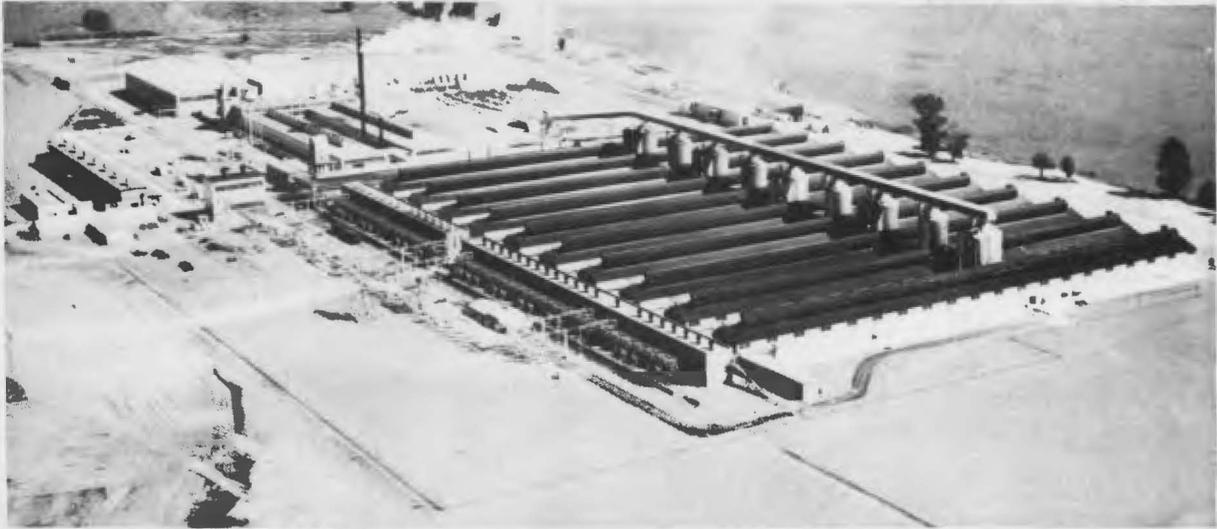
Composite reserves are maintained for each class of property and the cost of

property retired (less net salvage applicable thereto) is charged to such reserves.

**SURPLUS:** Surplus net revenues, together with the amount reserved for depreciation expense, are available for repayment of the federal investment.

**IRRIGATION EXPENSE ABSORBED BY POWER REVENUES:** Consistent with the allocation of construction costs, a portion of the operating and maintenance expenses of the Grand Coulee dam has been allocated to irrigation but by agreement is being repaid currently from power revenues, although the amount of such expenses allocated to irrigation properly could have been capitalized as part of the construction period costs of the irrigation works.

# RECONVERSION



*Pacific Northwest Aluminum Plant*

Since the close of the fiscal year the war has terminated and substantial cut-backs have been made in war production and use of power for war plants. As of June 30, 1945, 164,000 kilowatts had already been cut back. During the last six months of the calendar year 1945, additional 416,000 kilowatts were cut back. During this reconversion and temporary power surplus period, the two Shasta generators are being removed from the Grand Coulee project and are being returned to the Shasta dam. This will reduce the name plate rating capability of the combined Bonneville-Grand Coulee plants to 1,176,400 kilowatts. Other loads in the area have increased, and there is a current temporary surplus of power to be remarketed in the amount of approximately 500,000 kilowatts.

Studies of normal load growth for the region indicate that the power surplus is temporary and the Administration has requested installation of three additional

units at Grand Coulee to be completed during the fall of 1947 or early in 1948 and three more units in 1949. Peak load growth on Northwest distribution systems is exceeding expectations.

Despite surplus of power at the dams, substantial shortages exist in the outlying areas requiring an immediate expansion of transmission facilities. It is in the government's interest to take full advantage of the situation by building lines into the power shortage areas. These lines were held up during the war but the markets exist and actual returns to the government can be made by building these lines.

It appears that operating results will be in the black during the reconversion period, with the help of the \$7½ million net surplus as of June 30, 1945, and the estimated surplus of \$5,800,000 for fiscal year 1946. While revenues are expected to dip to \$13,800,000 by fiscal year 1948, full recovery is anticipated by 1950.



*Bonneville Dam Generator Room*

**POWER FOR PEACE**

Recovery of war loads for Bonneville and Grand Coulee projects and marketing of power from additional projects will depend upon an aggressive power marketing program by the Bonneville Power Administration which will take full advantage of the natural resources of the region and the influx of population, both during the war and during the reconversion period. It will also depend upon an aggressive retail power marketing program by distribution agencies, both publicly and privately-owned.

For purposes of showing plans for repayment of operating and construction costs for the Bonneville-Grand Coulee power system, recovery of loads and financial returns have been conservatively estimated. In order to realize the full potentials of Pacific Northwest development during the reconversion and postwar periods, the Administration has recommended a region-wide power development



*Snake River Power Dam Site*

program based upon new multiple-purpose dam projects recently authorized or pending authorization by the Congress.

These projects are elements of an overall basic development program which was recommended in 1943 by the Northwest States Development Association composed of the governors of the five Columbia basin states. The principal multiple-purpose physical works included in this program and their present status are as follows:

Hungry Horse dam in western Montana for power, irrigation and flood control; authorized by Congress, June 5, 1944; Bureau of Reclamation designated construction agency and Bonneville Power Administration designated marketing agent, by order of the Secretary of the Interior.

Cabinet Gorge project, to be located just above Lake Pend Oreille in northern Idaho, for power and irrigation purposes; project not yet authorized.

Grand Coulee dam; authorized by Rivers and Harbors Act of 1935 and reauthorized by Columbia Basin Project Act; constructed and operated by Bureau of Reclamation; construction of dam and part of powerhouse facilities completed; Bonneville Power Administration named marketing agent by Executive Order of the President.

Foster Creek project, not yet authorized; recommended by the Corps of Engineers (report under review).

Lower Snake river projects, for power and navigation; authorized by the Rivers and Harbors Act of 1945, with the Corps of Engineers as construction agency and the Bonneville Power Administration named marketing agent under the terms of the Bonneville Act.

McNary (Umatilla) dam project, for navigation, irrigation and power, authorized in Rivers and Harbors Act of 1945 with Corps of Engineers as construction agency and Bonneville Power Administration named as marketing agent under terms of the Bonneville Act.

Willamette valley projects, authorized by the Flood Control Acts of 1938 and 1944, with Corps of Engineers as construction agency and Bonneville Power Administration named as marketing agent by the Secretary of the Interior.

Additional smaller projects in the upper Snake river basin, as well as other parts of the Columbia basin, are incorporated in the program. These are primarily for irrigation and navigation purposes with some power features.

Plans of the Bonneville Power Administration for future construction of transmission lines and facilities take into account these developments. Low-cost hydroelectric power generated at these multiple-purpose projects in addition to providing the means for repayment of the public investment in the program, has a principal peacetime use as a tool for the development of new taxable wealth.

The over-all development program, including the power transmission program, will provide substantial opportunities for employment and business enterprise, both in construction and in subsequent operation of facilities, as well as in the agricultural, industrial and service enterprises they will induce. Employment in construction and related activities will depend upon the rate of progress which is made in the development program.

The basic program envisaged for the early postwar period should provide living for 400,000 new people in the Pacific



*Bonneville 115-k.v. Line*

Northwest. This immediate program, however, would develop the region's basic resources only fractionally. Continued over 20 years or so, the developmental program should provide a sound occupational foundation for 2,000,000 new people. The Pacific Northwest, encompassing 13 per cent of the total land area of the United States and only 3 per cent of the population, can readily absorb this increase. The valuable land and natural resources of the region, coupled with 40 per cent of the undeveloped hydroelectric power in the nation, can provide the means for a simultaneous rise in living standards.

### **Local Distribution**

The federal government's Columbia river power program is for the wholesale transmission and disposition of power. Local distribution to retail customers is a function for local publicly-owned, privately-owned or cooperative distribution agencies, as the local people themselves may elect.

An essential feature of the developmental program for the Columbia river is expansion of power markets, based on low rates to the ultimate consumers, in order that financial returns from power sales will support the heavy investment involved in the developmental program and at the same time expanded uses of power will contribute to jobs and higher living standards.

At the end of the fiscal year 1945, the Administration was selling power to 42 publicly or cooperatively-owned distributors. All but three of these distributors purchased power under firm contracts with the Administration. Included were 20 power cooperatives, 10 municipalities and 12 public utility or peoples' utility districts. All of the publicly-owned power distribution agencies sell power at cost to their retail customers. As their sales per customer increase, the distributors are able to reduce rates progressively. The Bonneville Power Administration has established standard resale rates which are objective rates. By June 30, 1945, four of the publicly-owned distribution agencies had rates below the Bonneville standard and three more had equaled the objective rates for these agencies.

The Bonneville residential standard rate begins with a rate of 3¢ per kilowatt-hour for the first 50 kilowatt-hours, 2¢ per kilowatt-hour for the next 50, 1¢ per kilowatt-hour for the next 200,  $\frac{1}{2}$ ¢ per kilowatt-hour for the next 900 and  $\frac{3}{4}$ ¢ per kilowatt-hour for all energy taken above 1200 kilowatt-hours. An indication of the comparative level of this rate is the fact that the average rate for all energy sold in the United States for residential use in 1944 was  $3\frac{1}{2}$ ¢ per kilowatt-hour. This contrasts with an average res-

idential rate of  $1\frac{1}{2}$ ¢ per kilowatt-hour for all power sold by public agencies purchasing all or part of their energy from the Bonneville Power Administration in the fiscal year 1945.

The Administration is conscientiously following the mandate of Congress to make power available to the largest number of people at the lowest possible cost. The establishment of wholesale rates to public power distributors, which enable them to resell electric energy as widely as possible, is in line with this objective. The objective cannot be reached if small public agencies are required to build expensive transmission lines to the federal multiple-purpose hydroelectric projects or if power is sold in the region only by private monopolies charging high rates.

Major privately-owned electric utility companies receiving substantial amounts of low-cost Columbia river power from the Bonneville Power Administration earned in calendar year 1944 from 7.05 per cent to 9.02 per cent on the original cost of their electric utility plant, less depreciation reserves per books. The five largest companies had aggregate earnings of \$2,980,000 in excess of a 6 per cent return and \$5,430,000 in excess of a 5 per cent return.

The rates of these major companies are generally at a level of from 15 per cent to 40 per cent higher than the Bonneville standard resale rates.

In fiscal year 1945 these major privately-owned utility companies paid an average of 2.45 mills per kilowatt-hour for energy purchased from the Bonneville Power Administration. For the same period public agencies paid an average of 2.60 mills per kilowatt-hour for their purchases of Bonneville-Grand Coulee energy.

Pacific Ocean

WASHINGTON

MONTANA

IDAHO

OREGON

CALIFORNIA

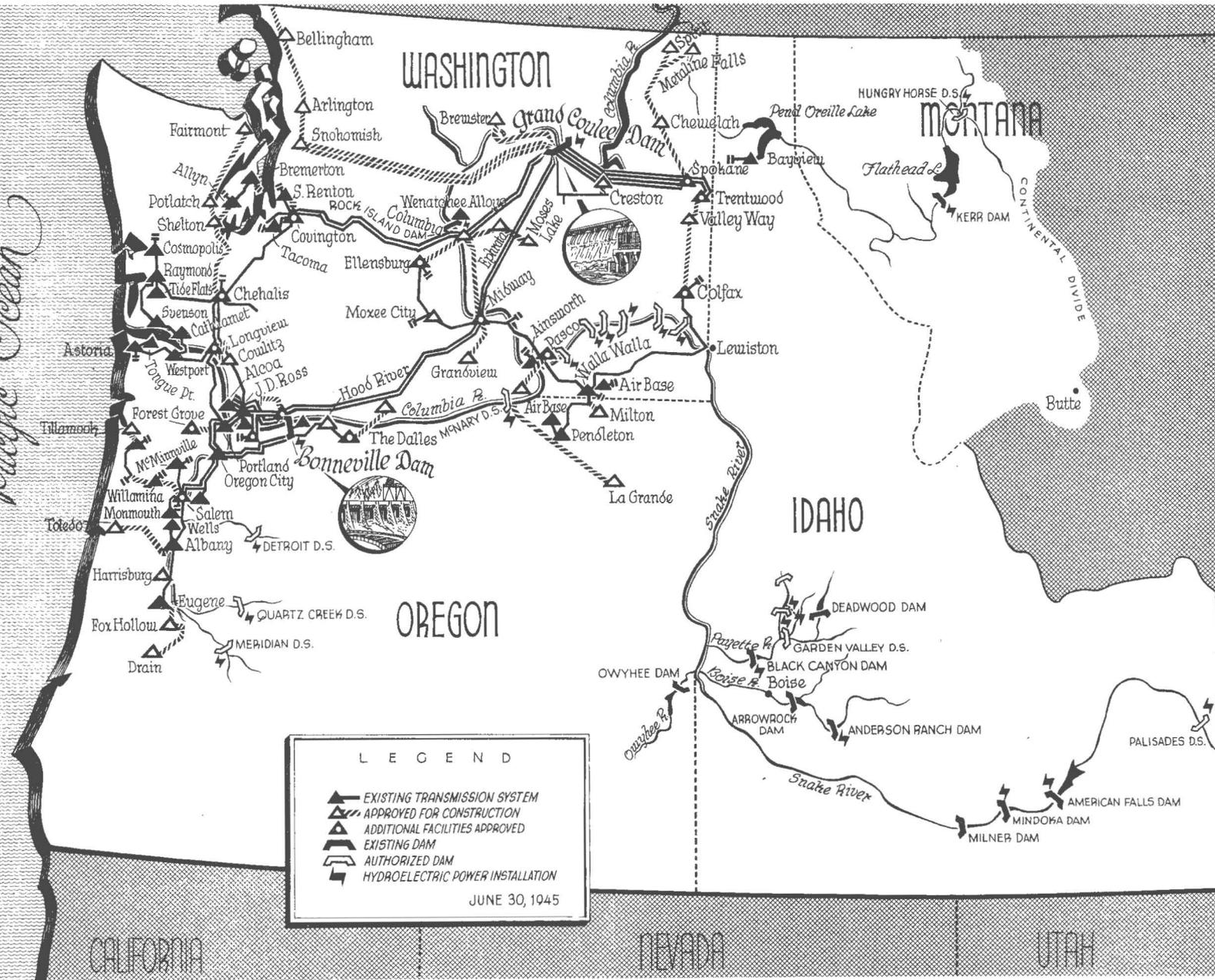
NEVADA

UTAH

LEGEND

- ▲ EXISTING TRANSMISSION SYSTEM
- ▲ APPROVED FOR CONSTRUCTION
- ▲ ADDITIONAL FACILITIES APPROVED
- ▲ EXISTING DAM
- ▲ AUTHORIZED DAM
- ▲ HYDROELECTRIC POWER INSTALLATION

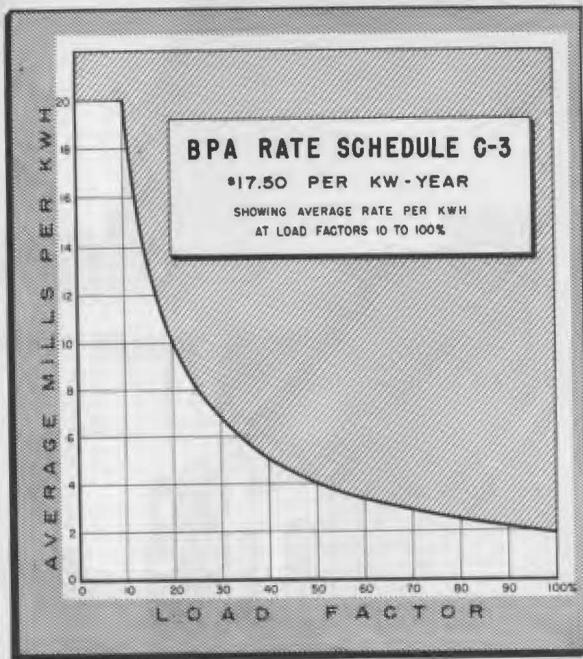
JUNE 30, 1945





*Control Room J. D. Ross Substation*

**WHOLESALE RATES**



The basic rate structure for Bonneville-Grand Coulee power is the \$17.50 per kilowatt-year rate. Several optional rates are available but are based fundamentally on the \$17.50 rate level. Attacks on the \$17.50 rate level are predicated upon misconceptions regarding its financial feasibility. This rate level is fundamentally sound and operating results to date, together with repayment programs for the future, demonstrate that it is founded on sound economics and finance.

The rate of \$17.50 per kilowatt-year is officially designated as the C-3 rate. The accompanying chart indicates the average cost per kilowatt-hour for purchasers buying power under this rate level at various load factors. Thus, if the purchaser uses the same amount of power at all times, twenty-four hours a day and three hundred and sixty-five days a year, his average cost under this rate is two mills per kilowatt-hour. If he uses each

kilowatt for only half of the time, however, his average cost rises to four mills per kilowatt-hour. Most of the industries where power is an important element of the cost of operation are so-called "continuous process" industries which use large blocks of power almost constantly. Their load factors are usually higher than 80 per cent. For these industries, the average cost of power per kilowatt-hour would vary from about 2.5 mills per kilowatt-hour down to two mills per kilowatt-hour.

Other rate schedules have been devised to meet the needs of industries with lower load factors and retail power distributors such as private and public utilities. If these distributors achieve a load factor of from 50 to 60 per cent, the average cost of power may vary from 3.2 mills to as high as 4.5 mills per kilowatt-hour, depending upon the rate schedule and the particular load factor achieved.

The basic \$17.50 per kilowatt-year rate (C-3) is the lowest wholesale power rate available anywhere in the United States. It is particularly effective in encouraging growth in the Pacific Northwest of industries using electricity at a high load factor and in such quantities as to make power an important item of expense in their cost of manufacture. These industries are primarily in the metallurgical and chemical fields. This low rate is possible only because of the tremendous power resources of the Columbia river.

Stream flow of the Columbia basin river system will supply sufficient water—if properly controlled—to do the irrigation, navigation, flood control and power jobs without conflict between these varying interests. This is the distinguishing feature of the great Columbia watershed.



*Switch Yard J. D. Ross Substation*

# **COST ALLOCATION AND REPAYMENT**

Pertinent statutes (the Bonneville Project Act and Federal Reclamation Law) require that the construction costs of the Bonneville dam and the Columbia basin projects be allocated to the purposes served and, except for the portion allocated to traditionally non-reimbursable purposes, such as flood control and navigation, that the costs be returned over a reasonable period of years to the United States Treasury. The cost allocations have now been made by the Federal Power Commission for the Bonneville dam and by the Secretary of the Interior for the Columbia basin project, as provided by the applicable laws. The investment in the Bonneville-Grand Coulee transmission system is for power purposes and is allocated entirely to power.

In very brief summary, one-half of the joint facilities costs and all the specific power facilities costs at the Bonneville dam are allocated to power. For the Columbia basin project the joint facilities costs, exclusive of \$1,000,000 for flood control and navigation, are allocated in these ratios: 44 per cent to irrigation, and 56 per cent to commercial power including downstream river regulation. This latter allocation is sub-divided as follows: 31.85 per cent to commercial power — including 3.85 per cent for river regulation at the Bonneville Dam — and 24.15 per cent to other river regulation, the latter to be reallocated to commercial power when and as additional downstream hydroelectric projects are developed. The power facilities at Grand Coulee dam (Columbia basin project) are at present all allocated to commercial power, but ultimately 7.5 per cent will be allocated to irrigation pumping when power facilities for that purpose are installed.

The cost allocations together with (1) the independent audit of the accounts to June 30, 1945, and (2) agreements entered into by the Bonneville Power Administration with the Corps of Engineers and the Bureau of Reclamation covering the operation and the financial obligations of the power phases of the two dams, form the basis for a comprehensive report, issued concurrently with this report, on the repayment of the reimbursable construction costs of the Bonneville dam project, the Columbia basin project and the transmission system required to market surplus power available at the two dams. The report indicates that the Bonneville Power Administration's basic wholesale power rate of \$17.50 per kilowatt-year is adequate to repay with interest, in addition to operating expenses, all construction costs, including replacements, allocable to power within a fifty-year repayment period, and to repay in addition a substantial portion—approximately 65 per cent—of the construction costs of the Columbia basin project allocated to irrigation and all construction costs allocated to river regulation. These over-all results are illustrated by the accompanying pie charts and by the summary data in Table VII for the 75-year repayment period.

It is charged that the Bonneville \$17.50 per kilowatt-year rate structure does not include taxes. This is true. It does include costs which are not included in a private utility company operation, namely the repayment of irrigation construction cost in the amount of \$228,404,676 over the repayment period in addition to the operating costs allocable to irrigation but to be returned from power revenues. These costs, averaging more than \$3 million per

TABLE VII

## SUMMARY OF REVENUES AND REPAYMENTS OVER 75-YEAR REPAYMENT PERIOD

**BONNEVILLE POWER ADMINISTRATION  
BONNEVILLE DAM PROJECT AND COLUMBIA BASIN PROJECT**

Power Sales, Bonneville Power Administration.....		\$1,863,223,279
Miscellaneous Income, Columbia Basin Project.....		744,990
Payments by Water Users, Columbia Basin Project:		
For construction costs of irrigation works.....	\$ 87,465,000	
For irrigation pumping power.....	50,500,000	137,965,000
<b>Total Revenues Available for Repayment of Expenses, Interest and Construction Costs.....</b>		<b>2,001,933,269</b>
<b>Amounts Required for Bonneville Dam Project:</b>		
Operating Expenses.....	\$ 29,064,256	
Interest at 2.5 per cent on Construction Costs Allocated to Power <sup>1</sup> ..	44,584,769	
Amortization of Replacements.....	28,261,677	
Amortization of Construction Costs.....	58,708,309	160,619,011
<b>Amounts Required for Columbia Basin Project:</b>		
Operating Expenses, Commercial Power.....	\$141,738,175	
Operating Expenses, Irrigation Pumping Power.....	10,190,476	
Interest at 3 per cent on Construction Costs Allocated to Commercial Power <sup>1</sup> .....	65,850,977	
Amortization of Replacements, Commercial Power.....	68,057,588	
Amortization of Replacements, Irrigation Pumping Power.....	4,862,412	
Amortization of Construction Costs Allocated to Commercial Power.....	118,622,815	
Amortization of Construction Costs Allocated to River Regulation..	35,519,577	
Amortization of Construction Costs Allocated to Irrigation.....	351,316,788	
Surplus—Amount of Revenues Applied in Excess of Requirements..	3,187,372	799,346,180
<b>Amounts Required for Bonneville-Grand Coulee Transmission System:</b>		
Operating Expenses.....	\$366,341,153	
Cost of Power Purchased from Non-Federal Sources.....	1,604,231	
Interest at 2.5 per cent <sup>1</sup> .....	108,013,200	
Amortization of Replacements.....	237,046,800	
Amortization of Construction Costs.....	168,332,747	881,338,131
<b>Total Deductions.....</b>		<b>\$1,841,303,322</b>
<b>Surplus Revenues.....</b>		<b>\$ 160,629,947</b>

<sup>1</sup> Interest for Bonneville Dam Project and Bonneville-Grand Coulee Transmission System is computed at 2.5 per cent, inasmuch as this rate is the approximate average cost of money on long-term U. S. Treasury bonds issued during the eleven years ended June 30, 1943. This accords with findings of the Federal Power Commission. Interest at 2.5 per cent is also included in the power cost accounts of the Columbia Basin Project as reported in Table VI and the accompanying Auditors' Report, but in the payout analysis, which is summarized in this Table VII, provision is made, pursuant to an agreement with the Bureau of Reclamation, for earmarking in a special account an amount equal to 3 per cent on unamortized construction costs although the law does not require interest on the Columbia Basin Project in addition to the irrigation subsidy to be met from power revenues.

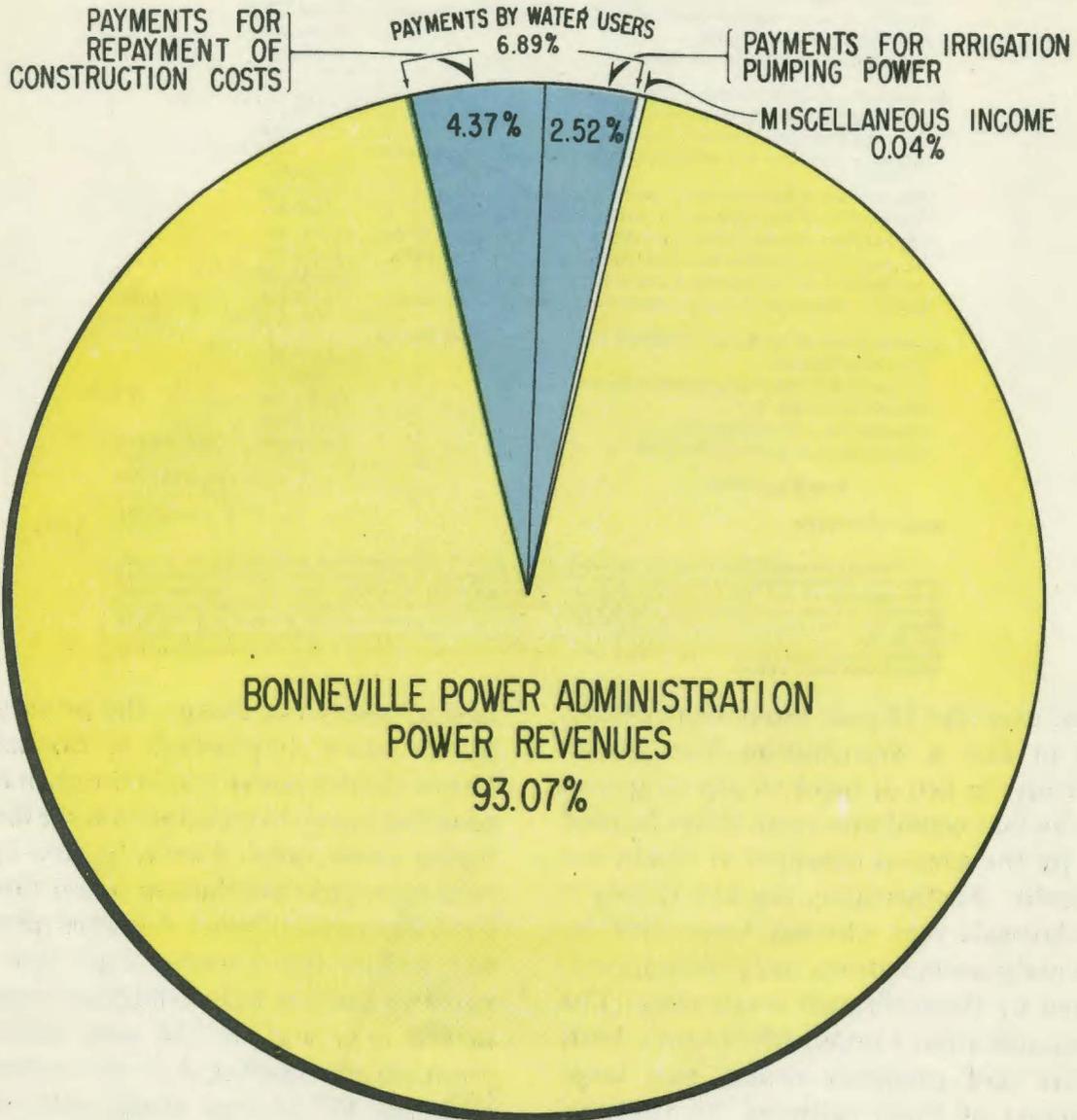
year, over the 75-year repayment period, are in fact a contribution from power revenues in lieu of taxes to pay irrigation works that would otherwise either be paid for by the general taxpayer or would not be built. Furthermore, the \$17.50 rate is a wholesale rate whereas taxes paid by privately-owned utility companies are collected by them through resale rates. The Administration's retail distributors, both public and privately-owned, pay large amounts of taxes collected by them in resale rates. If, in addition to the subsidy to irrigation development, the \$17.50 rate

had to bear a tax charge, the private and public power distributors of Bonneville-Grand Coulee power would simply have to pass this tax on to consumers in the form of higher resale rates. Similarly, new industrial customers purchasing power directly from Bonneville Power Administration at the \$17.50 per kilowatt-year rate pay taxes on the new industrial plants created in the area and on the new output of products manufactured in the region. To raise the \$17.50 rate would only retard the creation of new taxable wealth by these new industries.

# SOURCE OF REVENUES

OVER 75-YEAR REPAYMENT PERIOD

BONNEVILLE POWER ADMINISTRATION  
BONNEVILLE DAM PROJECT  
AND COLUMBIA BASIN PROJECT

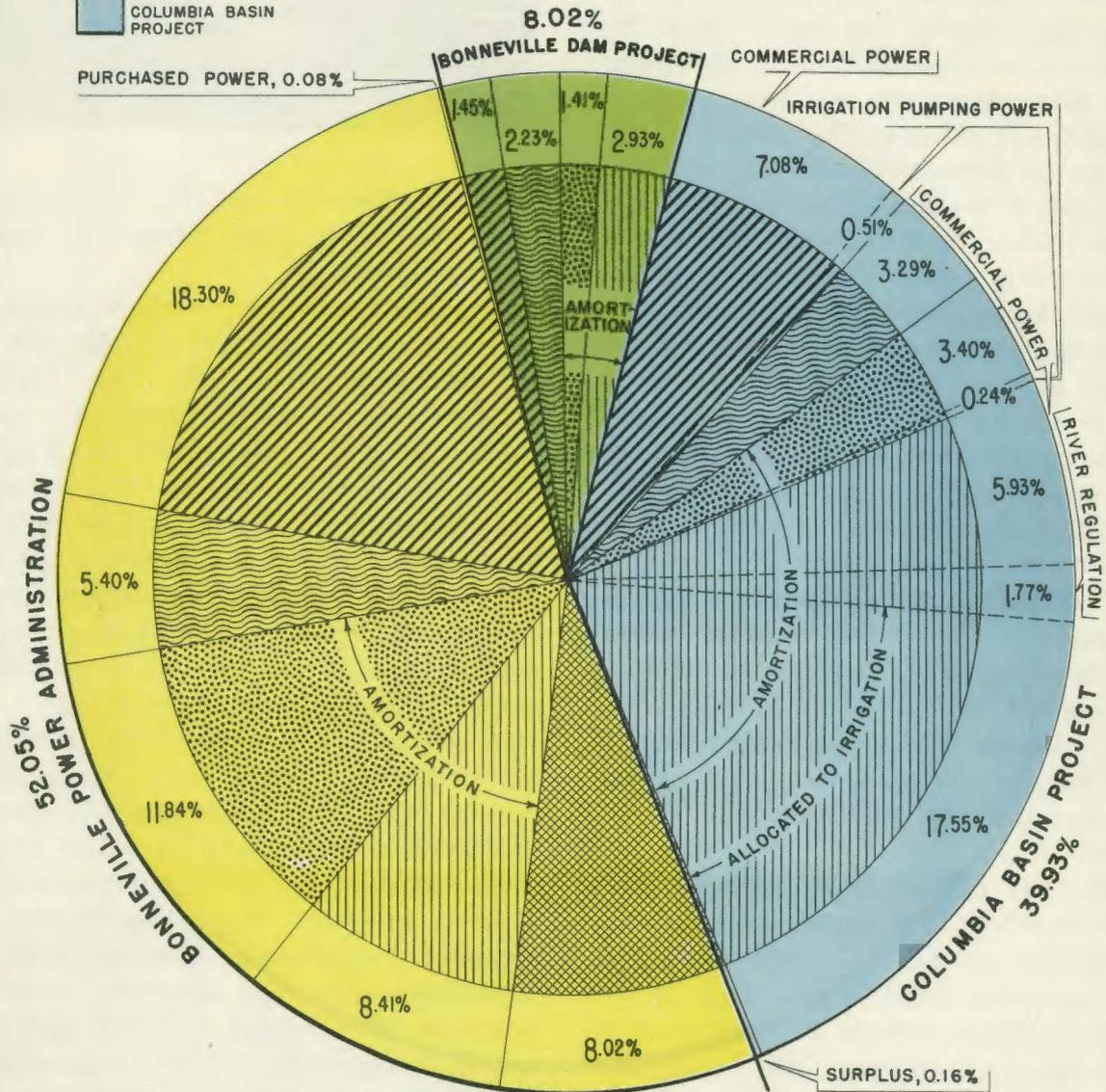


# DISPOSITION OF REVENUES

OVER 75-YEAR REPAYMENT PERIOD

BONNEVILLE POWER ADMINISTRATION, BONNEVILLE DAM PROJECT, & COLUMBIA BASIN PROJECT

## LEGEND



# PERSONNEL

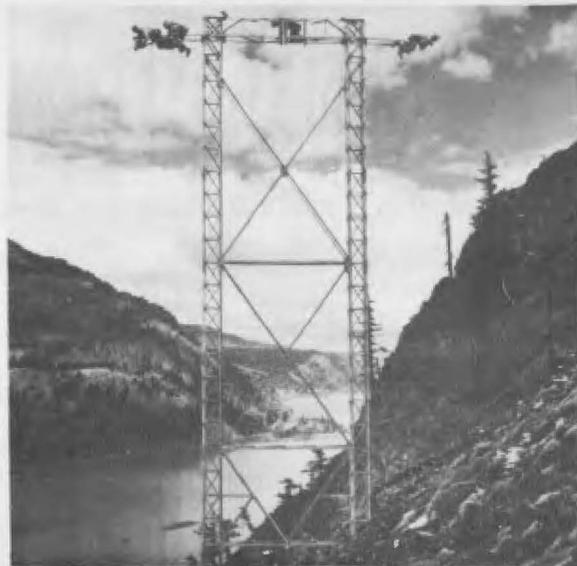
The personnel of the Administration, which had reached a peak of nearly 4,700 employees in April 1942 at the height of construction activity, declined sharply during the war years to a low of 1,588 in November 1944. As the Administration began its postwar reconversion and construction program and employees in the armed forces began to return to their jobs, the Administration's personnel climbed steadily to 1,810 as of December 31, 1945.

The war record of Bonneville employees was one of the most outstanding of any organization in the Pacific Northwest. Their war production, summarized in this report, speaks for itself. Bonneville employees greatly oversubscribed every bond drive, and their contributions to the blood bank won the region's highest awards. A total of 1,155 employees had been inducted into military service as of December 31, 1945. Of these 12 were killed in action and two were reported prisoners.

Through both its fighting and civilian employees, the Administration made highly valuable contributions to the winning of the war.

The Administration has enjoyed highly satisfactory relations with organized labor of the region from the start of its operations.

On May 2, 1945, a collective bargaining agreement was signed with the Columbia Power Trades Council providing for collective bargaining of wage scales and working conditions, establishment of fact-finding committees and machinery for the negotiation and arbitration of



labor-management problems. This agreement was a significant precedent in the federal service.

Bonneville's labor relations program was further strengthened with passage of H. R. 2690 on October 23, 1945. Under amendments to the Bonneville Act contained in the bill, the Bonneville Power Administration became the first regular federal agency to extend the retirement protection of the Social Security Act to all laborers, mechanics and workmen not subject to the civil service retirement act, and to provide unemployment compensation for all hourly-paid employees.

A major step in a program to provide the best possible employment opportunities for returning war veterans was taken by the Administration in November 1945, with establishment of an apprenticeship training program. This program also is designed to assure the Administration a continuing supply of competent trained workmen for the many technical jobs required in operation of the Bonneville-Grand Coulee transmission grid system.

# LITIGATION

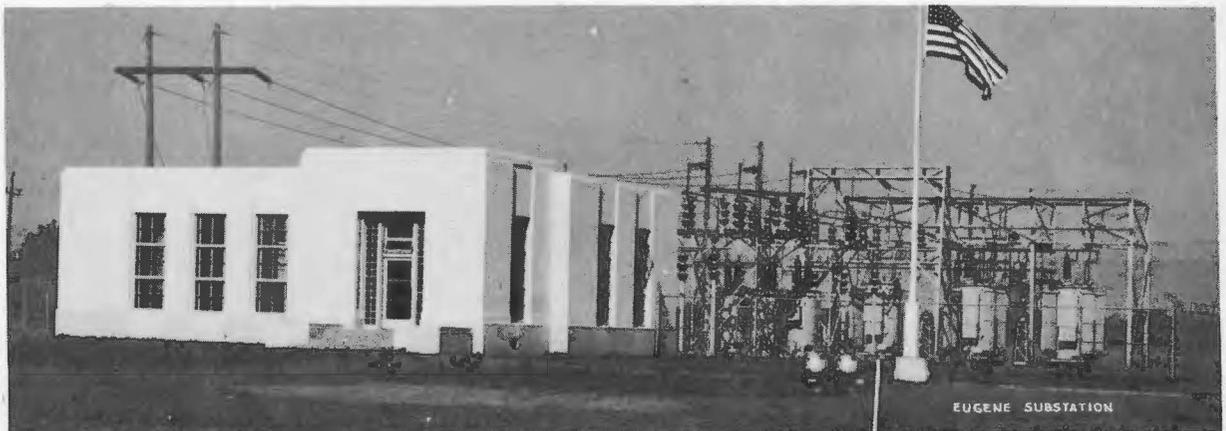
In 1943 actions against the Administrator were commenced in the United States District Court for Oregon by the Independent Trustees of the Portland Electric Power company and by Portland General Electric company, a wholly-owned subsidiary of the former, to determine the extent to which the Administrator, in carrying out the provisions of the Bonneville Act, including those granting preference and priority to public bodies and cooperatives, might require arrangements which would permit the transfer to public bodies of privately-owned power facilities, as a condition for entering into long-term power contracts with privately-owned utilities. Motions to dismiss these actions on preliminary and jurisdictional grounds have not yet been passed upon by the Court.

In addition to these proceedings there are pending a number of cases for the condemnation of rights of way and substation sites. These cases involve only relatively small amounts of money.

In August 1945 an action was commenced by the United States, acting through the Administrator, against the Puget Sound Power & Light Company,

for the collection of disputed power bills amounting to \$267,000 at the time the action was instituted. The parties had been unable to agree upon a basis for extending a one-year contract which expired on October 31, 1944. Puget Sound Power & Light company had continued to take deliveries of power but refused to pay, in full, bills as rendered by the government, taking issue with the government as to the rate schedule applicable to the service rendered. This controversy was settled and the action dismissed in December, following a compromise agreement under which the company paid the United States \$185,000, which was one-half of the total amount by which the company was allegedly delinquent at that time.

An action in the Court of Claims brought against the United States by the American Transformer company for money claimed to be due under a contract to furnish transformers to Bonneville was decided in favor of the United States on December 3, 1945.



# **AUDITORS' REPORT**

## **COLUMBIA RIVER POWER SYSTEM**

CONSISTING OF THE BONNEVILLE POWER ADMINISTRATION  
AND POWER COMPONENTS OF  
THE BONNEVILLE DAM PROJECT AND  
THE COLUMBIA BASIN PROJECT (GRAND COULEE DAM)

## **AUDIT CERTIFICATE AND FINANCIAL STATEMENTS**

JUNE 30, 1945

UNITED STATES DEPARTMENT OF THE INTERIOR  
BONNEVILLE POWER ADMINISTRATION

## COLUMBIA RIVER POWER SYSTEM

Consisting of Bonneville Power Administration and the Power Components  
of Bonneville Dam Project and Columbia Basin Project (Grand Coulee Dam)

### INDEX TO FINANCIAL STATEMENTS

Title	Schedule Number
AUDITORS' REPORT	
COLUMBIA RIVER POWER SYSTEM —	
Statement of Combined Assets and Liabilities Allocated to Power as of June 30, 1945.....	1
Statements of Combined Revenues and Expenses Allocated to Power for the Period from Beginning of Operations to June 30, 1944 and for the Fiscal Year Ended June 30, 1945.....	2
Notes to Financial Statements.....	3
Statement Combining Assets and Liabilities Allocated to Power as of June 30, 1945.....	4
Statements Combining Revenues and Expenses Allocated to Power for the Periods from Beginning of Operations to June 30, 1944 and for the Fiscal Year Ended June 30, 1945.....	5
BONNEVILLE POWER ADMINISTRATION —	
Statement of Assets and Liabilities as of June 30, 1945.....	6
Statements of Revenues and Expenses for the Period from July 1, 1938 (Beginning of Operations) to June 30, 1944 and for the Fiscal Year Ended June 30, 1945.....	7
Notes to Financial Statements.....	8
BONNEVILLE DAM PROJECT—	
Statement of Assets and Liabilities as of June 30, 1945.....	9
Statements of Revenues and Expenses for the Period from July 1, 1938 (Beginning of Operations) to June 30, 1944 and for the Fiscal Year Ended June 30, 1945.....	10
Notes to Financial Statements.....	11
COLUMBIA BASIN PROJECT (GRAND COULEE DAM) —	
Statement of Assets and Liabilities as of June 30, 1945.....	12
Statements of Revenues and Expenses for the Period from October 1, 1941 (Beginning of Operations) to June 30, 1944 and for the Fiscal Year Ended June 30, 1945.....	13
Notes to Financial Statements.....	14

# ARTHUR ANDERSEN & CO.

ACCOUNTANTS AND AUDITORS

DENTER HORTON BUILDING  
SEATTLE

## AUDITORS' REPORT

Dr. Paul J. Raver, Administrator,  
Bonneville Power Administration,  
Portland, Oregon.

Dear Sir:

We have examined the statement of combined assets and liabilities of Bonneville Power Administration, Department of the Interior, and of the power components of Bonneville Dam Project, built and operated by the Corps of Engineers, U. S. Army, and of Columbia Basin Project (Grand Coulee Dam), built and operated by the Bureau of Reclamation, Department of the Interior, hereinafter referred to as COLUMBIA RIVER POWER SYSTEM, and the statements of assets and liabilities allocated to power of each of these projects as of June 30, 1945. We have also examined the related statements of revenues and expenses allocated to power for the periods from the beginning of operation of each of the projects to June 30, 1944, and for the fiscal year ended June 30, 1945. In connection therewith, we have reviewed the systems of internal control and the accounting procedures of the three projects to the extent necessary to enable us to render an opinion on the financial position of the power components and the results of their power operations, and, without making a detailed audit of the transactions, have examined or tested accounting records of the projects and other supporting evidence by methods and to the extent we deemed appropriate. Our examination was made in accordance with generally accepted auditing standards applicable in the circumstances and included all procedures which we considered necessary.

Property, plant and equipment of each project has been recorded on the basis of the original cost thereof including an amount for interest during construction (except for nonpower facilities of Columbia Basin Project upon which such interest is not required) computed at  $2\frac{1}{2}\%$  compounded annually. The recorded costs of those facilities determined to be useful for power generation and for other purposes (joint facilities) have been allocated to power and to nonpower purposes in accordance with determinations by the Federal Power Commission in the case of Bonneville Dam Project, and by the Secretary of the Interior in the case of the Columbia Basin Project; the responsibility for determining these allocations was fixed by Acts of Congress. In our opinion, the property costs recorded as explained above are properly stated. In accordance with instructions received, we have not made an examination of the factual data underlying the allocations of joint facilities and we express no opinion on the bases of such allocations.

Operating and interest expenses applicable to joint facilities have been allocated between power and other operations on the same bases as the related property costs. As set forth in the preceding paragraph, we made no examination of and take no responsibility for the bases of these underlying allocations.

Property costs and operating expenses do not include general administrative and other costs of other departments of the Federal Government which, under governmental accounting pro-

cedures, are not allocated to individual projects. It is not practical to determine the amounts of such costs applicable to these projects.

Depreciation of the property of Bonneville Power Administration has been computed on a straight-line method, and depreciation of the property of Bonneville Dam Project and of the power portion of the property of the Columbia Basin Project has been computed on the compound interest method in each case, based upon estimated service lives of the various classes of property as determined by engineering studies. In our opinion, such depreciation policies are in accordance with generally accepted accounting principles and the amounts of depreciation expense charged to power operations represent reasonable allowances for the periods under review. No depreciation has been recorded in the records of the Columbia Basin Project for the facilities allocated to nonpower operations.

The amounts of revenues from power sales allocated to Bonneville Dam Project and Columbia Basin Project are in accordance with memoranda of agreement with the Corps of Engineers, U. S. Army, and the Bureau of Reclamation of the Department of the Interior dated November 28, 1945 and January 7, 1946, respectively. The amounts so allocated cover (a) operation and maintenance expenses to be returned from power revenues; (b) interest at the rate of  $2\frac{1}{2}\%$  per annum on the investment allocated to power plus, in the case of the Columbia Basin Project, the amount by which  $3\%$  interest on the unamortized construction costs allocated to power exceeds  $2\frac{1}{2}\%$  interest on the power investment; and (c) scheduled amortization of the construction costs allocated to power. The allocations of revenues to cover these costs and amortization requirements are independent of the amount of power generated and delivered to the Bonneville Power Administration.

In our opinion, subject to the comments in the second, third and fourth paragraphs above, the accompanying statements of assets and liabilities and the related statements of revenues and expenses allocated to power present fairly the position of Columbia River Power System and its power components at June 30, 1945, and the results of power operations for the periods from the beginning of operations to June 30, 1944 and for the fiscal year ended June 30, 1945, in conformity with generally accepted accounting principles consistently applied and in accordance with the uniform system of accounts prescribed by the Federal Power Commission pursuant to the Federal Water Power Act.

*Arthur Andersen & Co.*

Seattle, Washington,  
January 25, 1946.

## UNITED STATES OF AMERICA

## COLUMBIA RIVER POWER SYSTEM

Consisting of Bonneville Power Administration and the Power Components  
of Bonneville Dam Project and Columbia Basin Project (Grand Coulee Dam)

## STATEMENT OF COMBINED ASSETS AND LIABILITIES ALLOCATED TO POWER

JUNE 30, 1945

ASSETS						LIABILITIES	
	Original Cost (Notes 1 and 2)	Reserves for Depreciation (Note 3)	Original Cost Less Reserves				
<b>ELECTRIC UTILITY PLANT:</b>							
Joint facilities (dams, reservoirs, fishways, etc.), allocated to—							
Commercial power	\$ 62,167,505.27	\$ 890,130.95	\$ 61,277,374.32				
Downstream river regulation	31,912,924.22	341,574.90	31,571,349.32				
Specific power facilities (powerhouses, gener- ating equipment and transmission plant)	168,591,038.87	10,513,490.30	158,077,548.57				
General plant (employees' quarters, ser- vice buildings and equipment) allocated to—							
Commercial power	1,629,709.93	619,753.44	1,009,956.49				
Downstream river regulation	1,235,714.13	469,922.94	765,791.19				
	<u>\$265,536,892.42</u>	<u>\$ 12,834,872.53</u>	<u>\$252,702,019.89</u>	\$252,702,019.89			
<b>INTEREST AND DEPRECIATION CHARGES ON JOINT FACILITIES ALLOCATED TO DOWNSTREAM RIVER REGULATION—recoverable from operations of future downstream hydro plants</b>							
				3,480,047.96			
<b>SPECIAL FUNDS AND INVESTMENTS:</b>							
Special fund—see contra			\$ 1,515,500.00				
Emergency fund			500,000.00				
Miscellaneous investments			25,422.51	2,040,922.51			
<b>CURRENT ASSETS:</b>							
Cash held by Treasury Department disbursing officers			\$ 3,413,902.90				
Employees' withholding tax, war savings bonds and other special deposits			236,500.62				
Accounts receivable—							
Customers—							
Departments and agencies of U. S. Government			4,407,236.92				
Others, less reserve of \$438,559.82 for contract and bill adjustments			1,527,466.89				
Other receivables			477,295.75				
Materials and supplies			3,021,646.10	13,084,049.18			
<b>INVESTMENT OF U. S. GOVERNMENT:</b>							
Congressional appropriations, allotments and WPA ex- penditures			\$298,110,886.27				
Less—Amounts not requisitioned			24,027,192.82	\$274,083,693.45			
Transfers from other Federal projects (net)			862,884.49				
Interest on Federal investment			35,543,716.87				
				\$310,490,294.81			
<b>Less—Funds returned to U. S. Treasury—</b>							
Receipts from sales of electric energy—							
Allocated to projects under project repayment schedules			\$ 54,332,684.10				
Unallocated			1,253,281.71				
Miscellaneous receipts			582,707.84	56,168,673.65	\$254,321,621.16		
<b>CURRENT LIABILITIES:</b>							
Accounts payable (Note 4)			\$ 2,978,177.73				
Due to Central Valley Project (Shasta Dam) for rental of leased generating facilities			391,500.00				
Employees' accrued leave			1,051,153.20				
Miscellaneous			313,064.71	4,733,895.64			
<b>DEFERRED CREDITS:</b>							
Customer's deposit—see contra			\$ 1,515,500.00				
Other			28,261.99	1,543,761.99			
<b>RESERVES:</b>							
Removal of Shasta Dam leased generating facilities			\$ 720,416.41				
Deferred maintenance			393,000.00	1,113,416.41			
<b>CONTRIBUTIONS IN AID OF CONSTRUCTION by State of Washington</b>							
					175,526.14		
<b>ACCUMULATED NET REVENUES (Note 2):</b>							
Total net revenues from power operations			\$ 11,572,052.69				
Less—Amounts applied to repayment of irrigation operation and main- tenance expenses at Columbia Basin Project (Note 6)			531,632.50				
Remaining net revenues				\$ 11,040,420.19			
<b>CONSISTING OF:</b>							
Amounts applied to amortization in addition to provisions for depreciation—							
Bonneville Dam Project			\$ 909,899.44				
Columbia Basin Project (including \$763,085.38 represent- ing excess of 3% interest on unamortized construction							

## UNITED STATES OF AMERICA

## COLUMBIA RIVER POWER SYSTEM

Consisting of Bonneville Power Administration and the Power Components  
of Bonneville Dam Project and Columbia Basin Project (Grand Coulee Dam)

STATEMENTS OF COMBINED REVENUES AND EXPENSES ALLOCATED TO POWER  
FOR THE PERIOD FROM BEGINNING OF OPERATIONS TO JUNE 30,  
1944 AND FOR THE FISCAL YEAR ENDED JUNE 30, 1945

	Period from Beginning of Operations to June 30, 1944	Fiscal Year Ended June 30, 1945
<b>OPERATING REVENUES:</b>		
Sales of electric energy .....	\$40,457,101.10	\$22,903,281.60
Other electric revenues .....	130,122.75	86,736.75
Total operating revenues .....	<u>\$40,587,223.85</u>	<u>\$22,990,018.35</u>
<b>OPERATING EXPENSES (Notes 2 and 5):</b>		
Purchased power .....	\$ 697,136.20	\$ 207,094.91
Operation—		
Joint facilities—portion allocated to power .....	552,204.66	182,341.19
Specific power facilities .....	9,200,875.71	3,624,788.88
Provision for rental, installation and removal of generating facilities leased from Central Valley Project (Shasta Dam) .....	1,216,500.00	973,200.00
Maintenance—		
Joint facilities—portion allocated to power .....	581,587.68	211,819.13
Specific power facilities .....	1,314,413.72	787,240.64
Depreciation (Note 3)—		
Joint facilities—portion allocated to power (including downstream river regulation) .....	1,053,867.38	307,433.68
Less—Amount allocated to downstream river regulation, recoverable from operations of future downstream hydro plants .....	247,698.38*	93,876.52*
Specific power facilities .....	6,515,278.96	2,826,150.09
Total operating expenses .....	<u>\$20,884,165.93</u>	<u>\$ 9,026,192.00</u>
Net operating revenues .....	\$19,703,057.92	\$13,963,826.35
OTHER INCOME .....	\$ 8,604.92	\$ 13,361.44
	<u>\$19,711,662.84</u>	<u>\$13,977,187.79</u>
<b>INTEREST AND OTHER DEDUCTIONS:</b>		
Interest on portion of Federal investment allocated to power (including down- stream river regulation) .....	\$20,428,905.33	\$ 6,330,314.73
Less—		
Amount allocated to downstream river regulation, recoverable from operations of future downstream hydro plants .....	2,255,022.78*	883,450.28*
Amount charged to construction .....	2,055,621.10*	108,518.04*
Miscellaneous income deductions .....	659,985.10	204.98
Total interest and other deductions .....	<u>\$16,778,246.55</u>	<u>\$ 5,338,551.39</u>
Net revenues .....	\$ 2,933,416.29	\$ 8,638,636.40
<b>APPLICATION OF NET REVENUES:</b>		
Portion of net revenues from power operations applied to repayment of irriga- tion operation and maintenance expenses at Columbia Basin Project (Note 6)	354,322.23	177,310.27
Balance .....	<u>\$ 2,579,094.06</u>	<u>\$ 8,461,326.13</u>

\* Denotes red figure.

The accompanying notes (Schedule 3) are an integral part of these statements.

## COLUMBIA RIVER POWER SYSTEM

## NOTES TO FINANCIAL STATEMENTS ON SCHEDULES 1 AND 2

**1. Electric Utility Plant:**

Electric utility plant is stated at original cost including an amount for interest during construction computed at  $2\frac{1}{2}\%$  compounded annually.

Joint facilities have been allocated to power (including downstream river regulation) and to nonpower purposes in accordance with determinations by the Federal Power Commission in the case of Bonneville Dam Project, and by the Secretary of the Interior in the case of the Columbia Basin Project (Grand Coulee Dam); the responsibility for determining these allocations was fixed by Acts of Congress.

Specific power facilities represent the expenditures at the Bonneville Power Administration for utility plant and the expenditures at the Bonneville Dam Project and Columbia Basin Project (Grand Coulee Dam) for the facilities determined to be useful solely for power purposes.

General plant represents the portion of expenditures at the Columbia Basin Project for general facilities allocated to power. The allocation of general plant between power (including downstream river regulation) and nonpower purposes has been made pursuant to the determination of the Secretary of the Interior referred to above.

**2. Certain Costs Not Included:**

Property costs and operating expenses do not include general administrative and other costs of other departments of the Federal Government which, under Governmental accounting procedures, are not allocated to individual projects. It is not practical to determine the amounts of such costs applicable to these projects.

**3. Depreciation Policy:**

Depreciation of the property of Bonneville Power Administration, consisting principally of transmission plant, has been computed on the straight-line method, based upon the estimated service lives of the various classes of property as determined by engineering studies; such studies contemplate the maximum economic life of the land rights and clearing costs to be one hundred years.

Depreciation of the power facilities at the two dam projects has been computed on the compound interest method using an interest factor of  $2\frac{1}{2}\%$  and based upon the estimated service lives of the various classes of property as determined by engineering studies, except that no service life has been estimated longer than one hundred years. Depreciation of general plant at Grand Coulee Dam (which is charged to clearing accounts and redis-

tributed to construction and other accounts) has been computed substantially on a straight line method based upon the estimated service lives of the various classes of plant.

Composite reserves are maintained for each class of property and the cost of property retired (less net salvage applicable thereto) is charged to such reserves.

**4. Reversal of Certain Recorded Obligations:**

Obligations (purchase commitments, etc.) for proposed expenditures by Bonneville Power Administration (\$2,146,124.86) recorded in the Administration's combined system of fiscal and cost accounts at June 30, 1945, which do not represent actual liabilities at that date, have been reversed in order to include in the financial statements only costs and liabilities actually incurred. The cost records of the two dam projects have not been similarly integrated with the fiscal records, and thus do not include obligations for proposed expenditures recorded in their fiscal records.

**5. Allocation of Joint Expenses:**

Expenses applicable to joint facilities at the two dam projects have been allocated to power and to other than power operations on the same basis as the related property costs, i.e., 50% to power and 50% to other operations at Bonneville Dam Project and 56% to power operations and 44% to irrigation at Columbia Basin Project.

**6. Application of Net Revenues to Repayment of Irrigation Expenses:**

The allocation to irrigation of a portion of the operating and maintenance expenses on the joint facilities during this initial period prior to the commencement of irrigation operations is consistent with the allocation of construction cost. The repayment of such allocated expenses currently from power revenues has been reflected in these financial statements, although the amount of such expenses allocated to irrigation properly could have been capitalized as part of the construction period costs of the irrigation works.

**7. Contingent Liabilities:**

The projects are contingently liable under certain pending litigation which, in some instances, involve claims of substantial amount. In the opinion of counsel for the projects, any actual liability which may result from such litigation will not be relatively material.



**UNITED STATES OF AMERICA**  
**COLUMBIA RIVER POWER SYSTEM**  
**Consisting of Bonneville Power Administration and the Power Components**  
**of Bonneville Dam Project and Columbia Basin Project (Grand Coulee Dam)**

**STATEMENTS COMBINING REVENUES AND EXPENSES ALLOCATED TO POWER**  
**FOR THE PERIODS FROM BEGINNING OF OPERATIONS TO JUNE 30,**  
**1944, AND FOR THE FISCAL YEAR ENDED JUNE 30, 1945**

	PERIOD FROM BEGINNING OF OPERATIONS TO JUNE 30, 1944					FISCAL YEAR ENDED JUNE 30, 1945				
	Bonneville Power Administration (Schedule 7)	Bonneville Dam Project (Schedule 10)	Columbia Basin Project (Schedule 13)	Elimina- tions	Combined (To Schedule 2)	Bonneville Power Administration (Schedule 7)	Bonneville Dam Project (Schedule 10)	Columbia Basin Project (Schedule 13)	Elimina- tions	Combined (To Schedule 2)
<b>OPERATING REVENUES:</b>										
Sales of electric energy by Bonneville Power Administration	\$40,457,101.10	\$ .....	\$ .....	\$ .....	\$40,457,101.10	\$22,903,281.60	\$ .....	\$ .....	\$ .....	\$22,903,281.60
Less—Amounts allocated to Bonneville Dam Project and Columbia Basin Project	20,764,579.00*	9,800,000.00	10,964,579.00	.....	.....	8,091,390.68*	3,200,000.00	4,891,390.68	.....	.....
Payment for river regulation benefits at Bonneville Dam Project	.....	.....	375,140.00	375,140.00	.....	.....	.....	187,570.00	187,570.00	.....
Other electric revenues	130,122.75	.....	.....	.....	130,122.75	86,736.75	.....	.....	.....	86,736.75
Total operating revenues	\$19,822,644.85	\$9,800,000.00	\$11,339,719.00	\$375,140.00	\$40,587,223.85	\$14,898,627.67	\$3,200,000.00	\$5,078,960.68	\$187,570.00	\$22,990,018.35
<b>OPERATING EXPENSES:</b>										
Purchased power	\$ 697,136.20	\$ .....	\$ .....	\$ .....	\$ 697,136.20	\$ 207,094.91	\$ .....	\$ .....	\$ .....	\$ 207,094.91
Operation—										
Joint facilities—portion allocated to power	.....	330,531.23	221,673.43	.....	552,204.66	.....	66,286.97	116,054.22	.....	182,341.19
Specific power facilities	7,979,856.80	660,700.45	560,318.46	.....	9,200,875.71	3,070,463.22	225,097.79	329,227.87	.....	3,624,788.88
Payment for river regulation benefits	.....	375,140.00	.....	375,140.00	.....	.....	187,570.00	.....	187,570.00	.....
Provision for rental, installation and removal of generating facilities leased from Central Valley Project (Shasta Dam)	.....	.....	1,216,500.00	.....	1,216,500.00	.....	.....	973,200.00	.....	973,200.00
Maintenance—										
Joint facilities—portion allocated to power	.....	343,107.51	238,480.17	.....	581,587.68	.....	97,409.16	114,409.97	.....	211,819.13
Specific power facilities	855,923.48	263,063.97	195,426.27	.....	1,314,413.72	463,958.74	134,809.24	188,472.66	.....	787,240.64
Depreciation—										
Joint facilities—portion allocated to power (including downstream river regulation)	.....	479,494.33	574,373.05	.....	1,053,867.38	.....	89,749.00	217,684.68	.....	307,433.68
Less—Amount allocated to downstream river regulation, recoverable from operations of future downstream hydro plants	.....	.....	247,698.38*	.....	247,698.38*	.....	.....	93,876.52*	.....	93,876.52*
Specific power facilities	4,818,129.25	1,018,198.27	678,951.44	.....	6,515,278.96	2,012,301.25	423,019.90	390,828.94	.....	2,826,150.09
Total operating expenses	\$14,351,045.73	\$3,470,235.76	\$ 3,438,024.44	\$375,140.00	\$20,884,165.93	\$ 5,753,818.12	\$1,223,942.06	\$2,236,001.82	\$187,570.00	\$ 9,026,192.00
Net operating revenues	\$ 5,471,599.12	\$6,329,764.24	\$ 7,901,694.56	\$ .....	\$19,703,057.92	\$ 9,144,809.55	\$1,976,057.94	\$2,842,958.86	\$ .....	\$13,963,826.35
OTHER INCOME	\$ 593.13*	\$ .....	\$ 1,198.05	\$ .....	\$ 8,604.92	\$ 8,564.87	\$ .....	\$ 4,796.57	\$ .....	\$ 13,361.44
	\$ 5,471,005.99	\$6,329,764.24	\$ 7,910,892.61	\$ .....	\$19,711,662.84	\$ 9,153,374.42	\$1,976,057.94	\$2,847,755.43	\$ .....	\$13,977,187.79
<b>INTEREST AND OTHER DEDUCTIONS:</b>										
Interest on portion of Federal investment allocated to power (including downstream river regulation)	\$ 5,455,501.69	\$6,830,104.42	\$ 8,143,299.22	.....	\$20,428,905.33	\$ 1,777,707.88	\$1,400,168.71	\$3,152,438.14	.....	\$ 6,330,314.73
Less—										
Amount allocated to downstream river regulation, recoverable from operations of future downstream hydro plants	.....	.....	2,255,022.78*	.....	2,255,022.78*	.....	.....	883,450.28*	.....	883,450.28*
Amount charged to construction	771,350.69*	833,970.41*	450,300.00*	.....	2,055,621.10*	56,768.06*	379.98*	51,370.00*	.....	108,518.04*

**UNITED STATES OF AMERICA**  
**DEPARTMENT OF THE INTERIOR**  
**BONNEVILLE POWER ADMINISTRATION**

**STATEMENT OF ASSETS AND LIABILITIES**  
**JUNE 30, 1945**

<b>ASSETS</b>					<b>LIABILITIES</b>
ELECTRIC UTILITY PLANT (principally transmission plant), at original cost (Notes 1 and 2).....		\$82,486,993.85			INVESTMENT OF U. S. GOVERNMENT:
Less—Reserve for depreciation (Note 3).....		8,025,868.29			Congressional appropriations, allotments and WPA expenditures.....
Original cost less reserve.....			\$74,461,125.56		Less—Amount not requisitioned.....
					\$119,023,104.91
					22,967,538.78
					\$96,055,566.13
					Transfers from other Federal projects (net).....
					60,961.89*
					Interest on Federal investment.....
					7,233,209.57
					\$103,227,813.81
					Less—Funds returned to U. S. Treasury—
					Receipts from sales of electric energy
SPECIAL FUNDS AND INVESTMENTS:					Allocated to project under project re-
Special fund—see contra liability.....	\$	1,515,500.00			payment schedule.....
Emergency fund.....		500,000.00			\$ 26,008,346.92
Miscellaneous investments.....		25,422.51	2,040,922.51		Unallocated.....
					1,253,281.71
					Miscellaneous receipts.....
					355,698.10
					27,617,326.73
					Not investment of U. S. Govern-
					ment.....
					\$75,610,487.08
					CURRENT LIABILITIES:
CURRENT ASSETS:					Accounts payable (Note 5).....
Cash held by Treasury Department disbursing officer.....	\$	1,585,791.56			\$ 2,631,675.42
Employees' withholding tax, war savings bonds and other special deposits.....		236,500.62			Employees' accrued leave.....
Accounts receivable—					811,865.17
Customers—					Miscellaneous.....
Departments and agencies of U. S. Government.....		4,407,236.92			260,253.50
Others, less reserve of \$438,559.82 for contract and bill adjustments.....		1,527,466.89			DEFERRED CREDITS:
Other receivables.....		437,641.28			Customer's deposit—see contra.....
Materials and supplies.....		2,416,025.93	10,610,663.20		\$ 1,515,500.00
					Other.....
					28,261.99
					1,543,761.99
					ACCUMULATED NET REVENUES FROM POWER OPERATIONS OF
DEFERRED CHARGES—retirement and reimbursable work in progress, clearing accounts, etc.....			1,304,431.40		COLUMBIA RIVER POWER SYSTEM (Note 2).....
					\$ 11,572,052.69
					Less—
					Amounts applied to repayment of irri-
					gation operation and maintenance
					expenses at Columbia Basin Project \$
					531,632.50
					Amounts applied to amortization in
					addition to provisions for deprecia-
					tion—
					Bonneville Dam Project.....
					909,899.44
					Columbia Basin Project (includ-
					ing \$763,085.38 representing ex-
					cess of 3% interest on unamor-
					tized construction costs allo-
					cated to power over 2.5% inter-
					est on investment allocated
					to power).....
					2,571,421.24
					4,012,953.18

UNITED STATES OF AMERICA  
DEPARTMENT OF THE INTERIOR

**BONNEVILLE POWER ADMINISTRATION**

**STATEMENTS OF REVENUES AND EXPENSES FOR THE PERIOD FROM JULY 1, 1938  
(BEGINNING OF OPERATIONS) TO JUNE 30, 1944 AND FOR THE  
FISCAL YEAR ENDED JUNE 30, 1945**

	Period from July 1, 1938 to June 30, 1944	Fiscal Year Ended June 30, 1945
<b>OPERATING REVENUES:</b>		
Sales of electric energy.....	\$40,457,101.10	\$22,903,281.60
Less—Portion allocated to (Note 4)—		
Bonneville Dam Project.....	\$ 9,800,000.00	\$ 3,200,000.00
Columbia Basin Project (Grand Coulee Dam).....	10,964,579.00	4,891,390.68
	<u>\$20,764,579.00</u>	<u>\$ 8,091,390.68</u>
	\$19,692,522.10	\$14,811,890.92
Other electric revenues.....	130,122.75	86,736.75
Total operating revenues.....	<u>\$19,822,644.85</u>	<u>\$14,898,627.67</u>
<b>OPERATING EXPENSES (Note 2):</b>		
Purchased power.....	\$ 697,136.20	\$ 207,094.91
Operation.....	7,979,856.80	3,070,463.22
Maintenance.....	855,923.48	463,958.74
Depreciation (Note 3).....	4,818,129.25	2,012,301.25
Total operating expenses.....	<u>\$14,351,045.73</u>	<u>\$ 5,753,818.12</u>
Net operating revenues.....	\$ 5,471,599.12	\$ 9,144,809.55
<b>OTHER INCOME (net).....</b>		
	593.13*	8,564.87
	<u>\$ 5,471,005.99</u>	<u>\$ 9,153,374.42</u>
<b>INTEREST AND OTHER DEDUCTIONS:</b>		
Interest on Federal investment.....	\$ 5,455,501.69	\$ 1,777,707.88
Less—Amount charged to construction.....	771,350.69*	56,768.06*
Miscellaneous income deductions.....	659,985.10	204.98
Total interest and other deductions.....	<u>\$ 5,344,136.10</u>	<u>\$ 1,721,144.80</u>
Net revenues.....	<u>\$ 126,869.89</u>	<u>\$ 7,432,229.62</u>

\* Denotes red figures.

The accompanying notes (Schedule 8) are an integral part of these statements.

## BONNEVILLE POWER ADMINISTRATION

### NOTES TO FINANCIAL STATEMENTS ON SCHEDULES 6 AND 7

**1. Electric Utility Plant:**

Electric utility plant has been recorded on the basis of original cost including an amount for interest during construction computed at  $2\frac{1}{2}\%$ , compounded annually.

**2. Certain Costs Not Included:**

Property costs and operating expenses do not include general administrative and other costs of other departments of the Federal Government which, under governmental accounting procedures, are not allocated to individual projects. It is not practical to determine the amounts of such costs applicable to this project.

**3. Depreciation Policy:**

Depreciation has been computed on the straight-line method, based upon the estimated service lives of the various classes of property as determined by engineering studies; such studies contemplate the maximum economic life of the land rights and clearing costs to be one hundred years. A composite depreciation reserve is maintained and the cost of property retired (less net salvage applicable thereto) is charged to such reserve.

**4. Allocation of Revenues:**

The amounts of revenues from power sales allocated to Bonneville Dam Project and Columbia Basin Project (Grand Coulee Dam) are in accordance with memoranda of agreement with the Corps of Engineers, U. S. Army, and the Bureau of Reclamation of the Department of the Interior dated November 28, 1945 and January 7, 1946,

respectively. The amounts so allocated cover (a) operation and maintenance expenses to be returned from power revenues; (b) interest at the rate of  $2\frac{1}{2}\%$  per annum on the investment allocated to power plus, in the case of the Columbia Basin Project (Grand Coulee Dam), the amount by which  $3\%$  interest on the unamortized construction costs allocated to power exceeds  $2\frac{1}{2}\%$  interest on the power investment; and (c) scheduled amortization of the construction costs allocated to power. The allocations of revenues to cover these costs and amortization requirements are independent of the amount of power generated and delivered to the Bonneville Power Administration.

**5. Reversal of Certain Recorded Obligations:**

Obligations (purchase commitments, etc.) for proposed expenditures by Bonneville Power Administration (\$2,146,124.86) recorded in the Administration's combined system of fiscal and cost accounts at June 30, 1945, which do not represent actual liabilities at that date, have been reversed in order to include in the financial statements only costs and liabilities actually incurred. The cost records of the two dam projects have not been similarly integrated with the fiscal records, and thus do not include obligations for proposed expenditures recorded in their fiscal records.

**6. Contingent Liabilities:**

The project is contingently liable under certain pending litigation. In the opinion of counsel for the project, any actual liability which may result from such litigation will not be material.

**UNITED STATES OF AMERICA  
CORPS OF ENGINEERS, U. S. ARMY**

**BONNEVILLE DAM PROJECT**

**STATEMENT OF ASSETS AND LIABILITIES — JUNE 30, 1945**

<b>ASSETS</b>	Total	Deduct— Amounts Allocated to Other Than Power	Amounts Allocated to Power
<b>PROPERTY, PLANT AND EQUIPMENT, at original cost (Notes 1 and 2):</b>			
Joint facilities (dam, reservoir, fishways, etc.) allocated to—			
Power (50%).....	\$20,079,445.79	\$ .....	\$20,079,445.79
Other than power (50%).....	20,079,445.79	20,079,445.79	.....
Specific purpose facilities—			
Power (power house and generating equipment).....	37,610,653.37	.....	37,610,653.37
Navigation (ship lock, etc.).....	5,797,901.96	5,797,901.96	.....
	<u>\$83,567,446.91</u>	<u>\$25,877,347.75</u>	<u>\$57,690,099.16</u>
Less—Reserves for depreciation (Note 3)—			
Joint facilities.....	\$ 879,296.24	\$ 439,648.12	\$ 439,648.12
Specific purpose facilities—			
Power.....	1,417,841.63	.....	1,417,841.63
Navigation.....	176,375.22	176,375.22	.....
	<u>\$ 2,473,513.09</u>	<u>\$ 616,023.34</u>	<u>\$ 1,857,489.75</u>
Original cost less reserves.....	<u>\$81,093,933.82</u>	<u>\$25,261,324.41</u>	<u>\$55,832,609.41</u>
<b>CURRENT ASSETS:</b>			
Materials and supplies.....	\$ 10,153.29	\$ .....	\$ 10,153.29
Sundry accounts receivable.....	840.46	420.23	420.23
	<u>\$ 10,993.75</u>	<u>\$ 420.23</u>	<u>\$ 10,573.52</u>
<b>DEFERRED CHARGES.....</b>	<u>\$ 21,333.98</u>	<u>\$ 11,423.17</u>	<u>\$ 9,910.81</u>
	<u>\$81,126,261.55</u>	<u>\$25,273,167.81</u>	<u>\$55,853,093.74</u>
<b>LIABILITIES</b>			
<b>INVESTMENT OF U. S. GOVERNMENT:</b>			
Congressional appropriations, allotments and WPA expenditures.....	\$84,492,876.30	\$26,167,441.00	\$58,325,435.30
Less—Amounts not requisitioned.....	1,351,752.52	418,683.70	933,068.82
	<u>\$83,141,123.78</u>	<u>\$25,748,757.30</u>	<u>\$57,392,366.48</u>
Interest on Federal investment.....	15,194,473.28	5,485,263.34	9,709,209.94
	<u>\$98,335,597.06</u>	<u>\$31,234,020.64</u>	<u>\$67,101,576.42</u>
Less—			
Funds returned to U. S. Treasury under project repayment schedule.....	\$12,437,290.00	\$ .....	\$12,437,290.00
Net expense of non-reimbursable portion of project.....	6,208,546.95	6,208,546.95	.....
	<u>\$18,645,836.95</u>	<u>\$ 6,208,546.95</u>	<u>\$12,437,290.00</u>
Net investment of U. S. Government.....	<u>\$79,689,760.11</u>	<u>\$25,025,473.69</u>	<u>\$54,664,286.42</u>
<b>CURRENT LIABILITIES:</b>			
Accounts payable.....	\$ 2,193.33	\$ 1,096.66	\$ 1,096.67
Due to other projects.....	74,408.67	21,597.46	52,811.21
	<u>\$ 76,602.00</u>	<u>\$ 22,694.12</u>	<u>\$ 53,907.88</u>
<b>RESERVE FOR DEFERRED MAINTENANCE.....</b>	<u>\$ 450,000.00</u>	<u>\$ 225,000.00</u>	<u>\$ 225,000.00</u>
<b>ACCUMULATED NET REVENUES—Amount applied to amortization in addition to provisions for depreciation (Note 2).....</b>	<u>\$ 909,899.44</u>	<u>\$ .....</u>	<u>\$ 909,899.44</u>
	<u>\$81,126,261.55</u>	<u>\$25,273,167.81</u>	<u>\$55,853,093.74</u>

The accompanying notes (Schedule 11) are an integral part of this statement.

UNITED STATES OF AMERICA  
CORPS OF ENGINEERS U. S. ARMY

Schedule 10

BONNEVILLE DAM PROJECT

STATEMENTS OF REVENUES AND EXPENSES FOR THE PERIOD FROM JULY 1, 1938 (BEGINNING OF OPERATIONS) TO JUNE 30, 1944 AND FOR THE FISCAL YEAR ENDED JUNE 30, 1945

	PERIOD FROM JULY 1, 1938 TO JUNE 30, 1944			—FISCAL YEAR ENDED JUNE 30, 1945—		
	Total	Deduct— Amounts Allocated to Other Than Power	Amounts Allocated to Power	Total	Deduct— Amounts Allocated to Other Than Power	Amounts Allocated to Power
<b>OPERATING REVENUES:</b>						
Portion of sales of electric energy by Bonneville Power Administration allocated to Bonneville Dam Project (Note 4) .....	\$ 9,800,000.00	\$ .....	\$9,800,000.00	\$3,200,000.00	\$ .....	\$3,200,000.00
<b>OPERATING EXPENSES (Notes 2 and 5):</b>						
<b>Operation—</b>						
Joint facilities .....	\$ 661,062.44	\$ 330,531.21	\$ 330,531.23	\$ 132,573.94	\$ 66,286.97	\$ 66,286.97
<b>Specific purpose facilities—</b>						
Power .....	660,700.45	.....	660,700.45	225,097.79	.....	225,097.79
Other than power .....	157,746.45	157,746.45	.....	35,770.94	35,770.94	.....
Payment for river regulation benefits .....	375,140.00	.....	375,140.00	187,570.00	.....	187,570.00
<b>Total operation .....</b>	<b>\$ 1,854,649.34</b>	<b>\$ 488,277.66</b>	<b>\$1,366,371.68</b>	<b>\$ 581,012.67</b>	<b>\$ 102,057.91</b>	<b>\$ 478,954.76</b>
<b>Maintenance—</b>						
Joint facilities .....	\$ 686,215.02	\$ 343,107.51	\$ 343,107.51	\$ 194,818.32	\$ 97,409.16	\$ 97,409.16
<b>Specific purpose facilities—</b>						
Power .....	263,063.97	.....	263,063.97	134,809.24	.....	134,809.24
Other than power .....	161,011.58	161,011.58	.....	31,162.44	31,162.44	.....
<b>Total maintenance .....</b>	<b>\$ 1,110,290.57</b>	<b>\$ 504,119.09</b>	<b>\$ 606,171.48</b>	<b>\$ 360,790.00</b>	<b>\$ 128,571.60</b>	<b>\$ 232,218.40</b>
<b>Depreciation (Note 3)—</b>						
Joint facilities .....	\$ 958,988.65	\$ 479,494.32	\$ 479,494.33	\$ 179,497.99	\$ 89,748.99	\$ 89,749.00
<b>Specific purpose facilities—</b>						
Power .....	1,018,198.27	.....	1,018,198.27	423,019.90	.....	423,019.90
Other than power .....	150,186.08	150,186.08	.....	29,509.24	29,509.24	.....
<b>Total depreciation .....</b>	<b>\$ 2,127,373.00</b>	<b>\$ 629,680.40</b>	<b>\$1,497,692.60</b>	<b>\$ 632,027.13</b>	<b>\$ 119,258.23</b>	<b>\$ 512,768.90</b>
<b>Total operating expenses .....</b>	<b>\$ 5,092,312.91</b>	<b>\$1,622,077.15</b>	<b>\$3,470,235.76</b>	<b>\$1,573,829.80</b>	<b>\$ 349,887.74</b>	<b>1,223,942.06</b>
<b>Net operating revenues .....</b>	<b>\$ 4,707,687.09</b>	<b>\$1,622,077.15*</b>	<b>\$6,329,764.24</b>	<b>\$1,626,170.20</b>	<b>\$ 349,887.74*</b>	<b>\$ 1,976,057.94</b>
<b>INTEREST DEDUCTIONS (Note 5):</b>						
<b>Interest on Federal investment in—</b>						
Joint facilities .....	\$5,515,972.66	\$2,757,986.33	\$2,757,986.33	\$ 958,018.65	\$ 479,009.33	\$ 479,009.32
<b>Specific purpose facilities—</b>						
Power .....	4,072,118.09	.....	4,072,118.09	921,159.39	.....	921,159.39
Other than power .....	884,234.75	884,234.75	.....	169,465.15	169,465.15	.....
<b>Total interest on Federal investment .....</b>	<b>\$10,472,325.50</b>	<b>\$3,642,221.08</b>	<b>\$6,830,104.42</b>	<b>\$2,048,643.19</b>	<b>\$ 648,474.48</b>	<b>\$1,400,168.71</b>
<b>Less—Interest charged to construction of—</b>						
Joint facilities .....	\$ 99,118.40	\$ 49,559.20	\$ 49,559.20	\$ 539.80	\$ 269.90	\$ 269.90
<b>Specific purpose facilities—</b>						
Power .....	784,411.21	.....	784,411.21	110.08	.....	110.08
Other than power .....	4,275.66	4,275.66	.....	8.74	8.74	.....
<b>Total interest charged to construction .....</b>	<b>\$ 887,805.27</b>	<b>\$ 53,834.86</b>	<b>\$ 833,970.41</b>	<b>\$ 658.62</b>	<b>\$ 278.64</b>	<b>\$ 379.98</b>
<b>Net interest deductions .....</b>	<b>\$ 9,584,520.23</b>	<b>\$3,588,386.22</b>	<b>\$5,996,134.01</b>	<b>\$2,047,984.57</b>	<b>\$ 648,195.84</b>	<b>\$1,399,788.73</b>
<b>Net revenues .....</b>	<b>\$ 4,876,833.14*</b>	<b>\$5,210,463.37*</b>	<b>\$ 333,630.23</b>	<b>\$ 421,814.37*</b>	<b>\$ 998,083.58*</b>	<b>\$ 576,269.21</b>

\* Denotes red figure.

The accompanying notes (Schedule 11) are an integral part of these statements.

**BONNEVILLE DAM PROJECT****NOTES TO FINANCIAL STATEMENTS ON SCHEDULES 9 AND 10****1. Property, Plant and Equipment:**

Property, plant and equipment has been recorded on the basis of original cost including an amount for interest during construction computed at  $2\frac{1}{2}\%$ , compounded annually. Those facilities determined to be jointly useful for power generation and for other purposes, consisting principally of the dam, reservoir and fishways, have been allocated to power and to nonpower purposes in accordance with a determination by the Federal Power Commission acting under authority fixed by Congress in the Bonneville Project Act.

**2. Certain Costs Not Included:**

Property costs and operating expenses do not include general administrative and other costs of other departments of the Federal Government which, under governmental accounting procedures, are not allocated to individual projects. It is not practical to determine the amounts of such costs applicable to these projects.

**3. Depreciation Policy:**

Depreciation has been computed on the compound interest method using an interest factor of  $2\frac{1}{2}\%$  and based upon the estimated service lives of the various classes of property as determined by engineering studies except that no service life has been estimated longer than one hundred years. Composite reserves are maintained for each class of property and the cost of property retired (less net

salvage applicable thereto) is charged to such reserves.

**4. Allocation of Revenues:**

The amounts of revenues from power sales allocated to Bonneville Dam Project are in accordance with a memorandum of agreement with the Corps of Engineers, U. S. Army, dated November 28, 1945. The amounts so allocated cover (a) operation and maintenance expenses to be returned from power revenues; (b) interest at the rate of  $2\frac{1}{2}\%$  per annum on the investment allocated to power; and (c) scheduled amortization of the construction costs allocated to power. The allocations of revenues to cover these costs and amortization requirements are independent of the amount of power generated and delivered to the Bonneville Power Administration.

**5. Allocation of Joint Expenses:**

Operating and interest expenses applicable to joint facilities have been allocated to power and to other operations on the same basis as the related property costs (see Note 1 above), being  $50\%$  to power operations and  $50\%$  to other operations.

**6. Contingent Liabilities:**

The project is contingently liable under certain pending litigation. In the opinion of counsel for the project, any actual liability which may result from such litigation will not be material.

**UNITED STATES OF AMERICA**  
**DEPARTMENT OF THE INTERIOR**  
**COLUMBIA BASIN PROJECT (GRAND COULEE DAM)**

**STATEMENT OF ASSETS AND LIABILITIES—JUNE 30, 1945**

ASSETS	Total	Deduct— Amounts Allocated to Irrigation and Navigation	Amounts Allocated to Power (Including Downstream River Regulation)	LIABILITIES		
				Total	Deduct— Amounts Allocated to Irrigation and Navigation	Amounts Allocated to Power (Including Downstream River Regulation)
<b>PROPERTY, PLANT AND EQUIPMENT AT ORIGINAL COST</b> (Notes 1 and 2):						
Joint facilities (dam and reservoir) allocated to—						
Commercial power	\$ 42,088,059.48	\$ .....	\$ 42,088,059.48	\$ 186,098,652.35	\$ 65,336,306.29	\$ 120,762,346.06
Downstream river regulation	31,912,924.22	.....	31,912,924.22	195,071.89	68,486.67	126,585.22
Irrigation	53,688,115.41	53,688,115.41	.....	\$ 185,903,580.46	\$ 65,267,819.62	\$ 120,635,760.84
Navigation	1,000,000.00	1,000,000.00	.....	1,649,725.68	725,879.30	923,846.38
Specific power facilities (powerhouses and generating equipment)	48,493,391.65	.....	48,493,391.65	18,601,297.36	.....	18,601,297.36
Specific irrigation facilities (pumping plant)	8,369,829.08	8,369,829.08	.....	\$ 206,154,603.50	\$ 65,993,698.92	\$ 140,160,904.58
General plant (employees' quarters, service buildings and equipment) allocated to—						
Commercial power	1,629,709.93	.....	1,629,709.93			
Downstream river regulation	1,235,714.13	.....	1,235,714.13	\$ 16,418,679.68	\$ 531,632.50	\$ 15,887,047.18
Irrigation	2,251,404.62	2,251,404.62	.....	405,374.54	178,364.80	227,009.74
	\$ 190,669,148.52	\$ 65,309,349.11	\$ 125,359,799.41	\$ 16,824,054.22	\$ 709,997.30	\$ 16,114,056.92
Less—Reserves for depreciation (Note 3)—						
Joint facilities allocated to—						
Commercial power	\$ 450,482.83	\$ .....	\$ 450,482.83			
Downstream river regulation	341,574.90	.....	341,574.90			
Specific power facilities	1,069,780.38	.....	1,069,780.38	391,500.00	.....	391,500.00
General plant allocated to—				427,300.06	188,012.03	239,288.03
Commercial power	619,753.44	.....	619,753.44	\$ 1,347,752.04	\$ 371,558.37	\$ 976,193.67
Downstream river regulation	469,922.94	.....	469,922.94			
Irrigation	856,174.30	856,174.30	.....			
	\$ 3,807,688.79	\$ 856,174.30	\$ 2,951,514.49			
Original cost less reserves	\$ 186,861,459.73	\$ 64,453,174.81	\$ 122,408,284.92	\$ 189,330,549.28	\$ 65,283,701.62	\$ 124,046,847.66
<b>INTEREST AND DEPRECIATION CHARGES ON JOINT FACILITIES ALLOCATED TO DOWNSTREAM RIVER REGULATION—recoverable from operations of future downstream hydro plants</b>	\$ 3,480,047.96	\$ .....	\$ 3,480,047.96			
<b>CURRENT ASSETS:</b>						
Cash held by Treasury Department disbursing officer	\$ 2,799,557.94	\$ 971,446.60	\$ 1,828,111.34			
Sundry accounts receivable	60,083.06	20,848.82	39,234.24			
Materials and supplies	911,894.15	316,427.27	595,466.88			
	\$ 3,771,535.15	\$ 1,308,722.69	\$ 2,462,812.46			
<b>INVESTMENT OF U. S. GOVERNMENT:</b>						
Congressional appropriations, allotments and WPA expenditures						
Less Amounts not requisitioned						
Transfers from other Federal projects						
Interest on portion of Federal investment allocated to power						
Less—Funds returned to U. S. Treasury—						
Under project repayment schedule						
Miscellaneous receipts						
Net investment of U. S. Government						
<b>CURRENT LIABILITIES:</b>						
Accounts payable						
Due to Central Valley Project (Shasta Dam) for rental of leased generating facilities						
Employees' accrued leave						
RESERVES:						
Removal of Shasta Dam leased generating facilities						
Deferred maintenance						
CONTRIBUTIONS IN AID OF CONSTRUCTION—by State of Washington						
ACCUMULATED NET REVENUES (Note 2):						
Total net revenues from power operations—						
Period October 1, 1941 to June 30, 1944						
Fiscal year ended June 30, 1945						
Less—Amounts applied to repayment of irrigation operation and maintenance expense (Note 6)						
Period October 1, 1941 to June 30, 1944						
Fiscal year ended June 30, 1945						

UNITED STATES OF AMERICA  
DEPARTMENT OF THE INTERIOR

COLUMBIA BASIN PROJECT (GRAND COULEE DAM)

**STATEMENT OF REVENUES AND EXPENSES FOR THE PERIOD FROM OCTOBER 1, 1941 (BEGINNING OF OPERATIONS) TO JUNE 30, 1944 AND FOR THE FISCAL YEAR ENDED JUNE 30, 1945**

	PERIOD FROM OCTOBER 1, 1941 TO JUNE 30, 1944			FISCAL YEAR ENDED JUNE 30, 1945		
	Total	Deduct— Amounts Allocated to Irrigation and Navigation	Amounts Allocated to Power	Total	Deduct— Amounts Allocated to Irrigation and Navigation	Amounts Allocated to Power
<b>OPERATING REVENUES:</b>						
Portion of sales of electric energy by Bonneville Power Administration allocated to Columbia Basin Project (Note 4).....	\$10,964,579.00	\$ .....	\$10,964,579.00	\$4,891,390.68	\$ .....	\$4,891,390.68
Payment for river regulation benefits at Bonneville Dam Project.....	375,140.00	.....	375,140.00	187,570.00	.....	187,570.00
<b>Total operating revenues.....</b>	<b>\$11,339,719.00</b>	<b>\$ .....</b>	<b>\$11,339,719.00</b>	<b>\$5,078,960.68</b>	<b>\$ .....</b>	<b>\$5,078,960.68</b>
<b>OPERATING EXPENSES (Notes 2 and 5):</b>						
Operation—						
Joint facilities.....	\$ 395,845.42	\$ 174,171.99	\$ 221,673.43	\$ 207,239.68	\$ 91,185.46	\$ 116,054.22
Specific power facilities.....	560,318.46	.....	560,318.46	329,227.87	.....	329,227.87
Provision for rental, installation and removal of generating facilities leased from Central Valley Project (Shasta Dam).....	1,216,500.00	.....	1,216,500.00	973,200.00	.....	973,200.00
Maintenance—						
Joint facilities.....	425,857.45	187,377.28	238,480.17	204,303.52	89,893.55	114,409.97
Specific power facilities.....	195,426.27	.....	195,426.27	188,472.66	.....	188,472.66
Depreciation (Note 3)—						
Joint facilities allocated to power (including downstream river regulation).....	574,373.05	.....	574,373.05	217,684.68	.....	217,684.68
Leas—Amount allocated to downstream river regulation, recoverable from operations of future downstream hydro plants.....	247,698.38*	.....	247,698.38*	93,876.52*	.....	93,876.52*
Specific power facilities.....	678,951.44	.....	678,951.44	390,828.94	.....	390,828.94
<b>Total operating expenses.....</b>	<b>\$ 3,799,573.71</b>	<b>\$ 361,549.27</b>	<b>\$ 3,438,024.44</b>	<b>\$2,417,080.83</b>	<b>\$ 181,079.01</b>	<b>\$2,236,001.82</b>
<b>Net operating revenues.....</b>	<b>\$ 7,540,145.29</b>	<b>\$ 361,549.27*</b>	<b>\$ 7,901,694.56</b>	<b>\$2,661,879.85</b>	<b>\$ 181,079.01*</b>	<b>\$2,842,958.86</b>
<b>OTHER INCOME.....</b>	<b>16,425.09</b>	<b>7,227.04</b>	<b>9,198.05</b>	<b>8,565.31</b>	<b>3,768.74</b>	<b>4,796.57</b>
	<b>\$ 7,556,570.38</b>	<b>\$ 354,322.23*</b>	<b>\$ 7,910,892.61</b>	<b>\$2,670,445.16</b>	<b>\$ 177,310.27*</b>	<b>\$2,847,755.43</b>
<b>INTEREST DEDUCTIONS:</b>						
Interest on portion of Federal investment allocated to power (including downstream river regulation).....	\$ 8,143,299.22	\$ .....	\$ 8,143,299.22	\$3,152,438.14	\$ .....	\$3,152,438.14
Leas—						
Amount allocated to downstream river regulation, recoverable from operations of future downstream hydro plants.....	2,255,022.78*	.....	2,255,022.78*	883,450.28*	.....	883,450.28*
Amount charged to construction.....	450,300.00*	.....	450,300.00*	51,370.00*	.....	51,370.00*
<b>Net interest deductions.....</b>	<b>\$ 5,437,976.44</b>	<b>\$ .....</b>	<b>\$ 5,437,976.44</b>	<b>\$2,217,617.86</b>	<b>\$ .....</b>	<b>\$2,217,617.86</b>
<b>Net revenues.....</b>	<b>\$ 2,118,593.94</b>	<b>\$ 354,322.23*</b>	<b>\$ 2,472,916.17</b>	<b>\$ 452,827.30</b>	<b>\$ 177,310.27*</b>	<b>\$ 630,137.57</b>
<b>APPLICATION OF NET REVENUES:</b>						
Portion of net revenues from power operations applied to repayment of irrigation operation and maintenance expenses (Note 6).....	.....	354,322.23	354,322.23*	.....	177,310.27	177,310.27*
<b>Balance.....</b>	<b>\$ 2,118,593.94</b>	<b>\$ .....</b>	<b>\$ 2,118,593.94</b>	<b>\$ 452,827.30</b>	<b>\$ .....</b>	<b>\$ 452,827.30</b>

\* Denotes red figure.

The accompanying notes (Schedule 14) are an integral part of these statements.

## COLUMBIA BASIN PROJECT (GRAND COULEE DAM)

### NOTES TO FINANCIAL STATEMENTS ON SCHEDULES 12 AND 13

**1. Property, Plant and Equipment:**

Property, plant and equipment has been recorded on the basis of original cost including an amount for interest during construction computed at  $2\frac{1}{2}\%$  compounded annually except for nonpower facilities upon which such interest is not required. Those facilities determined to be jointly useful for power generation and for other purposes, consisting principally of the dam and reservoir, have been allocated to power and to other than power purposes in accordance with a determination by the Secretary of the Interior acting under authority fixed by Congress in the Reclamation Project Act of 1939.

**2. Certain Costs Not Included:**

Property costs and operating expenses do not include general administrative and other costs of other departments of the Federal Government which, under governmental accounting procedures, are not allocated to individual projects. It is not practical to determine the amounts of such costs applicable to these projects.

**3. Depreciation Policy:**

Depreciation of power facilities has been computed on the compound interest method using an interest factor of  $2\frac{1}{2}\%$  and based upon the estimated service lives of the various classes of property as determined by engineering studies except that no service life has been estimated longer than one hundred years. Depreciation of general plant (which is charged to clearing accounts and redistributed to construction and other accounts) has been computed substantially on a straight-line method based upon the estimated service lives of the various classes of plant. No depreciation has been provided on nonpower facilities. Composite reserves are maintained for each class of property.

**4. Allocation of Revenues:**

The amounts of revenues from power sales allocated to Columbia Basin Project (Grand Coulee Dam) are in accordance with a memorandum of

agreement with the Bureau of Reclamation of the Department of the Interior dated January 7, 1946. The amounts so allocated cover (a) operation and maintenance expenses to be returned from power revenues; (b) interest at the rate of  $2\frac{1}{2}\%$  per annum on the investment allocated to power plus the amount by which  $3\%$  interest on the unamortized construction costs allocated to power exceeds  $2\frac{1}{2}\%$  interest on the investment; and (c) scheduled amortization of the construction costs allocated to power. The allocations of revenues to cover these costs and amortization requirements are independent of the amount of power generated and delivered to the Bonneville Power Administration.

**5. Allocation of Joint Expenses:**

Operation and maintenance expenses applicable to joint facilities have been allocated to power and to other operations on the same basis as the related property costs (see Note 1 above), being  $56\%$  to power operations and  $44\%$  to other operations.

**6. Application of Net Revenues to Repayment of Irrigation Expenses:**

The allocation to irrigation of a portion of the operating and maintenance expenses on the joint facilities during this initial period prior to the commencement of irrigation operations is consistent with the allocation of construction cost. The repayment of such allocated expenses currently from power revenues has been reflected in these financial statements, although the amount of such expenses allocated to irrigation properly could have been capitalized as part of the construction period costs of the irrigation works.

**7. Contingent Liabilities:**

The project is contingently liable under certain pending litigation which, in some instances, involve claims of substantial amount. In the opinion of counsel for the project, any actual liability which may result from such litigation will not be relatively material.

## BONNEVILLE POWER ADMINISTRATION

PAUL J. RAVER, *Administrator*

D. L. MARLETT, *Assistant Administrator*

S. E. SCHULTZ  
*Chief Engineer*

C. GIRARD DAVIDSON  
*General Counsel*

W. A. DITTMER  
*Power Manager*

EARL D. OSTRANDER  
*Controller*

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Coquille, Oregon

Henry P. Carstensen  
Seattle, Washington

A. B. Comfort  
Tacoma, Washington

Dr. Wilson Compton  
Pullman, Washington

D. P. Fabrick  
Chateau, Montana

John M. Glenn  
Spokane, Washington

William C. Hefner  
Dallas, Oregon

Pat Hetherton  
San Francisco, California

Ronald L. Jones  
Brooks, Oregon

Ross Lynch  
Yakima, Washington

Glen S. Macy  
McMinnville, Oregon

Milton H. McGuire  
McMinnville, Oregon

Charles McKinley  
Portland, Oregon

Earl L. McNutt  
Eugene, Oregon

J. Scott Milne  
San Francisco, California

Ralph Montag  
Portland, Oregon

John O'Neill  
Portland, Oregon

Roger O. Oscarson  
Spokane, Washington

Fred B. Plath  
Yakima, Washington

George F. Yantis  
Olympia, Washington

Frank V. Romig  
Portland, Oregon

W. J. Seufert  
The Dalles, Oregon

Robert B. Sheets  
Seattle, Washington

Dr. A. L. Strand  
Corvallis, Oregon

Morton Tompkins  
Dayton, Oregon

Donald Treloar  
Kalispell, Montana

Thomas D. Welborn  
Brewster, Washington

Herbert G. West  
Walla Walla, Washington

Joseph D. Wood  
Boise, Idaho

Rufus Woods  
Wenatchee, Washington

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### BONNEVILLE POWER ADMINISTRATION

#### DISTRICT OFFICES

LOWER COLUMBIA DISTRICT  
Portland, Oregon

SOUTHWESTERN DISTRICT  
Eugene, Oregon

PUGET SOUND DISTRICT  
Seattle, Washington

UPPER COLUMBIA DISTRICT  
Spokane, Washington

MID-COLUMBIA DISTRICT  
Walla Walla, Washington

NORTH CENTRAL WASHINGTON DISTRICT  
Wenatchee, Washington