

BRIDGE TO THE FUTURE



THE ANNUAL REPORT
OF THE PUBLIC
UTILITY DISTRICT OF
Klickitat
County
WASHINGTON

1961

Sam Hill Memorial Bridge *Important Link in the Inter-American Highway System!*

When the new bridge at Maryhill is opened to traffic, there will be one continuous international highway system from Fairbanks, Alaska, to the Panama Canal Zone in Central America. To be sure, the northern and southern reaches of the highway are rugged and unpaved, and service stations are days apart. But the venturesome Alaskan or Canadian will be able to travel on a continuous route the full 10,000 miles to Panama, or he can use this highway as a direct route to eastern Oregon, California and the vast Southwestern United States. By the same U. S. Highway 97 Eastern Oregonians, Californians and residents of Latin America can drive to Eastern Washington, to Canada and Alaska.

A route for the venturesome is not the main purpose of the new bridge. A direct route is provided for interstate travelers who wish to take advantage of the long stretches of fast highway in the eastern parts of Washington and Oregon and in Central California and Nevada. The new bridge and Highway 97 are 30 minutes closer to points South than the nearest alternate route.

The bridge officially bears the drab name of Biggs Rapids Toll Bridge. However, local interests are hopeful that it will be officially christened to memorialize Samuel Hill, builder of Maryhill Museum, who first dreamed of a bridge at almost this exact location many years ago.

For over 50 years efforts to build this bridge ended in failure. But singleness of purpose and persistence eventually paid off, thanks to men of vision like William Bugge, director of highways; Darrel Hedges of the Washington Toll Bridge Authority; Henry Miller, Klickitat County commissioner; Mayor Geo. Nesbitt; Judge Vernon Miller of Sherman County, Oregon, Ken Fridley, Oregon State Highway Commissioner, and many others. The first break came in 1955 when Gov. Arthur Langlie dropped the proposed project in Director Bugge's lap. Mr. Bugge believed in the bridge and laid out a course of action, which started with getting legislative authorization. This was achieved with the yeoman service of State Senator Stanton Ganders and our then Representative Al Henry. The vote in both houses was unanimous.

Next, money was needed for a feasibility study. The Toll Bridge Authority agreed to put up one fourth. The Oregon State Highway Commission and Klickitat and Sherman Counties put up the rest. Bridge supporters worked their way through one disappointment after another, and after five years of study, a favorable feasibility report was obtained. This report carried the proviso that Oregon would build the approach and interchange on the Oregon side and Washington the Klickitat County approach. Ken Fridley of the Oregon Highway Commission assured ultimate victory when he announced Oregon would do its part. Gov. Albert Rosellini of Washington helped expedite the sale of bonds which were offered to investors in May of 1960.

The traffic studies that have been made of the new bridge show that about 250,000 vehicles will use the span in its first year of operation. This traffic will gradually increase until the bridge hits a peak of 400,000 cars in 1974. At that

time the toll is scheduled to be reduced at The Dalles bridge. This lower fare may divert a small amount of traffic from the Sam Hill Bridge for a few years, but the annual travel will eventually build back up to 400,000 cars annually. When this volume of traffic is compared with the 90,000 vehicles that use the present ferry in an average year, the importance of the bridge becomes immediately evident. In a nutshell: traffic will eventually increase by an additional 310,000 cars a year over the present ferry traffic.

The bridge is almost half a mile long—2,567 feet 2 inches to be exact. It has a 26 foot deck span. The 341 foot navigation span has 88 feet of clearance at normal pool level. The height of the truss span is 50 feet, making the entire structure 138 feet above the river. The deck consists of 1,575 cubic yards of lightweight concrete and the piers and abutments 19,700 cubic yards of regular concrete. Low alloy structural steel is used in the more highly stressed sections for a decided weight saving. Total weight of structure steel is 3,595,000 pounds. There is 879,000 pounds of reinforcing steel in the structure and 14,000 cubic yards of riprap was placed around the pier footings as a protective measure.

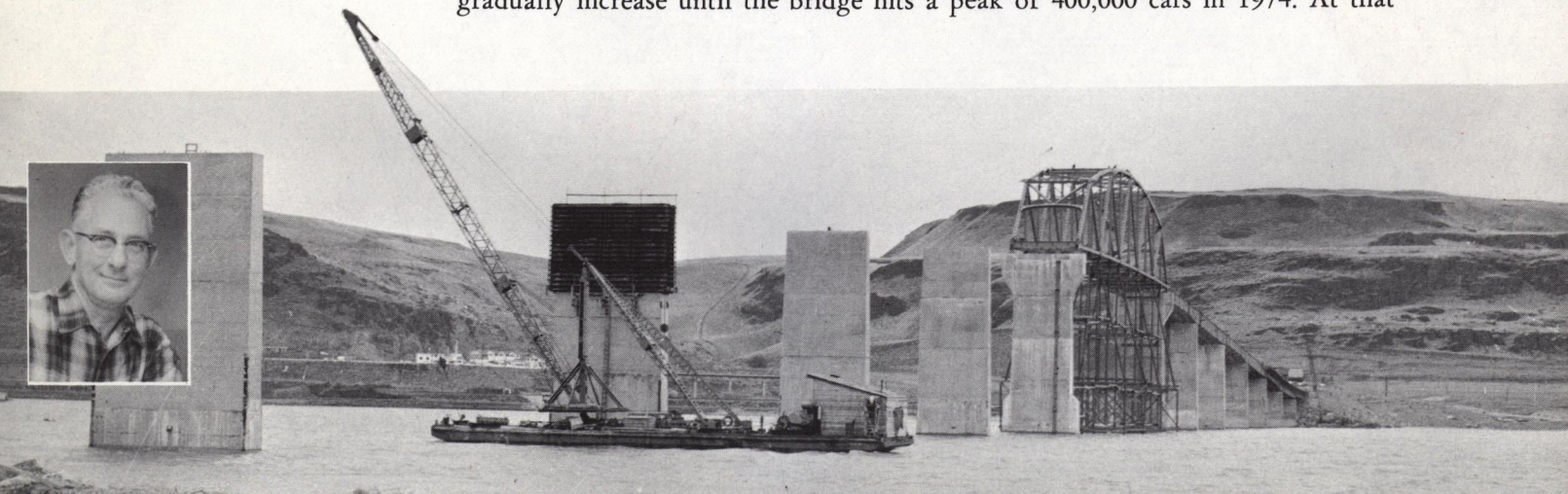
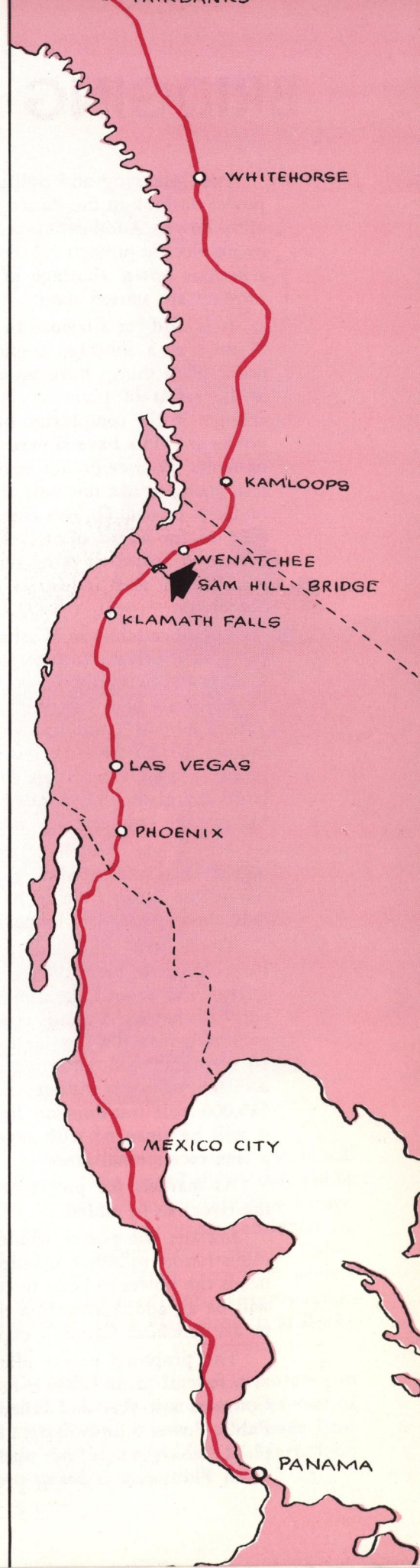
Paul Jarvie Co., the contractor, started work on the bridge Oct. 3, 1960. The contract amount is \$2,409,163. The bridge was designed and financed by the Toll Bridge Authority, C. C. Nichols, engineer, and D. B. Hedges, executive secretary. Charles E. Andrew was chief consultant and H. S. Stitzman is design engineer. The state highway bridge department, George Stevens, engineer, designed the truss span. The highway department, W. A. Bugge, director, supervises construction. J. W. Harris is resident engineer.

Tentative plans are to dedicate the bridge in September of 1962, the same day the navigation locks at John Day Dam are opened. An invitation has been extended to the President of the United States to take part in both.

With the bridge at The Dalles and the bridge between Bingen-White Salmon and Hood River, the new Sam Hill span will give Klickitat County more major highway crossings than any other county in either Washington or Oregon on the Columbia River. These are priceless assets to have as the Pacific Northwest continues to grow in population, in truck commerce and in importance as a tourist mecca.

For 70 years traffic has ferried the river here, first, horseman and wagons—now cars and trucks.

The bridge reaches across to Klickitat County. (Inset) J. W. Harris, highway department resident engineer.



CORRECTION

Page 2- Paul Jarvie Co., should be Paul Jarvis Co.,

Page 4- Rocky Beach should be Rocky Reach

BRIDGING the POWER GAP

Poor planning and political uncertainties have combined to render the power outlook in the Pacific Northwest confused and troublesome. Bonneville Power Administration which markets power from many federal hydro-electric projects has been running in the "red," and yet is predicting a serious power shortage in the next ten to fifteen years unless big new projects are started soon.

It is hard for a layman to unravel this seemingly contradictory situation. If there is a shortage coming, why should Bonneville be losing money now? Two things have brought this about. One is poor planning, which is the result of policies. A change of national administration, frequent changes in the complexion of Congress and constant pressure from private power interests have slowed down the development of these power developments. Bonneville has been unable to plan ahead for major new industrial loads to use not only the firm power but also the part time or "secondary" power. (It was the sale of this secondary power that put Bonneville so far ahead of its original payout schedule.) A second factor has been two economic recessions in a row, both of them accentuated by the inability of new industries to get commitments for firm power in the Northwest.

The uncertainty in Washington, D. C., has led many local utilities, both public and private, to plan for some of their own power supplies. Klickitat County Public Utility District is one of these utility systems that has been planning ahead. Of prime importance is its proposed development of the White Salmon River. It is also a member of the Washington Public Power Supply System which is building a hydro plant at Packwood — the same group of PUDs has asked the Federal Power Commission for a license to build the giant Nez Perce project on the Snake River and is presently exploring the construction of power facilities at Hanford atomic works.

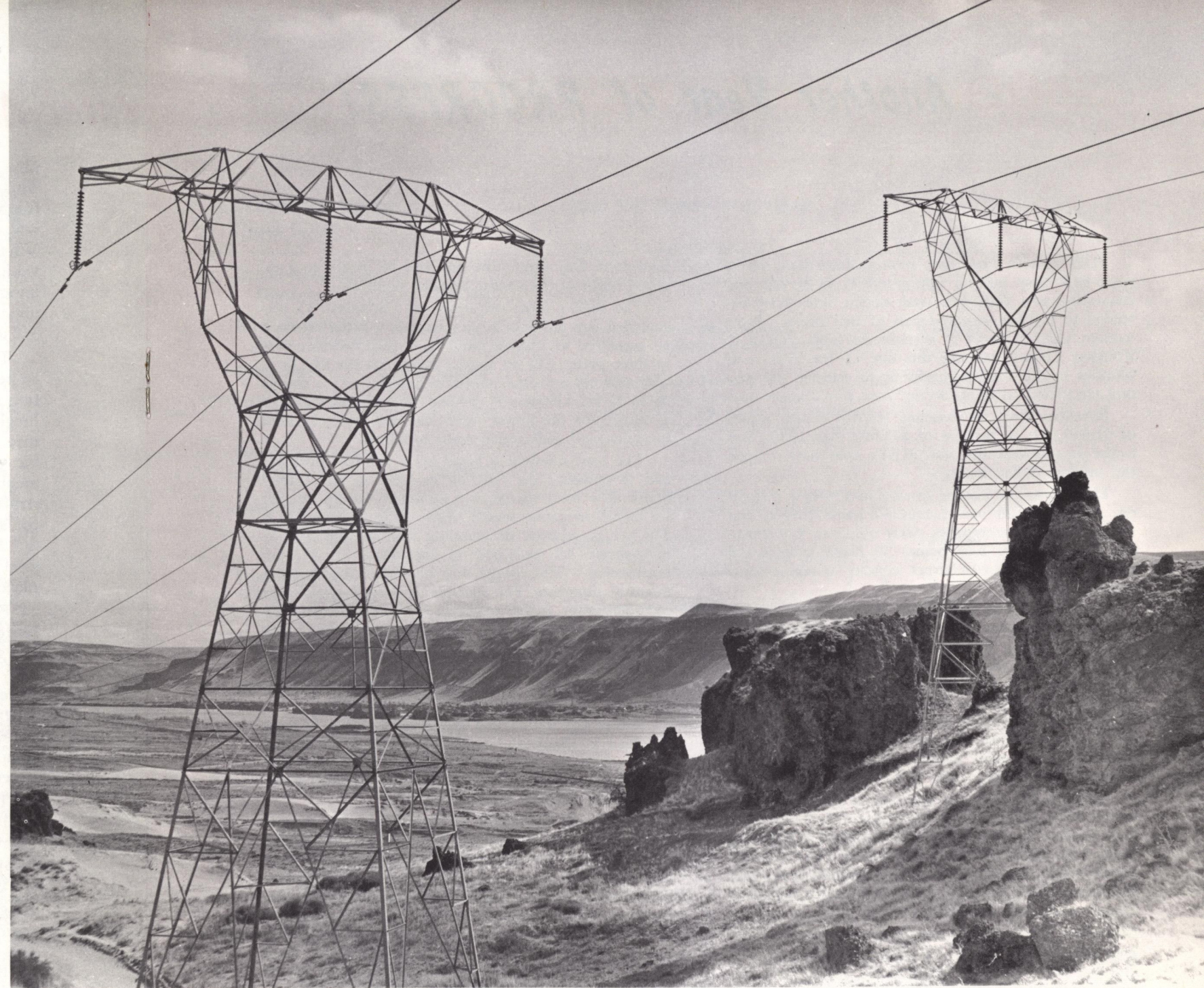
The White Salmon development provides for the building of a series of six dams and rebuilding of the Condit project. When fully developed the White Salmon would have a capacity of 205,000 kilowatts, about one half the capacity of Bonneville Dam.

The District has made application to the Federal Power Commission for a license to build the first dam in the series, on Nine Foot Creek northwest of the Trout Lake community. This project can be operated independently of the others and is economical to build. Specifications call for a concrete structure 100 feet high on the White Salmon River; an earth fill dam 80 feet high and 5,000 feet long on Green Canyon Creek creating 6,000 acre feet of water storage; a 40,000 kilowatt power house, and 28 miles of 115,000 volt transmission line. The estimated cost is \$4,217,000. If built, it will be financed with revenue bonds. The first dam would also create a fine recreational area.

As markets for power develop, the other dams and power houses on the river can be added.

Initially the power would be sold through the Bonneville Power Administration to other utilities on a call-back basis as the Klickitat PUD needs the power in years to come. This substantial block of low cost power will be an added attraction to power consuming industries that will come to use Klickitat County's excellent industrial sites.

The proposed power plant at Hanford was originally recommended as a federal project, but it met with private power company opposition in Congress last year and failed to win an appropriation. The Washington Public Power Supply System is seeking federal approval to build this power plant, which would use waste steam from the new dual purpose reactor when Plutonium is being produced. The cost is estimated at \$95 million.



The plant would have a capacity of nearly 1 million kilowatts at a very low cost. The WPPSS has offered to give the plant to the federal government when it has paid for itself, or to sell it to the government at any time for the amount of outstanding revenue bonds.

Another project in which your PUD is interested is the 26,000 kw plant at Packwood Lake in Lewis County, Washington. A \$10.5 million bond issue has been sold at a low interest rate and construction has started on this venture. Eleven PUDs will share in the power.

The Nez Perce project, also sought by WPPS, is tied up in Federal Power Commission proceedings.

Many important power issues are at stake in the Pacific Northwest. Probably the most important one is who is going to control the vast water resources in the headwaters of the Columbia, Snake and other major rivers — the people through publicly owned federal or local utilities, or private

interests. Another issue is the cost of power. Unless the cost is low, it will not attract new industries to the Northwest. The record shows that public development results in cheaper power because it is non-profit in nature, and the cost of money is lower. This latter is an important consideration, since interest is the principal cost item in producing electric power. Public bonds, whether federal or local, sell at lower interest rates than private company bonds and private company stock. This is why private power companies have agreed to purchase surplus power from PUD projects at Rocky Beach, Priest Rapids and elsewhere for resale to their customers.

The proposed power treaty with Canada is also of great importance to us in the Pacific Northwest of the United States. Vast storage reservoirs of water would be created in Canada, which would provide a more even flow of water in downstream power plants in the U. S., including McNary, John Day, The Dalles and Bonneville dams in this area.

1961 - Another Year of PROGRESS!

PUD revenues set new records last year, crews were kept busy making improvements to service and connecting new customers, and electric lines were extended to the last unserved part of the county. Now modern electric service is available to every person in Klickitat County, making this one of the first rural counties in the Pacific Northwest to achieve 100 percent electrification of its service area.

Revenues from the business reached a new record of \$1,049,137, an increase of \$25,087 over 1960. This is the second year that the PUD's sales have topped the million dollar mark.

PUD crews ran electric services to 173 new customers, including 120 new homes 30 house trailers and 23 new business enterprises. Sixty nine new transformers, including 120 new homes 30 house trailers and placed by equipment of larger capacity to take care of increased loads.

Twelve miles of power line was relocated during the year to prevent interruptions from winter icing. The line, running from Cleveland to Dot, was originally built on the same poles under a 69,000 volt transmission line. The high voltage lines would sometimes sag under the weight of heavy icing and short out the lines underneath, causing widespread outages to customers. The second line was moved to new poles on the other side of the road. Another five miles of this line, running west of Dot, is also to be moved.

A power line was run last year to serve 11 homes in the Rock Creek Indian settlement. These were the only families in the county still unserved. This line marked the attainment of a goal set by PUD commissioners when the District was first organized in 1938, and when 1750 of the 4100 families in Klickitat County were still without electricity.

A line was built last year to the new Horse Thief Lake Park where the U. S. Corps of Engineers are building rest rooms, a parking lot, picnic facilities, landscaping and a water system. This will indeed be one of the more popular parks along the Columbia River.

The PUD purchased an insulated aerial manlift last year. This equipment allows linemen to work barehanded on high voltage lines by using the principle which permits birds to sit on power lines without danger. The linemen are completely insulated from the ground, as the birds are, so that no current can pass through their bodies. Since the men can work without cumbersome rubber gloves, "hot sticks" and other safety equipment, the manlift will speed up work on high voltage lines.

Work will start in 1962 on relocating 20 miles of PUD line between Roosevelt and Alderdale, which townsites will be flooded by the lake to be formed be-

hind John Day Dam. The line will be moved to a location north of the newly relocated highway.

The PUD's farm irrigation rate (Schedule 5) was amended late last year to give farmers a better rate and an incentive to irrigate more land. The old rate was in three parts: (1) an annual charge on the PUD's equipment to serve the irrigation pumps; (2) a charge of \$1.25 per kilowatt of demand each month; and (3) a charge for the power used. The old rate was hard to understand and created many problems.

The new schedule is based on a flat rate principle and is probably the first of its kind in the United States. The total charge to a customer for the regular six month irrigation season, April 20 to October 20, is \$18 per horsepower of pumping load for the first 15 horsepower. All loads over 15 horsepower are \$12 per horsepower. The charge will be billed in six equal monthly payments. For example, a farmer who has a 15 horsepower pump will pay \$45 a month or \$270 for unlimited use of his irrigation equipment during the six month period. A 25 horsepower pump would cost \$65 a month or \$390 for the season, and so on. For service beyond six months, an additional monthly charge of \$2.30 per horsepower will be made.

Where the PUD's cost of special facilities to serve the load is abnormal, an alternate method of billing will be used. In such cases the charge will be one seventh of the cost of the PUD's facilities per year, divided into six monthly installments.

The District continued its aggressive sales promotion along other lines also. Fifty of the new homes built last year were all-electric, including electric heating. The PUD issued without charge 200 ampere electric entrance panels to 113 families who installed electric heat, electric kitchens or electric laundries in their homes or commercial water heaters in barns and milk-houses. Friendship lamps were installed in the front of 20 homes, and yard lights were installed on 70 farms and other rural residential properties.

In addition to good electric service for its customer-owners the PUD has the long range task of building its own "bridge" to the future. This is a "bridge" of adequate power supply and high quality of electric service. It is the kind of bridge every community has to have to take advantage of the great opportunities that lie ahead for the Pacific Northwest in the coming decade.

Respectfully submitted,

AMOS W. LARSEN, President
GERALD FENTON, Vice-President
L. E. DARLAND, Secretary
EMMET E. CLOUSE, Manager

1961 FINANCIAL REPORT

Where The Money Came From:

Urban Residential Sales	\$ 205,800
Rural Residential Sales (Non-Farm)	189,561
Farm Sales	158,281
Irrigation Pumping Sales	19,774
Small Commercial Sales	153,518
Industrial Sales	275,277
(Including John Day Construction)	
Street Lighting, Public Agencies and Other Sales ..	32,589
Miscellaneous Income	14,337
TOTAL REVENUE	\$1,049,137

How The Money Was Used:

Electric Power Purchased	\$ 315,940
Purchased from Bonneville Power Administration under our long-term contract.	
Operations and Maintenance	314,038
Wages, salaries, materials, supplies.	
State and Local Taxes	62,390
This includes revenue assessments in lieu of property taxes, but does not include sales taxes charged to materials and supplies we purchased.	
Interest	93,044
The average interest rate on our long term bonds is only 2.03 per cent.	
Bond Redemption	136,864
Each year we have a fixed amount of bonds to retire out of income.	
Balance for Additions and Betterments ..	126,861
These include new lines, new tools, rebuilt lines, etc., depreciation and amortization expenses.	
TOTAL	\$1,049,137



The BALANCE SHEET . . Dec. 31, 1961

ASSETS (What We Own):

Electric Plant in Service	\$5,800,378
Construction Work in Progress	937,357
Utility Plant Total	6,737,735
Less Reserves for Depreciation and Amortization	1,791,482
Depreciated Value of Utility Plant	4,946,253
Other Physical Property	
Less Reserves	11,897
Investments and Special Funds	185,074
General Funds—Cash	164,327
Temporary Investments and Special Deposits	220,208
Accounts Receivable—Electric (Less Reserves)	116,377
Other Notes and Accounts Receivable	1,700
Materials and Supplies	97,935
Other Current and Accrued Assets	13,228
Total Current and Accrued Assets	613,775
Unamortized Loan Expense and Other Deferred Debits	374,599
Total Assets and Other Debits	\$6,131,598

LIABILITIES (What We Owe):

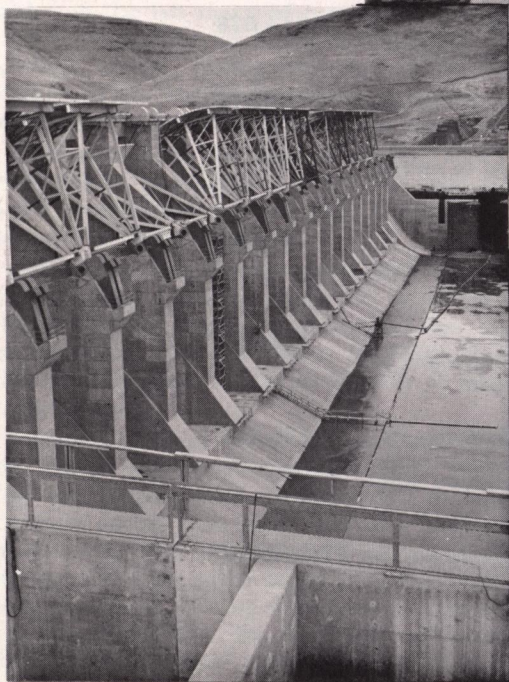
REA Long-Term Bonds	\$4,079,660
Long-Term Debt - Other	580,000
Federal Housing and Home Finance Agency	225,000
Total Long Term Debt	4,884,660
Notes and Accounts Payable	73,036
Consumers Deposits	30,342
Other Current and Accrued Liabilities	70,841
Total Current and Accrued Liabilities	174,219
Other Deferred Credits	23,507
Contributions in Aid of Construction	221,774
Total Deferred Credits	245,281
Net Operating Income (Present Year)	39,310
Net Operating Income (Previous Years)	788,128
Total Surplus*	827,438
Total Liabilities and Surplus	\$6,131,598

*This is the difference between assets and liabilities—the net worth of the system. It represents the people's debt free equity.

JOHN DAY DAM PROJECT



Closeup of piers in main spillway section of John Day Dam in Klickitat County.



Side view of piers. Powerhouse will extend from spillway to Oregon Shore.



Motorists have a commanding view of dam from Highway 8.

H. B. Elder, noted dam builder, is resident engineer on John Day project.



Gate towers guard navigation locks.

