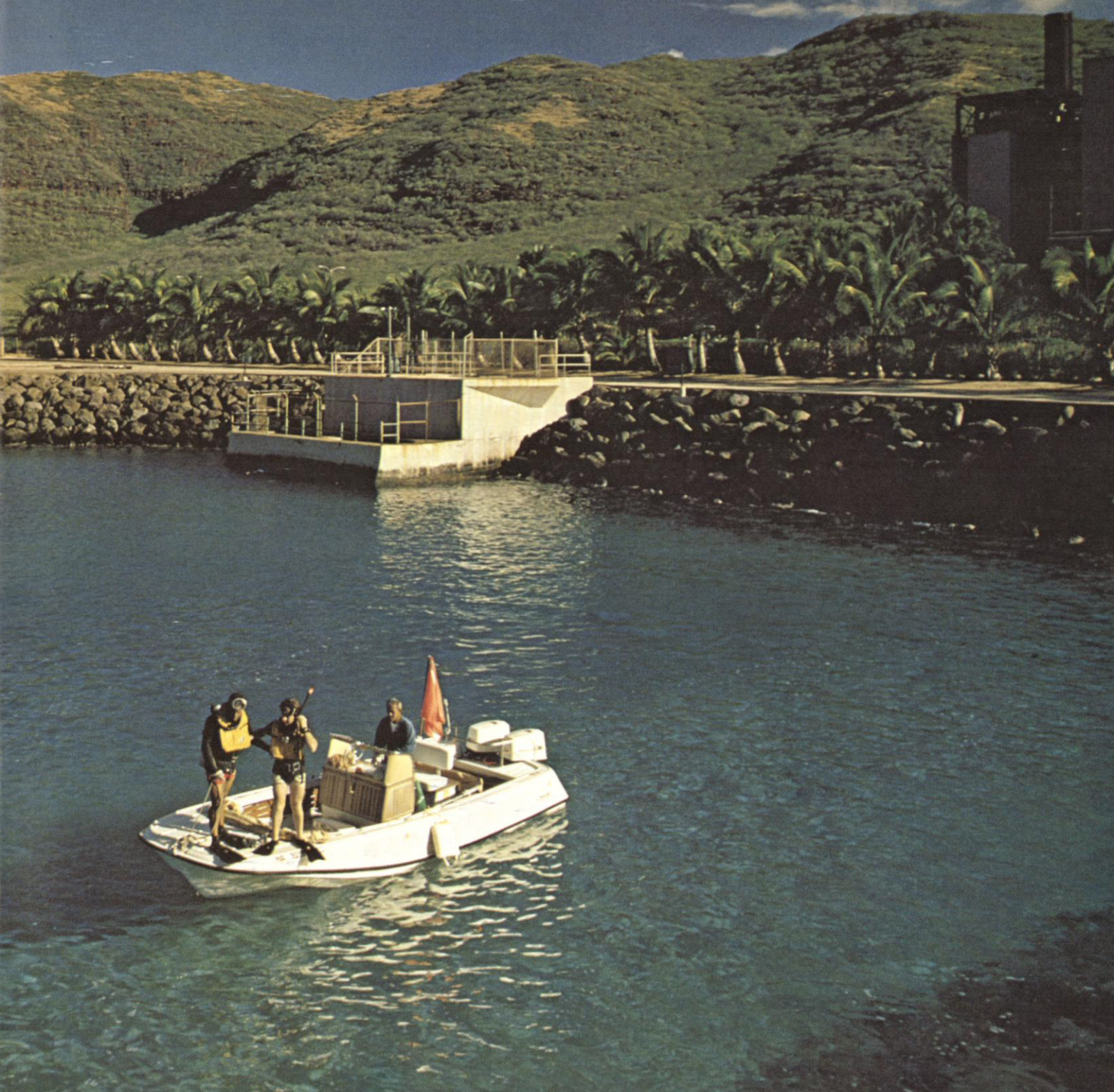


# HAWAIIAN ELECTRIC COMPANY, INC. / 1971 ANNUAL REPORT

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# highlights

**SALES** Consolidated kilowatt-hour sales of HECO and its two subsidiaries rose to 4 billion, an increase of 10.9 percent over 1970.

**REVENUES** Consolidated operating revenues amounted to \$93.4 million, an increase of 17.1 percent over the previous year.

**EARNINGS PER SHARE** Earnings per share of common stock amounted to \$2.21, up 7 cents over 1970.

**DIVIDENDS** Dividends paid on common stock totaled \$1.44 a share, up 9 cents over 1970.

**CUSTOMERS** The three companies served a total of 214,224 customers at the end of 1971, 3.5 percent more than at the end of 1970.

**RESIDENTIAL USE** Average annual residential usage of electricity rose to 7,391 kilowatt-hours, an increase of 4.1 percent over the previous year.

**PEAK DEMAND** The highest non-coincidental peak demand on the systems of the three companies was 822,000 kilowatts, a 7.5 percent increase over 1970.

**RATE CASE** In April of 1971, the company filed an application for a 9.7 percent rate increase on the Island of Oahu. Oahu customers provide 81 percent of the company's total electric sales revenues.

*COVER—A Boston Whaler idles off southwest Oahu shore where Kahe Plant stands. Scuba-diving scientists engaged by Hawaiian Electric use the 21-foot outboard boat in studying effect of our plant operations on island waters and marine life.*

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## to our shareholders

On October 13, 1971 Hawaiian Electric Company completed 80 years of service on Oahu, and it is my pleasure to report that year-end results were consistent with the success pattern developed throughout our history.

Kilowatt hour sales and revenue made substantial gains over 1970. On Oahu sales increased 9.9 percent, while growth on the Islands of Maui and Hawaii caused sales of our subsidiaries there to increase 16.5 and 15.3 percent, respectively.

Earnings per share in 1971 were \$2.21 compared with \$2.14 in 1970.

Since 1955 Hawaiian Electric has provided service on Oahu without any general increase in rates. We were able to absorb higher costs because of growth in volume of sales and improvements in operations. With recent substantially higher interest rates on money borrowed for plant expansion—coupled with the effects of inflation on expenses—we have been forced to seek relief through a rate increase of about 9.7 percent to provide satisfactory earnings in the future.

We filed a rate increase application with the Hawaii Public Utilities Commission on April 27, 1971. Public hearings were held in November. The economic hearings started late in January and are still in progress as this report goes to press, with a decision anticipated in April.

In order to comply with new environmental laws and regulations,

the company anticipates the need to make large expenditures in the future that will not produce any more or better electricity but will add substantially to the cost of meeting power demands.

We are concerned that the general anxiety over pollution may force us to take some measures costing far more than the value of benefits received, thus leading to unnecessary higher costs for service. This would be self-defeating, because electricity is the cleanest source of energy and is needed to solve many pollution problems.

In our rate increase application to the Public Utilities Commission, we requested an environmental control cost-adjustment clause, similar to our fuel oil price-adjustment clause. If approved, the company would be reimbursed by its customers for expenditures imposed by governmental action. Each customer's share would appear as a separate item on his electric bills, enabling him to see how much such pollution controls are costing him.

Beginning about 1955, and particularly after statehood in 1959, the construction industry was hard pressed to keep pace with Hawaii's fantastic rate of growth. During 1971 the number of apartments and hotels on Oahu finally caught up with demand, and it will be a few years before this type of construction will need to resume here on any large scale. The need for residential housing is still very strong,

and considerable effort is being made by private and governmental sectors to provide single-family homes on the Islands of Oahu, Maui and Hawaii.

Our state's economy is strong and holds excellent potential for continued development. It is clear that Hawaiian Electric and its subsidiaries must expand to meet future power needs.

In its long-range planning, the Company projects the future population of Oahu to be one million by 1990 and one and a half million by the year 2020. Present population is approximately 650 thousand.

Even if the population does not grow at the projected rates, requirements for electricity in the home and in business will increase rapidly. In addition, industrial and governmental loads will grow dramatically as a result of measures taken to improve the environment.

Total generating capability of the Oahu system today is 873,000 kw and our largest generating units are 90,000 kw. Plans call for increasing total capability to 1,349,000 kw by 1976 and the use of 141,000 kw units beginning in 1974.

Most of the new installed capability will be at Kahe near an industrial park in a remote area along the leeward coast of Oahu. We do not plan to install additional steam generating units at the Honolulu or Waiiau Plants. We are seeking additional power plant sites on Oahu, Maui and Hawaii.



During the next five years the company and its subsidiaries plan to add plant and equipment costing an estimated \$330 million, over twice the amount spent in the previous five years.

I will retire on April 18, 1972 after having been with Hawaiian Electric more than 30 years. I am confident that the Company is in sound condition and that it is organized and staffed with men of fine ability who are prepared to meet the challenge of providing power in a new period of rapidly changing conditions.

At this time I wish to acknowledge the counsel of our able Board of Directors and to express my appreciation for the support and excellent performance of our management and employees, whose broad experience and skills contribute so much to the Company's continuing success.

*Lewis W. Lengnick*

LEWIS W. LENGNICK, *President*

February 15, 1972



Hawaii's natural beauty and charm is its most distinguishing feature. As the major electric utility of the state, we have a vital interest in meeting growing power needs with a minimum effect on the environment, and traditionally we have taken the initiative in controlling the environmental impact of our facilities.

Over the years we have given special consideration to attractive power plant design, landscaping, control of emissions from our plants, improved appearance of powerlines and substations, and undergrounding of facilities. We were among the first utilities in the country to buy large substation transformers with extra low sound levels for use in residential neighborhoods.

Strong public interest in the environment and, especially, the development of governmental controls have created the need for Hawaiian Electric to intensify its efforts in this area.

### New Department

In November 1971 we established an Environmental Department to perform studies and collect data requisite to compliance with all regulations. Also, it will be necessary to prepare and present technical information at hearings before

*The town fish market once made history on a portion of company's Honolulu Plant site. Market is no more, but fishing's still good in harbor, where fishes are attracted by warmth from plant cooling system discharges.*

the legislature and other governmental bodies, as well as for environmental impact reports.

During the year, we purchased several pieces of special equipment and sophisticated instruments to help us gather necessary new information.

One item, to be used by our new Environmental Department's Marine Biology Laboratory, is the Boston Whaler pictured on the front cover of this report. The marine biologist in charge of the laboratory will examine marine organisms and thermal outflow in the vicinity of company power plants.

### Air Quality

Long before air quality became a subject of general public concern—and even though our power plants contributed a very small percentage of the total volume of air pollution—we were working on the problem of smoke from our power plant stacks.

In Hawaii the only practical way we have found to generate the amount of electric power required is by burning fuel oil. In this process several gases, including oxides of sulfur and nitrogen, are released into the air. After years of research and experimentation by ourselves and others in the industry, it was found that the only practical means of controlling sulfur oxide emissions today is to use an oil with a low sulfur content.

Costly alterations are necessary to convert a plant to the use of low sulfur oil, but these have been com-

pleted at both our Honolulu and Waiiau Plants, which together produce approximately 70 percent of the power generated for Oahu. We started using the new fuel at the Honolulu Plant in June 1969 and at the Waiiau Plant in June 1971. The smoke is completely eliminated, and the amount of sulfur oxides is reduced to a minimum.

There is a limited amount of low sulfur oil available, and it is in great demand. We are fortunate to have contracts insuring an adequate supply for our Honolulu and Waiiau Plants for several more years. If we had to negotiate such contracts today, the cost would be considerably more.

While use of low sulfur oil is the best method we have found for eliminating smoke from our operations, we will continue our interest in the development of alternate sources of energy.

### Water Quality

Obtaining newly required governmental permits for power plant use of Hawaii's ocean water at this time is of utmost importance for the continuance of economical electric service to the people of Hawaii.

Under government regulations of water quality, we have applied for permits to use ocean water at all oceanside company plants. Permits have been granted for the Honolulu Power Plant as well as for plants of our subsidiaries at Hilo, Hawaii and Kahului, Maui. In support of our application for permits at Waiiau and Kahe on Oahu, we are

conducting studies on the environmental effects of our warm water discharge.

We have retained a former associate professor of oceanography at the University of Hawaii to collaborate in various marine studies we are making on all the islands. His familiarity with offshore conditions in Hawaii dates back to 1963 when he first conducted detailed

oceanographic studies for us at our Kahe Plant.

We have engaged Bechtel Corporation to prepare data concerning alternate cooling methods for our Waiiau and Kahe Plants.

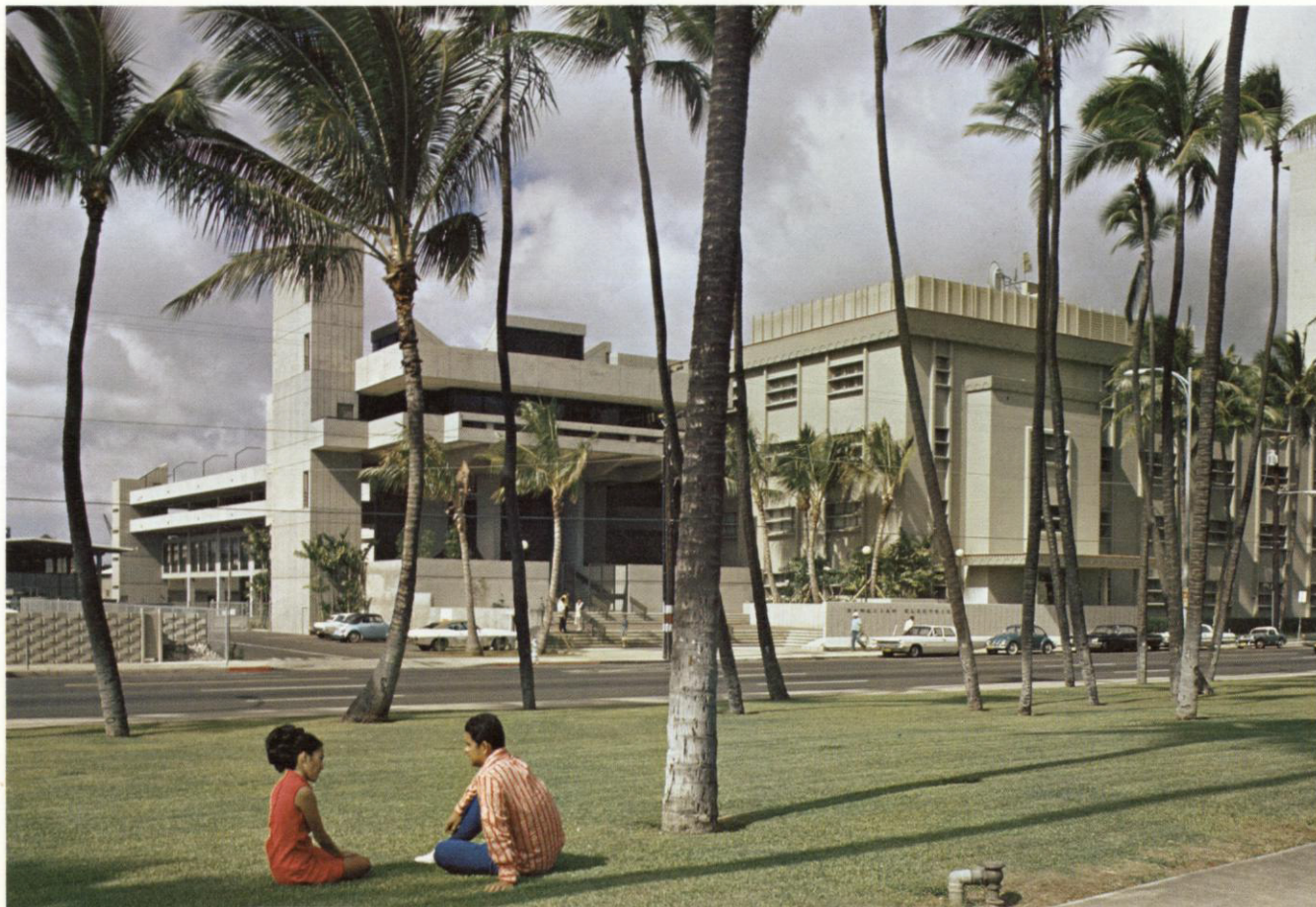
Hawaiian Electric is also interested in the possibility of making some productive use of warm water discharge, and we will cooperate with the Fish and Game Division

of the State Department of Land and Natural Resources on projects that may further the science of mariculture.

#### **New Generating Plant Sites**

To meet expected future power demands, additional plant sites are required on Oahu, Maui and Hawaii.

*Ward Avenue addition of warehouse, offices, cafeteria, parking decks and computer center, received an architectural award.*





In 1971 Stearns-Roger Corporation, engineering consultants of Denver, completed a study for Maui Electric that led to the selection of a 32-acre plot in an agricultural district on Maalaea Bay for an additional steam generating unit needed on Maui's system in 1975.

The State Land Use Commission gave a special permit in July 1971 for the use of only five acres on

which only interim diesel and gas turbine units can be installed. The Commission requested that a report on the environmental impact of a steam generating plant accompany any later application to use the rest of the property. The Environmental Systems Department of Westinghouse Electric has been engaged to do the environmental studies.

Stearns-Roger, retained to design

Kahe 5 and 6 and Hilo Electric Light Company's Hill 6, has contracted to prepare environmental impact reports on the operation of those units.

Hawaiian Electric needs a fourth power plant site on Oahu, and several locations have been under investigation. It is anticipated that the company will need the first unit in operation at a new site by 1977.

*Air is clear over the Waiiau Power Plant, which joined its sister Honolulu station in switching over to smokeless low-sulfur fuel oil.*





## growth of sales

Rapid economic growth occurring in Hawaii immediately following statehood in August 1959 was centered mainly on Oahu.

Between 1960 and 1970 Hawaii's resident population increased by 22 percent, and of great significance to growth in kilowatt hour sales was the construction boom that occurred throughout that ten-year period. Kilowatt hour sales on Oahu moved up at an average annual rate of 9.1 percent between 1960 and 1970, and in 1971 they rose 9.9 percent.

The number of apartments and hotels on Oahu has finally caught up with demand, but the need for residential housing remains strong. Townhouses and cluster homes are gaining popularity in our area. In 1971 we installed service for 1,216 such units compared with only 543 during 1970. Ninety-one percent have all-electric appliances.

Hawaiian Electric connected service for its 150,000th residential customer in December 1971. The total number of customers on Oahu is now 174,300 compared with 117,227 in 1960. Today nearly 80 percent of our customers have all electric homes compared with about 65 percent in the first year following statehood.

During the same ten-year period, the average annual residential us-

age of electricity by our customers increased 58 percent to its present level of 7,776 kilowatt hours, which is above the national average. Approximately 97 percent of the new single-family homes built on Oahu in 1971 were all electric.

The number of commercial and industrial customers on Oahu between 1960 and 1970 increased by one-third, and kilowatt hour sales to this group more than doubled. A major portion of our newly connected load during 1971 was for office buildings and commercial operations throughout the island.

Downtown Honolulu has undergone dramatic change during the past four years. Many old buildings

have been replaced by modern high-rise structures with pleasing architecture and green areas. Others were remodeled to recapture an old charm that attracts visitors and residents alike.

Three years ago, downtown had about one-and-a-half-million square feet of modern office space. When current projects are completed, this total will have doubled, greatly increasing the need for power to operate air conditioning and other electrical equipment.

### Neighbor Islands

Sugar and pineapple were the economic mainstay of the neighbor

*Underground wiring improves an attractive neighborhood on slopes of Koko Head. Ninety-six percent of services installed in new subdivisions were placed underground.*



*Electric furnaces at Hawaiian Western Steel melt 60,000 tons annually of scrap, mainly from old cars, into reinforcing bars for island construction.*

islands until about 1967. At that time new resort areas began to appear, greatly stimulating tourism and other growth that promises to continue for some time to come.

In 1971 kilowatt hour sales of our two subsidiary companies were above the forecasts, and both companies are accelerating plans for the installation of new facilities.

#### *Hawaii*

Hilo Electric Light Company's total kilowatt hour sales increased 15.3 percent over 1970. Service connections were made for 1,120 new

single-family homes and 199 apartment units. Approximately 73 percent of the new homes were all electric.

Also contributing heavily to Hilo Electric 1971 growth in kilowatt hour sales were new hotels, office buildings and shopping centers at Hilo and on the other side of the island. A 750-seat auditorium was added at the University of Hawaii Hilo campus during the year.

A number of projects are planned and several are under construction on the Big Island. These include a new Hilo airport terminal facility, large resort developments, new resi-

dential communities and several subdivision and apartment projects.

#### *Maui*

Maui Electric Company kilowatt hour sales increased 16.5 percent over 1970, exclusive of large industrial sales to the sugar plantations for the pumping of irrigation water. Because of dry conditions on Maui during most of the year, the need for irrigation pumping was unusually heavy.

New services were installed on Maui for 743 new single-family homes and 420 apartments. Over



*State and county office buildings are part of major shopping and governmental center created on redeveloped land in Hilo.*

90 percent were all electric. New hotels and hotel additions created 786 more rooms in the Kaanapali area. New shopping centers and office buildings, as well as a memorial stadium at Wailuku, were completed during 1971. Several additional shopping centers are planned or underway.

A resort development on fifteen hundred acres of land in the Kihei-Makena area was started in 1971 with an 18-hole golf course that opened in December. Construction of the first hotel is to start in 1972, and during the next 15 years several hotels and apartments are planned

for this new resort community.

### Electricity for the Future

The need for electricity will increase rapidly in the future, as pollution control measures calling for electric power are added to the normal power demands of a growing population and expanding economy. This presents a great challenge and opportunity for our company and others in the electric utility industry.

During the 1970's Hawaiian Electric and its subsidiaries will be called upon to provide electric en-

ergy to operate sewage treatment plants, solid waste compaction facilities, waste recycling facilities, various forms of pollution-free transportation, as well as the pumps and other power-consuming components of pollution abatement systems that industries will have to install.

To provide jobs and a high standard of living for a growing population, Hawaii's economy must continue to grow. At the same time, the environment must be protected. To achieve both of these objectives simultaneously, an abundant supply of clean electric energy is needed.



*Apartments and hotels on Oahu caught up with demand, but need for single-family dwellings continued. Company installed its 150,000th residential service in December.*

## system development

Utility plant investment of Hawaiian Electric and its two subsidiaries at the end of 1971 was \$402 million. At the beginning of 1960, total plant investment of the three companies was \$130 million. The company anticipates the need for continued heavy expansion in the years ahead.

Hawaiian Electric's energy pro-

duction and delivery system on Oahu is outlined on the map appearing on page 30.

Combined capability of the oil fired steam-turbine generator units of our three power plants, situated at Honolulu Harbor, Pearl Harbor and Kahe Valley, is 873,000 kilowatts.

Our Kahe Plant, in an isolated

valley owned entirely by the company on Oahu's leeward coast, has three units in operation. Construction of Kahe 4, a companion 90,000 kilowatt unit for Kahe 3, was about 80 percent complete at year end. Engineering is in progress at Stearns-Roger for the design of Kahe 5, scheduled for operation before the end of 1974.

*Up to 56 vehicles can be night-loaded from new Central Stores Warehouse at Ward Avenue. Interior is as big as two football fields.*



## HAWAIIAN ELECTRIC COMPANY, INC.

# FINANCIAL

### SUMMARY OF FINANCIAL RESULTS

(Dollars in Thousands)

	1971		1970	
	Amount	Percent of Total	Amount	Percent of Total
<b>WE RECEIVED FROM</b>				
Operating Revenues .....	\$93,355	99.9	\$79,701	99.8
Other Income .....	108	0.1	120	0.2
Total .....	93,463	100.0	79,821	100.0
<b>WE HAD THESE EXPENSES</b>				
Wages and Employment Benefits Charged to Operation .....	16,480	17.6	14,938	18.7
Fuel Oil .....	23,703	25.4	16,448	20.6
Other Materials and Services .....	6,298	6.7	5,301	6.7
Depreciation .....	9,214	9.9	8,646	10.8
Federal and Local Taxes .....	17,738	19.0	16,675	20.9
Interest on Borrowed Money and Other Miscellaneous Expenses .....	10,018	10.7	8,567	10.7
Allowance for Construction Funds .....	(888)	(1.0)	(1,216)	(1.5)
Total .....	82,563	88.3	69,359	86.9
<b>LEAVING AS NET INCOME</b> .....	10,900	11.7	10,462	13.1
<b>FROM WHICH WE PAID STOCKHOLDERS</b>				
Preferred Dividends .....	1,562	1.7	1,419	1.8
Common Dividends .....	6,098	6.5	5,696	7.1
<b>AND WE RETAINED IN OUR BUSINESS</b> .....	\$ 3,240	3.5	\$ 3,347	4.2

HAWAIIAN ELECTRIC COMPANY, INC. AND SUBSIDIARIES

**CONSOLIDATED BALANCE SHEET**

December 31, 1971  
(with comparative figures for 1970)

**Capitalization and Liabilities**

	1971	1970	Increase (Decrease)
<b>CAPITALIZATION:</b>			
Common Equity:			
Common Stock of \$6-2/3 Par Value Per Share. Authorized 6,600,000 Shares; Outstanding 4,239,661 Shares (4,226,558 in 1970) (Note 3)	\$ 28,264,407	\$ 28,177,053	\$ 87,354
Premium on Common Stock	16,789,226	16,653,980	135,246
Retained Earnings	38,060,334	34,629,372	3,430,962
	<u>83,113,967</u>	<u>79,460,405</u>	<u>3,653,562</u>
Cumulative Preferred Stock of \$20 Par Value Per Share. Authorized 2,400,000 Shares; Outstanding 1,342,086 Shares (1,348,733 in 1970) (Note 4)	26,841,720	26,974,660	(132,940)
Cumulative Preferred Stock of \$100 Par Value Per Share. Authorized and Outstanding 80,000 Shares (None in 1970) (Note 4)	8,000,000	—	8,000,000
	<u>34,841,720</u>	<u>26,974,660</u>	<u>7,867,060</u>
Total Stockholders' Equity	117,955,687	106,435,065	11,520,622
Long-Term Debt (Note 5)	167,693,854	153,201,101	14,492,753
Total Capitalization	<u>285,649,541</u>	<u>259,636,166</u>	<u>26,013,375</u>
<b>CURRENT LIABILITIES:</b>			
Long-Term Debt—Current Portion and Sinking Fund Requirements	1,788,266	988,821	799,445
Notes Payable	1,570,000	3,150,000	(1,580,000)
Drafts Payable	2,869,964	2,695,362	174,602
Accounts Payable	4,282,749	3,447,924	834,825
Federal Taxes and Other Taxes (Note 2)	2,579,299	2,595,651	(16,352)
Interest Accrued	2,276,107	2,115,829	160,278
Other	1,575,301	1,258,689	316,612
Total Current Liabilities	<u>16,941,686</u>	<u>16,252,276</u>	<u>689,410</u>
<b>DEFERRED CREDITS:</b>			
Deferred Income Taxes (Note 2)	22,098,929	19,356,948	2,741,981
Unamortized Depreciation Adjustment	528,000	616,000	(88,000)
Unamortized Investment Credit (Note 6)	4,054,379	3,630,607	423,772
Unamortized Premium on Debt	100,448	131,504	(31,056)
Other	2,273,655	1,823,635	450,020
Total Deferred Credits	<u>29,055,411</u>	<u>25,558,694</u>	<u>3,496,717</u>
CONTRIBUTIONS IN AID OF CONSTRUCTION	<u>14,551,707</u>	<u>12,375,594</u>	<u>2,176,113</u>
COMMITMENTS AND CONTINGENT LIABILITIES (Notes 7 and 8)	<u>\$346,198,345</u>	<u>\$313,822,730</u>	<u>\$32,375,615</u>

See Accompanying Notes to Consolidated Financial Statements.



HAWAIIAN ELECTRIC COMPANY, INC. AND SUBSIDIARIES

**CONSOLIDATED BALANCE SHEET**

December 31, 1971  
(with comparative figures for 1970)

**Assets**

	1971	1970	Increase (Decrease)
<b>UTILITY PLANT, at Cost:</b>			
In Service:			
Land .....	\$ 8,700,014	\$ 8,109,048	\$ 590,966
Plant and Equipment .....	<u>366,832,978</u>	<u>346,252,755</u>	<u>20,580,223</u>
	375,532,992	354,361,803	21,171,189
Property Held for Future Use .....	12,672	12,562	110
Construction in Progress .....	25,482,135	8,506,180	16,975,955
Plant Acquisition Adjustment .....	<u>547,359</u>	<u>581,445</u>	<u>(34,086)</u>
	401,575,158	363,461,990	38,113,168
Less Accumulated Depreciation (Note 2) .....	<u>75,983,571</u>	<u>69,572,109</u>	<u>6,411,462</u>
Net Utility Plant .....	<u>325,591,587</u>	<u>293,889,881</u>	<u>31,701,706</u>
<b>OTHER PROPERTY AND IMPROVEMENTS,</b>			
at Cost Less Accumulated Depreciation of \$64,170 (\$148,320 in 1970) .....	<u>211,940</u>	<u>421,626</u>	<u>(209,686)</u>
<b>CURRENT ASSETS:</b>			
Cash .....	3,434,679	3,757,860	(323,181)
Temporary Investments .....	600,000	100,000	500,000
Accounts Receivable .....	8,940,860	9,005,734	(64,874)
Less Allowance for Uncollectible Accounts .....	<u>118,519</u>	<u>109,876</u>	<u>8,643</u>
Net Accounts Receivable .....	<u>8,822,341</u>	<u>8,895,858</u>	<u>(73,517)</u>
Construction and Operating Materials and Supplies, at Average Cost .....	4,511,865	4,023,989	487,876
Prepaid Expenses .....	<u>247,994</u>	<u>280,412</u>	<u>(32,418)</u>
Total Current Assets .....	<u>17,616,879</u>	<u>17,058,119</u>	<u>558,760</u>
<b>DEFERRED CHARGES:</b>			
Unamortized Debt Expense .....	1,731,142	1,627,611	103,531
Other .....	<u>1,046,797</u>	<u>825,493</u>	<u>221,304</u>
Total Deferred Charges .....	<u>2,777,939</u>	<u>2,453,104</u>	<u>324,835</u>
	<u>\$346,198,345</u>	<u>\$313,822,730</u>	<u>\$32,375,615</u>

See Accompanying Notes to Consolidated Financial Statements.

HAWAIIAN ELECTRIC COMPANY, INC. AND SUBSIDIARIES

**STATEMENT OF CONSOLIDATED INCOME**

Year Ended December 31, 1971  
(with comparative figures for 1970)

	1971	1970	Increase (Decrease)
OPERATING REVENUES .....	<u>\$93,354,781</u>	<u>\$79,700,663</u>	<u>\$13,654,118</u>
OPERATING EXPENSES:			
Production:			
Fuel Oil .....	23,702,845	16,447,780	7,255,065
Other .....	5,283,698	4,378,885	904,813
Transmission and Distribution .....	2,831,405	2,680,820	150,585
Maintenance and Repairs .....	4,969,760	4,364,343	605,417
Customer Accounts and Sales .....	3,422,745	3,257,043	165,702
Administrative and General .....	4,812,296	4,375,455	436,841
Depreciation (Note 2) .....	9,214,376	8,645,996	568,380
Taxes, Other than Income Taxes .....	9,366,663	8,246,854	1,119,809
Investment Credit Deferred, Net .....	423,771	463,432	(39,661)
Federal Income Taxes:			
Currently Payable .....	4,535,258	5,228,702	(693,444)
Deferred .....	2,416,319	1,740,955	675,364
State Income Taxes:			
Currently Payable .....	670,315	769,953	(99,638)
Deferred .....	325,661	224,750	100,911
Pensions and Pension Plan Costs (Note 7) .....	1,458,016	1,183,043	274,973
Total Operating Expenses .....	<u>73,433,128</u>	<u>62,008,011</u>	<u>11,425,117</u>
OPERATING INCOME .....	19,921,653	17,692,652	2,229,001
OTHER INCOME AND INCOME DEDUCTIONS:			
Allowance for funds used during construction .....	887,932	1,215,801	(327,869)
Other—net .....	(17,566)	(201,206)	183,640
Total other income and income deductions .....	<u>870,366</u>	<u>1,014,595</u>	<u>(144,229)</u>
INCOME BEFORE INTEREST CHARGES .....	<u>20,792,019</u>	<u>18,707,247</u>	<u>2,084,772</u>
INTEREST CHARGES:			
Interest on Long-Term Debt .....	9,288,003	7,438,644	1,849,359
Amortization of Net Bond Premium and Expense .....	93,442	81,511	11,931
Other Interest Charges .....	510,499	725,427	(214,928)
Total Interest Charges .....	<u>9,891,944</u>	<u>8,245,582</u>	<u>1,646,362</u>
NET INCOME .....	<u>\$10,900,075</u>	<u>\$10,461,665</u>	<u>\$ 438,410</u>
Primary Earnings Per Share* .....	\$2.21	\$2.14	
Fully Diluted Earnings Per Share** .....	\$2.10	\$2.04	

\*Primary earnings per share are based on the average number of common shares outstanding in each year.

\*\*Fully diluted earnings per share give effect to the dilution which would result from the conversion of the Company's convertible debentures and \$1.44 convertible preferred stock, and of the convertible subordinated notes of Hilo Electric Light Company, Limited.

See Accompanying Notes to Consolidated Financial Statements.

#### (4) Preferred Stock

Outstanding preferred stock consisted of the following series:

\$20 par value:

Series C, 4¼%	— 150,000 shares	\$ 3,000,000
Series D, 5%	— 50,000 shares	1,000,000
Series E, 5%	— 150,000 shares	3,000,000
Series H, 5¼%	— 250,000 shares	5,000,000
Series I, 5%	— 89,657 shares	1,793,140
Series J, 4¾%	— 250,000 shares	5,000,000
Series K, 4.65%	— 175,000 shares	3,500,000
Series L, \$1.44	— 227,429 shares	4,548,580
		<u>26,841,720</u>

\$100 par value — Series M, 8.05% — 80,000 shares	<u>8,000,000</u>
	<u>\$34,841,720</u>

Series C, D, E, H, J and K preferred stocks are redeemable on any dividend payment date at the option of the Company at par (in each instance \$20) together with accrued and unpaid dividends plus a premium of \$1 per share.

The Series I preferred stock is redeemable on 30 days' notice at the option of the Company at par (\$20) together with accrued and unpaid dividends.

The Series L preferred stock is redeemable at \$38.50 a share after December 31, 1973, and each share is convertible into .96 of a share of common stock at any time prior to redemption. Each share of Series L preferred stock has the same voting privileges as such share of common stock except on matters where class voting is required by statute.

The Series M preferred stock is redeemable on 30 days' notice at the option of the Company at a premium to October 15, 1976 of \$8.05 reducing in five year increments to no premium in 1986.

#### (5) Long-Term Debt

The following first mortgage bonds, convertible debentures and bank notes payable were outstanding:

First mortgage bonds:

The Company:

Series F, 3%, due 1977	\$ 5,000,000
Series G, 3½%, due 1981	3,000,000
Series H, 3½%, due 1982	4,000,000
Series I, 3.45%, due 1984	6,000,000
Series J, 4.70%, due 1987	7,000,000
Series K, 4.75%, due 1989	10,000,000
Series L, 4.65%, due 1991	12,000,000
Series M, 4.45%, due 1993	16,000,000
Series N, 4.55%, due 1995	11,000,000
Series O, 5.75%, due 1997	13,000,000
Series P, 9%, due 1974	18,000,000
Series Q, 9% due 2000	23,000,000
Series R, 8.20%, due 2001	14,000,000
	<u>142,000,000</u>

Hilo:

Series B, 4%, due 1976	1,250,000
Series D, 6¼%, due 1983	400,000
Series E, 4¾%, due \$10,000 annually to 1984, remainder 1985	860,000
Series F, 6%, due 1988	2,000,000
Series G, 5-7/8%, due 1989	2,970,000
Series H, 7¾%, due 1990	2,000,000
Series I, 8¾%, due 2001	2,500,000
	<u>11,980,000</u>

Maui:

Series C, 4¼%, due \$10,000 annually to 1977, remainder 1978	840,000
Series D, 4-7/8%, due 1988	750,000
Series E, 5.1%, due \$25,000 annually to 1990, remainder 1991	2,450,000
Series F, 6-7/8%, due \$10,000 annually 1978 to 1992, remainder 1993	1,000,000
	<u>5,040,000</u>
Total first mortgage bonds	<u>\$159,020,000</u>

Convertible debentures —  
the Company, 4-1/8%, due 1982 — 6,179,000

Second mortgage notes — Hilo,  
due in monthly installments of  
\$13,090 including interest:  
United States Government,  
Small Business  
Administration, 3% — 445,369  
Banks, 5½% — 49,485

Convertible subordinated notes —  
Hilo, 6½%, due 1985 — 2,000,000

Total long-term debt \$167,693,854

The first mortgage bonds of the Company, Maui and Hilo are secured by separate indentures which by their terms purport to be a lien on substantially all of the real and personal property, now owned or hereafter acquired, of the respective companies.

The convertible debentures are convertible into common stock at \$32.50 a share and are redeemable at the option of the Company at a premium to March 1, 1972 of 2.65% reducing annually thereafter to no premium in 1981. The convertible subordinated notes of Hilo are convertible into common stock of the Company at \$37.75 a share and are redeemable at the option of the Company at a premium to October 31, 1972 of 5.57% reducing annually thereafter to no premium in 1983.

#### (6) Investment Credits

Investment credits allowed under the Revenue Act of 1962 have reduced the consolidated income tax liability in the amount of \$576,000. The Company and its subsidiaries have elected to amortize the entire amount of the investment credit over the estimated useful lives of the properties giving rise to the credits.

#### (7) Pension Plan

The Company and its subsidiaries have pension plans covering substantially all of their employees. The total pension cost under these plans, including amounts charged to plant, was \$2,171,299. The costs of the plans include amortization of prior service costs over a forty-year period. It is the Company's policy to fund pension costs accrued. At January 1, 1971, the date of the last determination, the actuarially computed value of vested benefits exceeded the pension funds by approximately \$6,513,600.

#### (8) Commitments and Contingent Liabilities

The Company and its subsidiaries have commitments approximating \$34,500,000 in connection with their plant expansion programs.

HAWAIIAN ELECTRIC COMPANY, INC. AND SUBSIDIARIES

**STATEMENT OF CONSOLIDATED CHANGES IN FINANCIAL POSITION**

Year Ended December 31, 1971  
(with comparative figures for 1970)

	1971	1970
<b>FUNDS PROVIDED:</b>		
Net Income .....	\$10,900,075	\$10,461,665
Depreciation and Amortization (Including Charges to Other Accounts) .....	9,419,575	9,027,201
Deferred Income Taxes .....	2,741,981	1,978,556
Investment Credit, Net .....	423,771	465,046
Funds Available from Operations .....	23,485,402	21,932,468
Contributions in Aid of Construction .....	2,367,700	1,885,340
Short-Term Bank Loans .....	1,570,000	2,850,000
Sale of First Mortgage Bonds and Notes .....	16,500,000	27,000,000
Sale of Preferred Stock .....	8,000,000	—
Commercial Paper .....	—	1,600,000
Temporary Cash Investments .....	100,000	1,550,000
Miscellaneous, Net .....	851,375	—
<b>TOTAL .....</b>	<b>52,874,477</b>	<b>56,817,808</b>
<b>FUNDS USED:</b>		
Plant Construction Expenditures, Net .....	40,474,956	35,684,158
Dividends on Preferred Stock .....	1,562,339	1,418,526
Dividends on Common Stock .....	6,098,361	5,695,618
Retirement of Long-Term Debt .....	988,821	5,174,480
Redemption of Commercial Paper .....	2,000,000	—
Payment of Short-Term Bank Loan .....	1,150,000	7,710,000
Temporary Investments .....	600,000	—
Miscellaneous, Net .....	—	1,135,026
<b>TOTAL .....</b>	<b>\$52,874,477</b>	<b>\$56,817,808</b>

See Accompanying Notes to Consolidated Financial Statements.

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**(1) Principles of Consolidation and Acquisition**

The Company's investments in its wholly-owned subsidiaries, Hilo Electric Light Company, Limited (Hilo) and Maui Electric Company, Limited (Maui) were acquired through exchanges of capital stocks which transactions have been recorded as poolings of interest.

**(2) Depreciation and Federal Income Taxes**

Prior to 1968, the Company computed the depreciation recorded in its accounts on a 4% compound interest method utilizing the remaining life principle. With the approval of the Public Utilities Commission, the Company has computed depreciation on plant additions first subject to depreciation after January 1, 1968 on the straight-line remaining life method. All assets subject to depreciation prior to January 1, 1968 remain on the compound interest method.

In connection with a depreciation study completed in 1971, the Public Utilities Commission ordered the Company to change the estimated average service lives of certain properties. These changes reduced depreciation expense by \$813,000 for the year ended December 31, 1971.

Maui Electric Company, Limited computes depreciation on the straight-line remaining life method. Hilo Electric Light Company, Limited computes depreciation on the straight-line method.

For income tax purposes, the Company and its subsidiaries compute depreciation using an accel-

erated method on qualifying properties and the straight-line method on the remainder of the plant. Reductions in taxes currently payable of \$2,758,035 arising from the use of accelerated depreciation and variations in service lives have been charged to income and credited to deferred income taxes. The Company and its subsidiaries consistently followed the policy of making no similar provision for deferred income taxes for reductions in taxes currently payable resulting from the use of the straight-line method rather than the compound interest method of computing depreciation and deducting interest and certain overhead expenses charged to construction. These differences between taxable income and book income amounted to \$2,776,924.

It is the opinion of management, that, if in the future, income reported for income tax purposes should exceed book income as a result of the above amount for which no deferred income taxes are provided, taxes then payable on such excess represent allowable expenses in determination of future rates.

**(3) Common Stock**

The Company has reserved 218,332 shares of its common stock for conversion of the Series L convertible preferred stock and 190,123 shares for conversion of the 4-1/8% convertible debentures. In addition, the Company has reserved 52,980 shares of its common stock for conversion of \$2,000,000 of 6½% convertible subordinated notes of Hilo Electric Light Company, Limited.

HAWAIIAN ELECTRIC COMPANY, INC. AND SUBSIDIARIES  
**STATEMENT OF CONSOLIDATED RETAINED EARNINGS**

Year Ended December 31, 1971  
 (with comparative figures for 1970)

	1971	1970	Increase (Decrease)
BALANCE AT BEGINNING OF YEAR .....	\$34,629,372	\$31,173,603	\$3,455,769
NET INCOME FOR YEAR .....	10,900,075	10,461,665	438,410
OTHER ADDITIONS .....	191,587	108,248	83,339
	<u>45,721,034</u>	<u>41,743,516</u>	<u>3,977,518</u>
DEDUCTIONS:			
Cash Dividends on Capital Stock:			
Preferred Dividends (Annual Rate per Share):			
Series C - \$0.85 .....	127,500	127,500	—
Series D - \$1.00 .....	50,000	50,000	—
Series E - \$1.00 .....	150,000	150,000	—
Series H - \$1.05 .....	262,500	262,500	—
Series I - \$1.00 .....	89,657	89,657	—
Series J - \$0.95 .....	237,500	237,500	—
Series K - \$0.93 .....	162,750	162,750	—
Series L - \$1.44 .....	330,376	338,619	(8,243)
Series M - \$8.05 .....	152,056	—	152,056
	<u>1,562,339</u>	<u>1,418,526</u>	<u>143,813</u>
Common Stock (Annual Rate Per Share: 1971, \$1.44; 1970, \$1.35) .....	6,098,361	5,695,618	402,743
	<u>7,660,700</u>	<u>7,114,144</u>	<u>546,556</u>
BALANCE AT END OF YEAR .....	<u>\$38,060,334</u>	<u>\$34,629,372</u>	<u>\$3,430,962</u>

**STATEMENT OF CONSOLIDATED PREMIUM ON COMMON STOCK**

Year Ended December 31, 1971  
 (with comparative figures for 1970)

	1971	1970	Increase (Decrease)
BALANCE AT BEGINNING OF YEAR .....	\$16,653,980	\$16,415,530	\$238,450
Premium Received on Conversion of Debentures and Series L Preferred Stock .....	264,456	271,020	(6,564)
Costs of Issuing Series M Preferred Stock .....	(129,069)	—	(129,069)
Sundry .....	(141)	(32,570)	32,429
BALANCE AT END OF YEAR .....	<u>\$16,789,226</u>	<u>\$16,653,980</u>	<u>\$135,246</u>

See Accompanying Notes to Consolidated Financial Statements.

**OPINION OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS**

The Board of Directors and Shareholders  
 Hawaiian Electric Company, Inc.:

We have examined the consolidated balance sheet of Hawaiian Electric Company, Inc. and subsidiaries as of December 31, 1971 and the related statements of income, retained earnings, premium on common stock and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the aforementioned consolidated financial statements present fairly the financial position of Hawaiian Electric Company, Inc. and subsidiaries as of December 31, 1971, the results of their operations and the changes in their financial position for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

*Peat, Marwick, Mitchell & Co.*

Peat, Marwick, Mitchell & Co.

January 31, 1972

## HAWAIIAN ELECTRIC COMPANY, INC. AND SUBSIDIARIES

**CONSOLIDATED STATISTICAL SUMMARY**

	1971	1970	1969	1968	1967	1966
<b>FINANCIAL STATISTICS (Millions of Dollars)</b>						
Utility Plant in Service .....	\$376.09	\$354.95	\$312.36	\$297.40	\$274.14	\$260.29
Construction in Progress .....	25.48	8.51	16.47	5.22	8.56	3.02
<b>TOTAL UTILITY PLANT</b> .....	<b>401.57</b>	<b>363.46</b>	<b>328.83</b>	<b>302.62</b>	<b>282.70</b>	<b>263.31</b>
Accumulated Depreciation .....	75.98	69.57	62.68	56.20	52.03	47.18
Capitalization: (December 31)						
Long-Term Debt .....	167.69	153.20	127.90	113.73	113.97	94.15
Preferred Stock .....	34.84	26.97	27.07	27.41	27.41	27.41
Common Stock .....	28.27	28.18	28.09	27.92	27.92	27.92
Premium on Common Stock .....	16.79	16.65	16.42	15.93	16.04	16.04
Retained Earnings .....	38.06	34.63	31.17	28.28	25.46	23.00
<b>TOTAL</b> .....	<b>285.65</b>	<b>259.63</b>	<b>230.65</b>	<b>213.27</b>	<b>210.80</b>	<b>188.52</b>
Long-Term Debt Interest .....	9.29	7.44	5.17	5.06	4.84	3.98
Preferred Dividends .....	1.56	1.42	1.44	1.45	1.45	1.45
Common Dividends .....	6.10	5.70	5.32	5.21	4.79	4.59
<b>OPERATING STATISTICS:</b>						
Sales of Electricity .....	93.11	79.39	71.57	66.16	60.02	55.84
Other Revenues .....	.24	.31	.31	.32	.26	.25
<b>TOTAL OPERATING REVENUES</b> .....	<b>93.35</b>	<b>79.70</b>	<b>71.88</b>	<b>66.48</b>	<b>60.28</b>	<b>56.09</b>
Operating Expenses:						
Fuel Oil .....	23.70	16.45	13.91	12.72	11.48	10.91
Other Production .....	5.28	4.38	4.15	3.90	3.61	3.27
Transmission & Distribution .....	2.83	2.68	2.39	2.36	2.16	1.95
Customer Accounts & Sales .....	3.42	3.26	2.98	3.01	2.88	3.21
Administrative & General .....	6.27	5.56	4.74	4.63	4.19	3.78
Maintenance .....	4.97	4.36	3.85	3.44	3.46	3.55
Depreciation .....	9.21	8.65	7.91	7.01	6.63	5.89
Taxes Other than Income .....	9.37	8.25	7.60	7.01	6.50	6.10
Federal Income Taxes .....	4.54	5.23	5.75	4.78	3.53	2.70
Federal Income Taxes Deferred .....	2.42	1.74	1.81	1.85	1.83	1.59
Investment Credit Deferred, Net .....	.42	.46	.22	.66	.19	.75
State Income Taxes .....	.67	.77	.76	.67	.50	.44
State Income Taxes Deferred .....	.33	.22	.22	.22	.24	.22
<b>Total Operating Expenses</b> .....	<b>73.43</b>	<b>62.01</b>	<b>56.29</b>	<b>52.26</b>	<b>47.20</b>	<b>44.36</b>
Operating Income .....	19.92	17.69	15.59	14.22	13.08	11.73
Other Income & Deductions, Net .....	.87	1.02	.48	.47	.41	.84
Interest Charges .....	9.89	8.25	6.47	5.56	5.18	4.39
<b>NET INCOME</b> .....	<b>\$10.90</b>	<b>\$ 10.46</b>	<b>\$ 9.60</b>	<b>\$ 9.13</b>	<b>\$ 8.31</b>	<b>\$ 8.18</b>
<b>COMMON SHARES (Millions)</b> .....	<b>4.24</b>	<b>4.23</b>	<b>4.21</b>	<b>4.19</b>	<b>4.19</b>	<b>4.19</b>
<b>COMMON STOCK STATISTICS:</b>						
Earned Per Share:						
On Primary Shares .....	\$ 2.21	\$ 2.14	\$ 1.94	\$ 1.83	\$ 1.64	\$ 1.62
On Fully-Diluted Shares .....	2.10	2.04	1.86	1.76	1.59	1.62
Dividends Paid Per Share .....	1.44	1.35	1.29	1.20	1.08	1.04
Equity Per Share .....	\$ 19.60	\$ 18.80	\$ 17.96	\$ 17.22	\$ 16.58	\$ 15.99
<b>MISCELLANEOUS STATISTICS:</b>						
Kilowatt Hour Sales (Billions) .....	4.04	3.64	3.32	3.02	2.73	2.55
Average Annual Residential Use (KWH) .....	7,391	7,099	6,840	6,546	6,124	5,920
Revenue Per Residential KWH .....	2.76¢	2.62¢	2.61¢	2.63¢	2.65¢	2.66¢
Customers, December 31: (Thousands)						
Residential .....	183	175	168	162	157	150
Total .....	214	207	199	191	185	177
System Capability (MW) .....	1,002	987	876	881	823	815
Peak Load (MW)* .....	822	765	704	635	580	546

\*Noncoincident and nonintegrated.

Note: Years 1966 through 1968 are restated to reflect the pooling of interests with subsidiaries.



At the Waiiau Plant on the shores of Pearl Harbor, we have eight units with a total capability of 427,000 kilowatts. Engineering was completed in 1971 for the company's first two gas turbines, each having a capability of 52,000 kilowatts. They will be installed as peaking units at Waiiau in 1973. The first one is scheduled for service in March of that year.

At the downtown Honolulu Plant, where four units with a total capability of 180,000 kilowatts are operating, no new units have been added since December 1957.

Both the Honolulu and Waiiau Plants are burning low sulfur oil that reduces the emission of sulfur oxides to a minimum, and we do not plan to add any more steam units at either of these locations.

During 1971 our major transmission system, which carries power at 138,000 volts, was expanded to meet load growth.

#### **Underground Electric Service**

Our company always has been conscious of the need to preserve Hawaii's beauty while at the same time meeting the demand for electric power. In addition to designing and adopting the most pleasing forms of overhead facilities, we started intensive engineering stud-

*Helicopters help string transmission lines high over mountains, out of sight, making access roads through forest land unnecessary. Island power demand called for further expansion of high-voltage system.*

ies years ago for the reduction of undergrounding costs.

Since 1966 all new subdivision tracts on Oahu have been served by underground or modified underground distribution lines in compliance with a city ordinance. Because of this and our earlier efforts, our company has a much greater proportion of facilities underground than do most comparable electric utilities on the mainland.

More than 80 percent of all new commercial and industrial services added during the year were placed underground.

#### **Subsidiary Companies**

Economic growth on the Islands of Hawaii and Maui is moving at a phenomenal rate, requiring rapid expansion of our subsidiary companies to meet present and future power needs. During the next five years, Hilo Electric and Maui Electric plan to spend \$52 million and \$28 million, respectively, for new plant and equipment. Both companies are seeking a new power plant site for future generating units.

#### *Hilo Electric*

On the Big Island of Hawaii, Hilo Electric Light Company has six power stations, as shown on the system map on page 31 of this report. Total capability of the system is 60,750 kilowatts provided by five steam-turbine generators, eight diesel, one gas turbine and four hydro generator units. Construction is progressing satisfactorily for the

addition of four 2,750-kilowatt diesel units in 1972. Two will be added in the spring at Waimea and two in the fall at Hilo, raising total capability of the system to 71,750 kilowatts.

The company has a purchase power agreement for the purchase of 12,000 kilowatts of generating capacity from Puna Sugar Company. In 1971 a purchase power agreement was negotiated with Hilo Coast Processing Company at Pepeekeo for an additional 16,000 kilowatts to become operational in 1973.

Construction of nine miles of 69,000-volt transmission line from

Hilo Electric's Kaumana switching station to the Puna Sugar Company's generating facility was about 65 percent complete at year end, and the line is scheduled for service in mid-1972.

Engineering design was started for Hill 6, a 25,000-kilowatt steam unit scheduled for completion at Hilo in 1974.

#### *Maui Electric*

During the last half of 1971, Maui Electric Company installed a new 2,750-kilowatt diesel generator at Maalaea, and two similar diesel units are to be added there in 1972.

Maui Electric has four oil fired steam-turbine generator units and one diesel at Kahului. The new diesel generators at Maalaea will bring total capability of Maui's system to 48,250 kilowatts by the end of 1972. The company has contracts for drawing as much as 13,000 kilowatts of power from sugar plantations during most of the year.

A second 69,000-volt transmission line to Lahaina from the Kahului power plant was completed and put in service in August 1971. This was required to serve the Kaanapali and Napili resort areas where several new developments were completed during the year.

*First diesel unit at Maalaea site provides new power source on Maui, where 90 percent of new houses and apartments built were all-electric. A 1,500-acre resort in Kihei-Makena began with a golf course completed in December.*





Quality of service depends largely upon performance of company employees. In public opinion surveys regularly conducted for us by professional pollsters, our service is consistently rated at the top of the scale.

Employees are carefully selected and trained for their jobs, and they perform in a true spirit of cooperation that brings credit to them and the company. We frequently receive letters from customers expressing praise and appreciation for assistance given beyond the call of duty.

Generally, employees are all 'round participating citizens of the community — and the company encourages this. The company itself is known for its willingness to work for community betterment and to support programs that enhance Hawaii's social, cultural and economic well-being.

### Emphasis on Personnel Development

Our state-approved apprenticeship program is one of the largest of its kind in Hawaii. At present there are 92 indentured apprentices in various trades in the Distribution and System Operation Departments, including 11 in new programs for subsidiary companies.

During 1971, 206 employees took advantage of the company's employee self-development program which provides financial assistance on outside courses selected by employees to improve their job knowledge and ability.

To develop a depth of management sufficient for continued com-



Two registered nurses dispense first aid for aches and cuts in new improved Health Center at Ward Avenue. Company health program puts emphasis on prevention.

### PAYROLL & BENEFITS

	1971	1970
WAGES FOR PRODUCTIVE WORK .....	\$19,562,377	\$17,557,110
BENEFITS:		
Vacations .....	1,419,326	1,192,017
Holidays .....	906,790	800,100
Sickness .....	594,424	435,310
Leaves and Excused Absences .....	76,840	84,338
Pension Plans .....	2,171,299	1,893,487
Cash Pensions .....	22,378	23,497
Group Life Insurance .....	304,167	198,656
Medical and Hospital Plans .....	695,957	547,818
Social Security Insurance .....	742,251	661,217
Unemployment Insurance .....	80,035	68,104
Other Employee Benefits .....	189,634	149,879
	<u>7,203,101</u>	<u>6,054,423</u>
TOTAL .....	<u>\$26,765,478</u>	<u>\$23,611,533</u>



pany advancement, we have for many years selected men for participation in various management development programs offered both locally and on the mainland.

In 1971 a career path program was initiated. Under this program a career path plan for each department is worked out and reviewed annually.

In addition to outside courses, we have internally conducted courses to provide a solid background of information in all non-technical aspects of the electric utility business.

#### New Union Contracts

Approximately 75 percent of our employees are represented by the International Brotherhood of Electrical Workers, Local 1260, AFL-CIO. Since 1964 a Joint Review Committee, composed of Union and Company representatives, has met regularly to solve potential problems. The work of this committee has been effective in fostering good company-union relations.

Hawaiian Electric and its two subsidiaries are operating under separate union agreements with IBEW, Local 1260. Negotiations were conducted for all three companies during 1971, and new contracts were signed having a common expiration date of October 31, 1973. It is anticipated that 1973

*Surf, sun, sand and a picnic park built by company offer recreation for employees, and public too, at beach in front of Kahe Plant on Leeward Oahu.*

negotiations will be on a joint basis.

The new contracts provide for general wage adjustments, improvements in the medical and retirement plans, and inauguration of a dental plan. Benefit plans are identical for Hawaiian Electric and subsidiary company employees.

#### Vice President Appointments

Hawaiian Electric Vice President and Director Carl H. Williams was appointed Executive Vice President of the company on February 16, 1971. He joined Hawaiian Electric in 1945, was named Vice President, Engineering in 1962 and Vice President, Planning in 1966.

Eugene A. Helbush, Controller of Hawaiian Electric since 1962, was named Vice President and Controller by the Board of Directors on October 19, 1971. At the same meeting, C. Dudley Pratt, Jr., formerly Assistant to the President, was promoted to Vice President, Planning.



*Carl H. Williams  
Executive Vice President*

# financial summary

This section presents financial results on a consolidated basis. Although the need for a general rate increase on Oahu was being felt, the company achieved an increase in earnings through concerted management efforts to hold operation and maintenance expenses to a minimum—primarily by deferment, where this could be done for a short time without impairing service. These efforts to achieve good earnings were augmented in the fourth quarter of the year when the Hawaii Public Utilities Commission ordered the company to lower its depreciation rates.

## Earnings and Dividends

1971 was the eighth consecutive year in which earnings and dividends increased over the previous year.

Consolidated net income of Hawaiian Electric and its two subsidiaries amounted to \$10,900,000 in 1971. After preferred dividend payments of \$1,562,000 there remained \$9,338,000 available for common stockholders.

Fourth quarter earnings of 63 cents per share of common stock brought earnings for the year to \$2.21 per share, an increase of 7 cents over 1970. Fourth quarter earnings in 1970 were 50 cents per share.

Quarterly dividends totaling \$1.44 per share were paid in 1971, a 6.7 percent increase over 1970. The company estimates that 46.9 percent of common stock dividends paid in 1971 constitute a return of capital for Federal Income Tax pur-

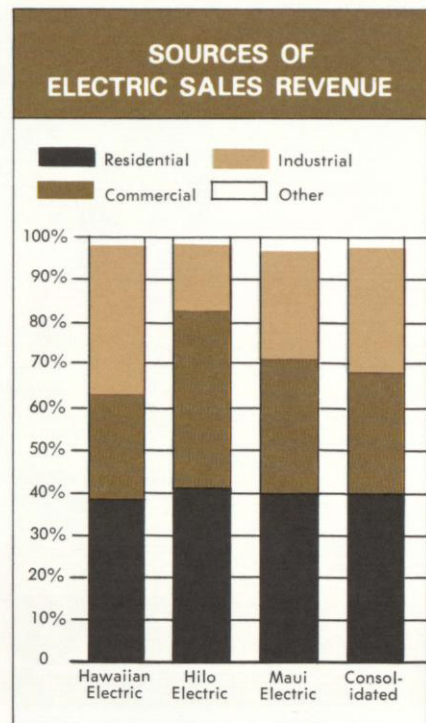
CONDENSED STATEMENTS OF INCOME				
For Year Ended December 31, 1971				
(Dollars in Thousands)				
	Hawaiian Electric	Hilo Electric	Maui Electric	Consolidated
REVENUES .....	\$75,671	\$10,422	\$ 7,262	\$93,355
EXPENSES				
Operation .....	33,472	4,230	3,809	41,511
Maintenance .....	3,741	852	377	4,970
Depreciation .....	7,090	1,439	685	9,214
Taxes .....	14,545	1,978	1,215	17,738
	58,848	8,499	6,086	73,433
OPERATING INCOME .....	16,823	1,923	1,176	19,922
INCOME DEDUCTIONS .....	7,741	868	413	9,022
NET INCOME .....	\$ 9,082	\$ 1,055	\$ 763	\$10,900

poses and need not be included in gross dividend income in stockholders' income tax returns. The company estimates that 45.7 percent may be excluded from Hawaii State income tax returns.

Common shareholders of Hawaiian Electric Company currently number 13,862. Sixty-seven percent of the company's owners are residents of Hawaii and hold approximately 57 percent of total shares outstanding. To the company's knowledge, no stockholder holds more than 2.7 percent of the common stock.

## Sales and Revenue

Total kilowatt hour sales rose to 4,038,944,000, an increase of 10.9 percent over 1970, aided by accelerated economic development on islands served by company subsidiaries and by unusually high sales



for irrigation pumping on Maui.

Higher kilowatt hour sales in 1971 produced an increase of \$7,562,000 in operating revenues. Fuel oil adjustment clause revenue was higher as a result of higher fuel oil prices. Total operating revenues increased 17.1 percent from \$79,701,000 in 1970 to \$93,355,000 in 1971.

#### **Operation and Maintenance Expenses**

Fuel oil moved ahead of federal and local taxes to become the company's largest expense item in 1971,

absorbing 25 cents of every revenue dollar. The average price we had to pay for fuel oil in 1971 was 29 percent higher than in 1970.

The world petroleum industry is currently experiencing serious planning, production and transportation difficulties. As a result, the electric utility industry has seen a sharp upward spiral in the price of fuel oil. The price Hawaiian Electric was paying at the end of 1971 was 36 percent higher than the price paid just 18 months earlier, when the sharp upturn in fuel oil price started.

In 1971 wages and employee benefits charged to operations amounted to 16,480,000, an increase of 10 percent over 1970. The high rate of inflation in recent years has created strong upward pressure on wage and benefit levels. This is illustrated by the fact that the average pay for an hour of productive work in 1971 was \$5.45 compared with \$2.08 in 1955, the year of the last general rate increase on Oahu.

The cost of materials and services charged to operations in 1971 totaled 6,298,000, up \$997,000 from the comparable figure for 1970.

*Waikiki sparkles with seemingly as many lights as there were visitors to Hawaii in 1971, amounting to a record total of 1.8 million.*



### Depreciation

Depreciation charged to income amounted to \$9,214,000 in 1971.

As a result of our most recent depreciation study, completed in 1971, the Hawaii Public Utilities Commission ordered us to lower certain of our depreciation rates. This resulted in approximately \$800,000 less depreciation expense in 1971 than would have been recorded on the basis of rates used in 1970.

Depreciation expense for the Oahu system now absorbs 10.5 cents of every dollar of operating revenue, compared with about seven cents in 1955.

### Taxes

Federal and local taxes charged to operations in 1971 totaled \$17,738,000, equivalent to \$4.18 per share of common stock. Taxes other than income taxes increased as a result of increased revenue. Federal Income Taxes were slightly lower in 1971 than in the previous year, largely a result of elimination of the Federal Income Tax Surcharge.

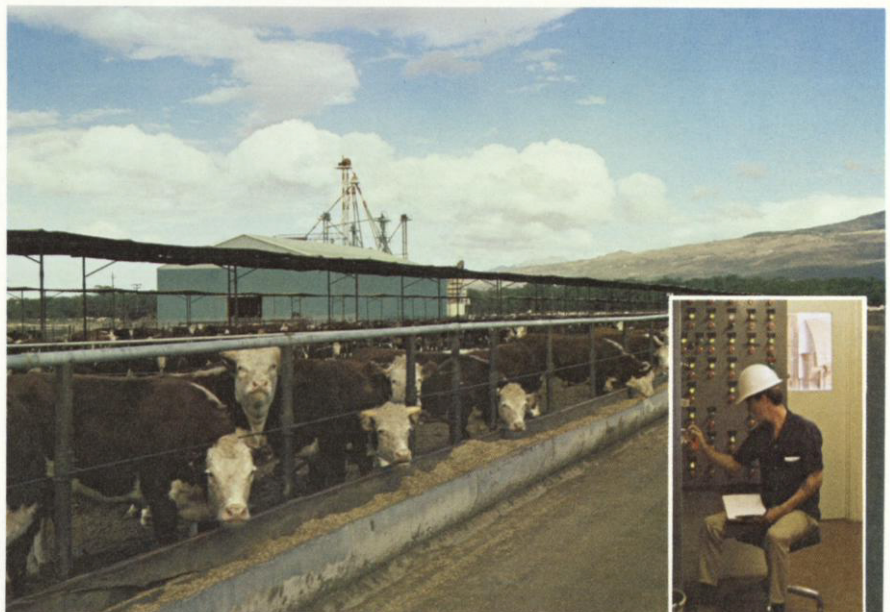
### Allowance for Construction Funds

Hawaiian Electric does not earn an immediate return on funds devoted to construction. We therefore compute a return on these funds and add it to the costs of construction.

In 1971 allowance for funds used during construction and credited to income amounted to \$888,000. This contributed 21 cents to earnings per share in 1971, down from 29 cents



*Decorative wall and doors, abundant planting and a low silhouette make this neighborhood substation inconspicuous, all part of Company beautification program.*



*Cattle at Hawaii Meat Company feed lot enjoy a nutritious and economical diet, electronically served and computerized for efficiency.*

in 1970 when we completed two major construction projects.

### Capital Expenditures

In 1971 the company's capital expenditures amounted to \$33.1 million on Oahu, \$3.2 million on Maui and \$4.5 million on the Island of Hawaii. The combined total of \$40.8 million invested in the three systems represents a 12.1 percent increase over capital expenditures of 1970. In 1972 the company plans to spend a total of \$46.1 million on plant and equipment, 13 percent more than in 1971.

### Financing

In October of 1971 Hawaiian Electric sold \$14 million of 30-year Series R first mortgage bonds, bearing 8.2 percent interest. At the same time, the company also sold \$8 million of Series M cumulative preferred stock, paying dividends equivalent to 8.05 percent. The proceeds from these two issues were used primarily to finance the 1971 construction program on the Island of Oahu.

In April of 1971 Hilo Electric Light Company sold \$2.5 million of 30-year Series I first mortgage bonds, bearing 8.5 percent interest. Proceeds were used to finance 1971 construction as well as to redeem \$750,000 of Series C first mortgage bonds issued in 1951 at 4.25 percent interest. Hilo Electric also obtained \$2.5 million through the sale of common stock to the parent company.

Maui Electric Company did not

<b>TAXES</b> (Dollars in Thousands)				
	1971		1970	
	Amount	Percent of Operating Revenues	Amount	Percent of Operating Revenues
<b>TAXES OTHER THAN INCOME</b>				
Public Service .....	\$ 6,422	6.9	\$ 5,712	7.2
Franchise Royalty .....	2,214	2.4	1,875	2.3
F.I.C.A. and Unemployment .....	513	0.5	465	0.6
Other .....	218	0.2	195	0.2
	9,367	10.0	8,247	10.3
<b>INCOME TAXES</b>				
State				
Current .....	670	0.7	770	1.0
Deferred .....	326	0.4	225	0.3
	996	1.1	995	1.3
Federal				
Current .....	4,535	4.9	5,229	6.6
Deferred .....	2,416	2.6	1,741	2.2
Investment Credit Deferred—Net	424	0.4	463	0.5
	7,375	7.9	7,433	9.3
<b>TOTAL INCOME TAXES</b> .....	8,371	9.0	8,428	10.6
<b>TOTAL TAXES CHARGED TO OPERATIONS</b> .....	\$17,738	19.0	\$16,675	20.9

*With microfilm viewer, complete information is at hand to give customer faster, better, lower-cost counter service.*



undertake any permanent financing in 1971. Permanent financing is planned for all three companies in 1972, including the sale of common stock by the parent company.

**Cost of Debt**

One of the problems seriously affecting electric utilities in recent years has been the sharp rise in interest rates.

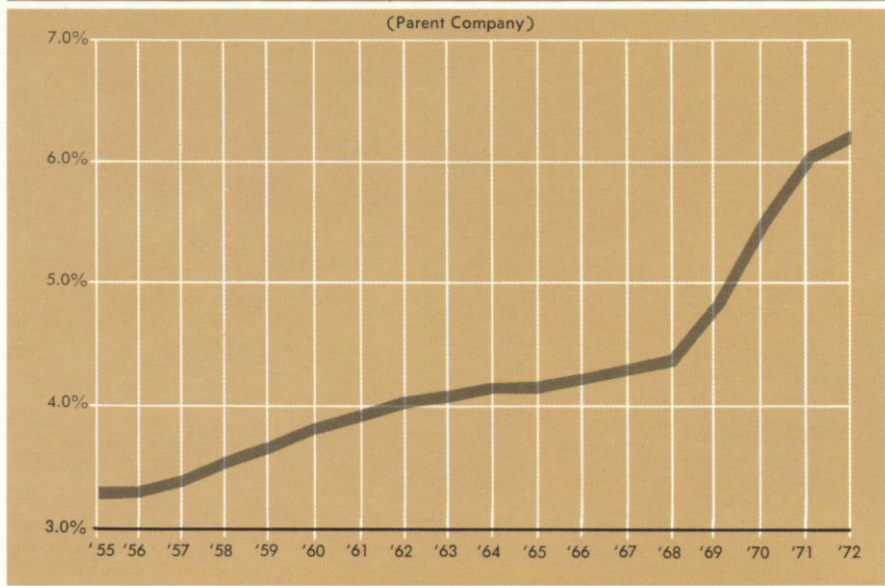
In 1971 our total interest expense amounted to \$9,892,000, a 20 percent increase over the previous year. This absorbed ten cents of every dollar of operating revenue compared with five cents in 1955, the year of our last increase in rates on Oahu.

Between 1955 and 1971 the total long-term debt of the Oahu system increased more than five times to \$148,179,000.

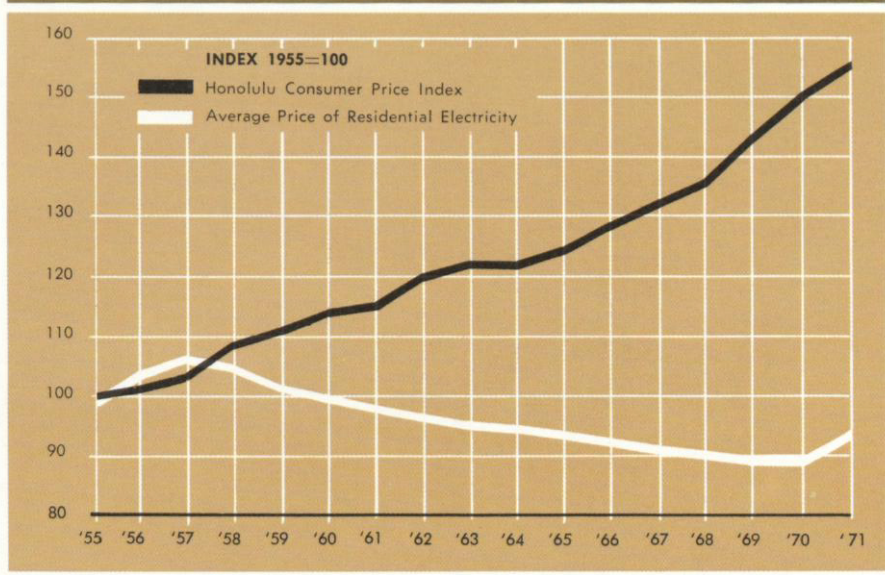
As illustrated by the chart on this page, the average interest cost of long-term debt of the parent company has risen continually since 1955 and took a sharp upturn three years ago when the company, in 1969 and 1970, sold a total of \$41 million of first mortgage bonds bearing interest of 9 percent.

*No general rate increase has been put into effect on Oahu since 1955, and the average residential cost of a kilowatt hour has decreased from 2.71 cents in 1955 to 2.56 cents in 1971.*

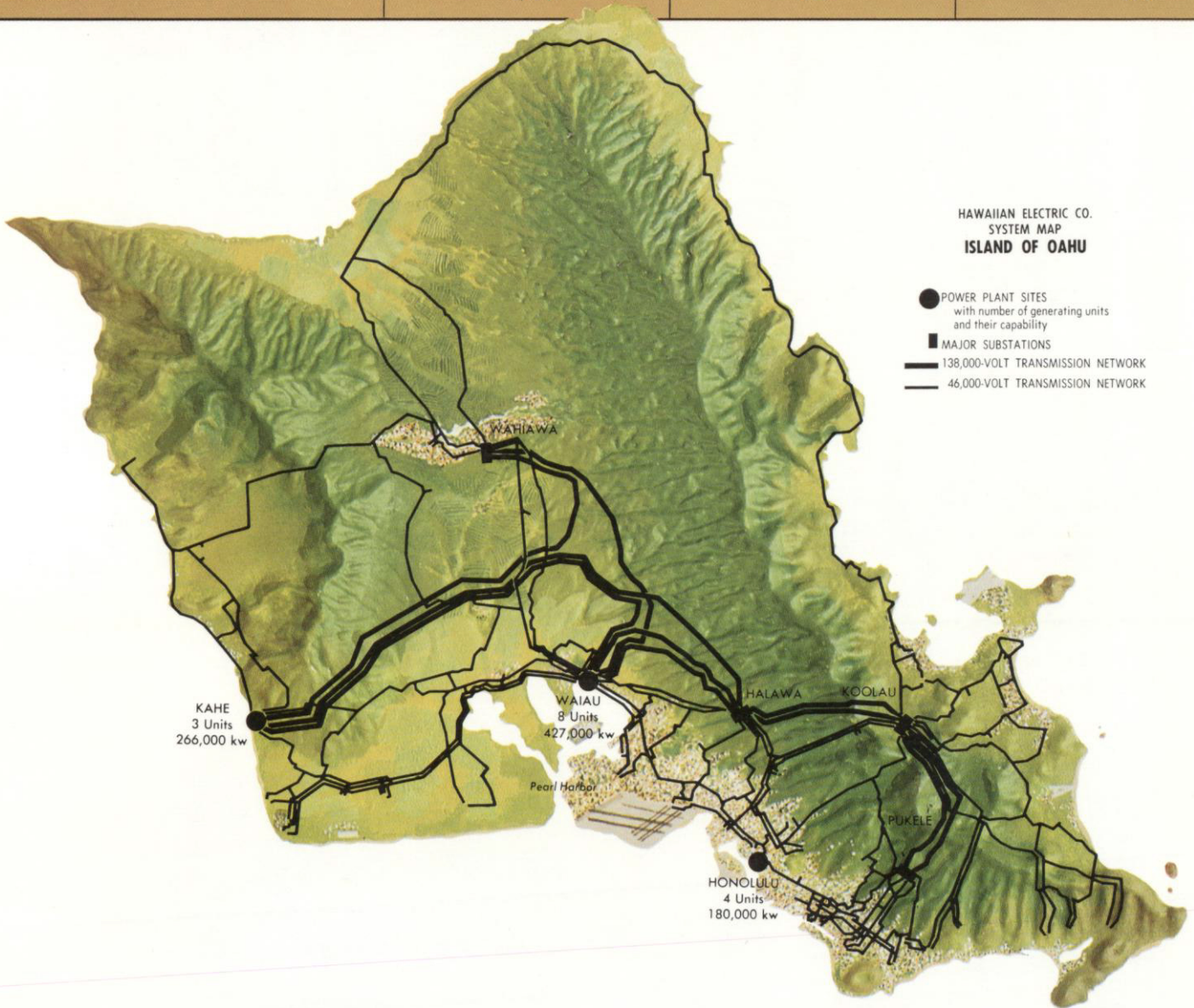
**AVERAGE COST OF LONG TERM DEBT**



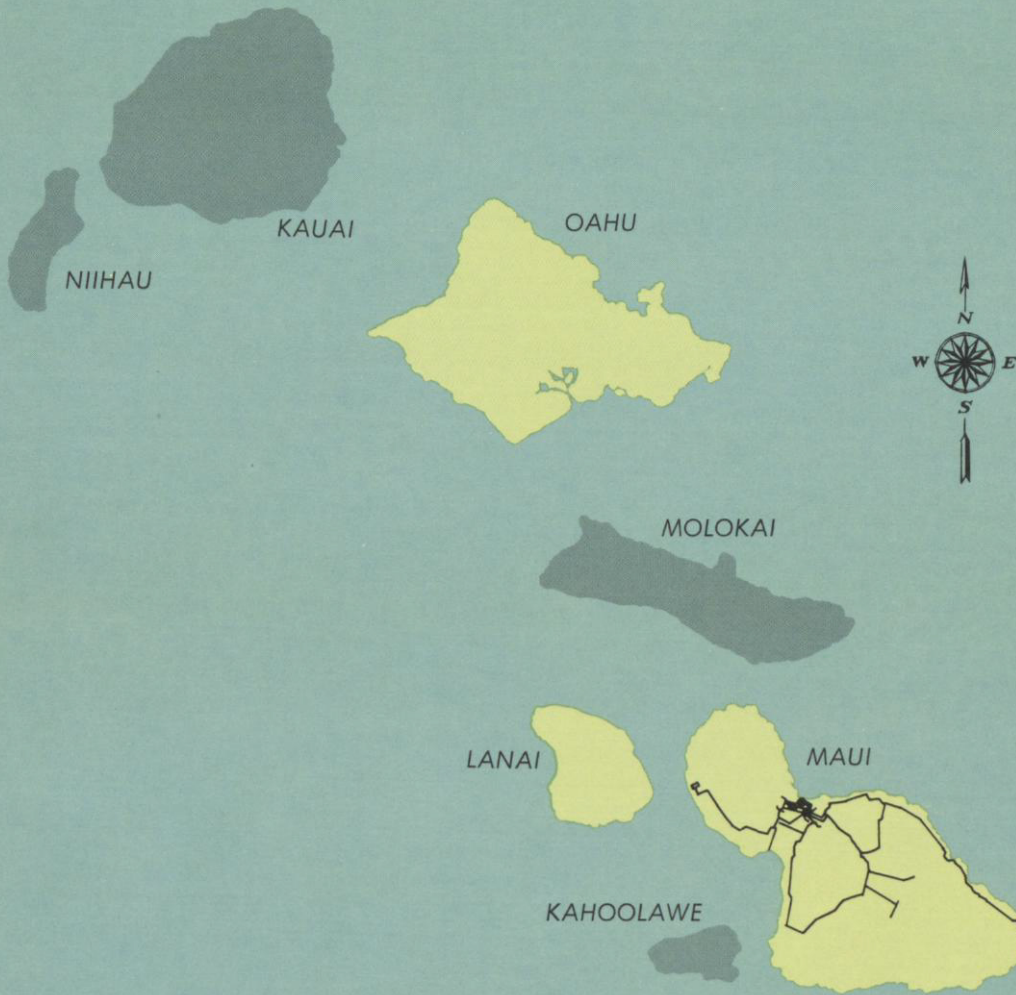
**COMPARISON OF HONOLULU CONSUMER PRICES AND RESIDENTIAL RATES IN CENTS FOR KWH**



COMPANY PROFILE	Parent Company	Subsidiaries	
	HAWAIIAN ELECTRIC CO. (founded Oct. 13, 1891)	MAUI ELECTRIC CO. (acquired Nov. 1, 1968)	HILO ELECTRIC LIGHT CO. (acquired Feb. 1, 1970)
Service Area	Island of Oahu 608 sq. miles	Islands of Maui and Lanai 868 sq. miles	Island of Hawaii 4,037 sq. miles
Population (7/1/71)	646,000	41,000	66,000
Metered customers	174,300	16,657	23,267
Electricity sold	3,600,727,922 kwh	191,111,912 kwh	247,104,439 kwh
Average annual use per res. customer	7,776 kwh	5,747 kwh	5,489 kwh
Plant in service	\$308,133,000	\$23,632,000	\$43,768,000
Generating facilities	3 generating sites 15 generating units	2 generating sites 6 generating units	6 generating sites 18 generating units
Type of plant	steam	4 steam 2 diesel	5 steam 4 hydro 8 diesel 1 gas turbine
Total capability	873,000 kw	42,750 kw	60,750 kw
Peak load, 1971	726,000 kw	38,600 kw	56,790 kw
Transmission system	138,000 v 46,000 v.	69,000 v 23,000 v	69,000 v 34,500 v
Personnel	1,484	135	223



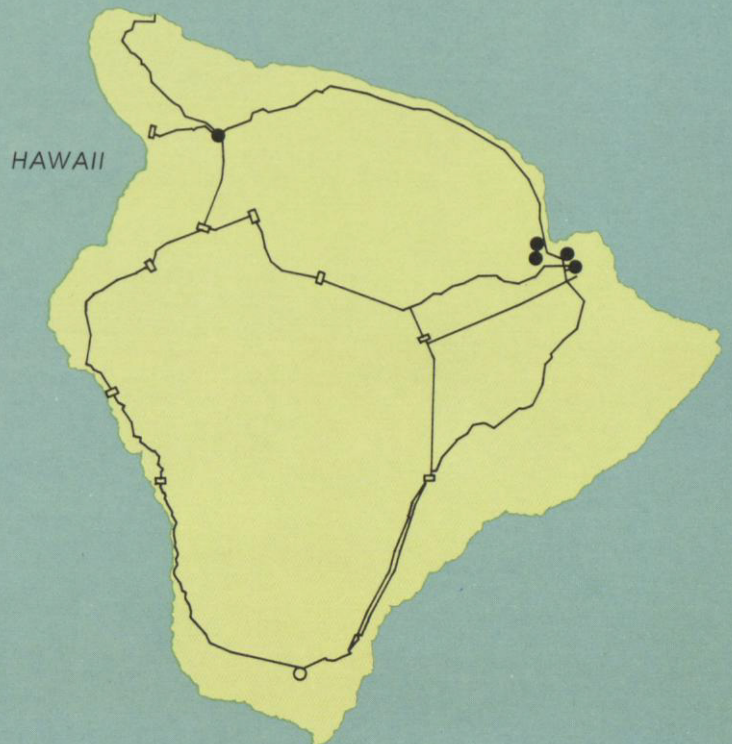




## POWERING ISLAND GROWTH

*While only third in size among the islands, Oahu has the largest population as it is the center of government and commerce. Likewise, Hawaiian Electric's major service area is on Oahu, which is undergoing increasing urbanization. Growth is also rapid on the Neighbor Islands, and the Maui and Hawaii subsidiaries are expanding to supply the needed new power. In the next five years Hawaiian Electric plans to invest \$250 million on Oahu, \$52 million on Hawaii and \$28 million on Maui in new plant and equipment.*

- POWER PLANT SITES
- MAJOR SUBSTATIONS
- TRANSMISSION



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ELECTRIC  
COMPANY,  
INC.**

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HAROLD C. EICHELBERGER / *Chairman of the Board, AMFAC, Inc.*  
RICHARD HENDERSON / *President, The Realty Investment Co., Ltd.*  
ANDREW T. F. ING / *Financial Vice President and Treasurer*  
DUDLEY C. LEWIS / *Attorney, Damon, Shigekane, Key & Char*  
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\* PHILIP E. SPALDING, JR. / *President, Hawaiian Western Steel, Ltd.*  
RICHARD L. SUMMERS / *Vice President, Employee Relations and Public Affairs*  
THURSTON TWIGG-SMITH / *President and Publisher, The Honolulu Advertiser*  
HERMAN V. VON HOLT / *Estate Management*  
CARL H. WILLIAMS / *Executive Vice President*  
RALPH T. YAMAGUCHI / *Attorney-at-Law, Yamaguchi & Tanaka*  
JESSE R. ZEIGLER / *Vice President, Operations*

\* Resigned October 19, 1971

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ARTHUR C. SLOGGETT / *Assistant Secretary*

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RICHARD E. BELL / *Environmental*  
GLENN M. BUNNELL / *Distribution*  
VERN E. CRONKHITE / *Engineering Design*  
WILLIAM J. FROOME / *System Operation*  
ARDEN G. HENDERSON / *Customer Engineering*  
FRANCIS E. KARR / *Generation*  
CURTIN A. LESER / *Manpower Planning*  
JOHN F. RICHARDSON, JR. / *Principal Planning Engineer*  
JOHN A. ROLFING, JR. / *Special Projects*  
JOHN T. STAYTON, JR. / *Employee Relations*  
KENNETH F. STRETCH / *Customer Service*  
G. MURRAY WINSLEY / *Purchasing and Stores*

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WELLS FARGO BANK / *National Association / San Francisco*  
OFFICE OF THE COMPANY / *Honolulu*

**Registrars**

THE CHASE MANHATTAN BANK / *New York*  
THE BANK OF CALIFORNIA / *National Association / San Francisco*  
FIRST HAWAIIAN BANK / *Honolulu*

## MAUI ELECTRIC COMPANY, LTD.

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WILLIAM H. BALTHIS  
*Maui Representative, Hawaiian Trust Company, Ltd.*  
COLIN C. CAMERON  
*President, Maui Land and Pineapple Company, Inc.*  
J. WALTER CAMERON  
*Former President and Chairman of the Board*  
SANFORD J. LANGA  
*Attorney-at-Law*  
KARL C. LEEBRICK  
*President Emeritus, Mauna Olu College*  
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*Retired / Former Public Utilities Commissioner*  
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*Executive Vice President and General Manager*  
\*HAROLD D. RISING  
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\*Resigned July 16, 1971

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*Financial Vice President*  
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*Treasurer*  
PETER C. LEWIS  
*Secretary*  
EUGENE A. HELBUSH  
*Assistant Treasurer*  
HOWARD MURAKAMI  
*Assistant Treasurer*  
LILLIAN M. TAKABAYASHI  
*Assistant Secretary*

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ARTHUR C. FERREIRA, SR.  
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ADDISON W. LEWIS  
*Administration*  
GEORGE E. LUPPOLD  
*Production*  
KING P. PALMER  
*Sales and Promotion*

## HILO ELECTRIC LIGHT CO., LTD.

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*Chairman of the Board, Hawaii Finance Company, Ltd.*  
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*Vice President, The Realty Investment Co., Ltd.*  
WILLIAM MACKENZIE  
*President*  
DENZIL W. ROSE  
*Manager, Hilo Motors*  
HERBERT C. SHIPMAN  
*President, Hilo Meat Company, Ltd.*  
CARL H. WILLIAMS  
*Executive Vice President, Hawaiian Electric Company, Inc.*  
JESSE R. ZEIGLER  
*Vice President, Hawaiian Electric Company, Inc.*

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ANDREW T. F. ING  
*Financial Vice President and Treasurer*  
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*Secretary*  
EDWARD O. RICE  
*Assistant Secretary*  
ORION YOSHIMURA  
*Assistant Treasurer*

### **Department Managers**

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SHIGETO MATSUBARA  
*Distribution*  
JITSUO NIWAO  
*Engineering*  
NORMAN OSS  
*Production*  
EDWARD O. RICE  
*Administration*  
ORION YOSHIMURA  
*Accounting*



HAWAIIAN  
ELECTRIC  
Company, Inc.

P. O. Box 2750  
Honolulu, Hawaii 96803

