



SCHLUMBERGER
ANNUAL REPORT
1976

SCHLUMBERGER LIMITED

IN BRIEF

	1976	1975	1974
Revenue	\$1,839,938,000	\$1,587,571,000	\$1,218,735,000
Net Income	\$ 293,162,000	\$ 219,337,000	\$ 147,630,000
Net Income Per Share	\$3.41	\$2.61	\$1.79
Dividends Paid Per Share	\$0.53	\$0.40	\$0.31

THE COVER:

*Schlumberger oilfield production logging
in the mountains of southwest Iran.*

TO THE SHAREHOLDERS

A year ago, almost to the day, I was cautioning our stockholders not to expect in 1976 a repeat performance of the previous two years. How wise are the men who hesitate to predict the future, particularly future earnings! Net income in 1976 recorded another leap forward, a 34% increase over 1975, on a 16% increase in revenue.

As in the previous three years, "wireline" or logging services to the oil industry were the major contributing factor in the growth of net income and revenue. Activity in North America set new records in every region, from Alaska to the Gulf Coast, from California to Northern Alberta; in every type of operation whether open hole logging or cased hole completions, whether on land or offshore, whether on oil wells or gas wells. All countries of South America had higher revenue except Peru. In the Eastern Hemisphere, although at a somewhat slower pace than in previous years, continued progress in the North Sea, North Africa and the Middle East more than offset the steep decline in revenue and net income in Indonesia.

Drilling & Production Services increased both revenue and net income. Forex Neptune with higher drilling revenue in 1976 was able to match the previous year's net income, a commendable achievement in a period of declining daily rates for large offshore units. All other drilling and production units, Flopetrol, Johnston, Dowell Schlumberger (50% owned) had improved results.

This performance of our oilfield service units is truly unique. Last year, I made several field trips to see our crews at work. They do an incredible job and despite too many statements that one hears or even reads, the youngest are the most enthusiastic, the most energetic, the most dedicated.

Measurement & Control operations in North America achieved substantial gains in revenue and net income. The best gains were made by the Energy Management division of Sangamo Weston and by Heath.

Measurement & Control-Europe results for the year were inconclusive. Expressed in U.S. dollars, net income was even with the previous year, as the French franc and the pound sterling declined throughout the year. Expressed in local currencies, solid progress was achieved in most divisions, particularly energy management and fluids; some weakness in orders and shipments was noticeable at the Mechanical and Industrial Valve divisions.

Sometimes our Measurement & Control people get a temporary inferiority complex when they compare their results to the exceptional success story of the oil-field services. And yet the five year summary of operations on page 33 shows that the operating income of Measurement & Control units worldwide grew from \$15.4 million in 1972 to \$77.4 million in 1976. By any standard, nothing to be ashamed of.

Progress recorded in the profit and loss statement receives more publicity than figures in the balance sheet. Yet during 1976 improvement in the balance sheet was just as impressive. Net liquidity, that is cash and short-term securities minus debt, increased \$272 million during the year and \$76 million for the fourth quarter alone. This large increase was made after an investment of \$187 million in fixed asset additions. It was certainly due to higher earnings and depreciation but also to a better control of inventories and receivables in every operating unit, in every country.

On December 9, 1976 the Board of Directors increased the dividend 50%

and split the stock three shares for two.

The year 1976 belongs to the past and this is no time to rest on our laurels. Recently, I outlined for the Board and for the management the main challenges, the main avenues of our future. There are four of them:

1. "Wireline" or logging services will grow faster in the ten years to come than in the past ten years. They will grow faster than drilling activity. The introduction worldwide of fully computerized instrumentation is opening a new era and will revolutionize the technique of logging.

2. The technology of drilling will undergo dramatic changes in the next five years. The vast know-how of drilling an oil well, accumulated over almost a hundred years, will be gradually complemented by modern instrumentation and data acquisition for safer, faster and cheaper drilling. The capabilities of Forex Neptune to understand and study drilling problems, the first results achieved by our "Measurement While Drilling" research and engineering group, our association with The Analysts—a growing and successful venture in the mud logging and drilling data field—all of these together should enable us to contribute in a major way to this evolution.

3. In the complex and diversified area of production tools and services for the oil industry, we have good products and field organizations. As we further develop these products and put together a more effective worldwide field organization, we will achieve a position of leadership in the market for production tools and services.

4. Our Measurement & Control operations cover Europe and North America in a variety of products. In this diversity, we believe that one product line—we call

it Energy Management—has an unusually great potential. A major part of this report is devoted to energy management beginning on page 16. These pages describe the products we have, the new products we are developing, the future of those products. If we are capable of effectively coordinating our efforts on both sides of the Atlantic and of adapting them to the needs of the utilities to meet the demand for electricity, we will be successful.

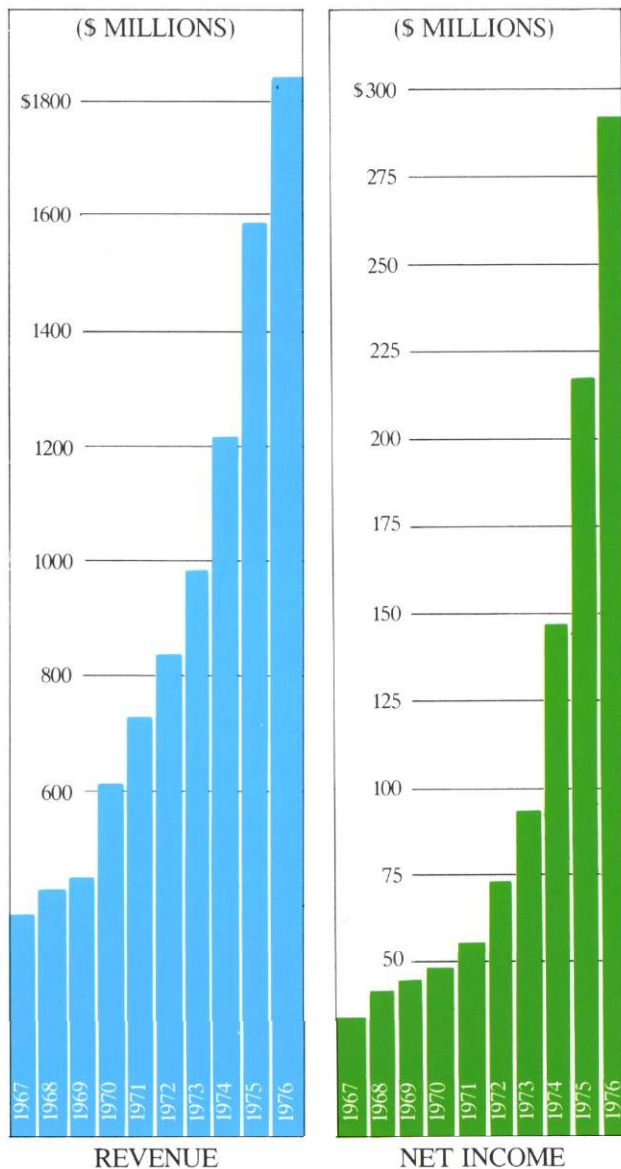
These challenges are simple and clear. They are realistic but they will require all our resources in human talents, in research capabilities, in money.

March 2, 1977



JEAN RIBOUD
CHAIRMAN AND PRESIDENT

FINANCIAL REVIEW



Revenue in 1976 was \$1.8 billion, an increase of 16% over 1975 and net income was \$293 million, a 34% improvement. Earnings per share were \$3.41 based on the average number of shares outstanding after giving effect to the December 1976 three-for-two stock split; on a comparable basis previous year earnings per share were \$2.61.

Operating revenue and income by business category are shown in the Consolidated Summary of Operations on page 33 of this report. Quarterly operating results are summarized in the Notes to Consolidated Financial Statements on page 32.

Profit margins continued to improve in 1976; net income was 16% of revenue compared to 14% in 1975; the increase was due mainly to higher revenue and effective control of costs.

Return on stockholders' equity was 25%, the same as the previous year.

Oilfield service revenue worldwide increased 19%:

- Wireline activity was ahead 30% in North America where drilling rig count ended the year at the highest level in 15 years; 16% up in the Eastern Hemisphere despite a slowdown in West Africa and a

sharp decline in Indonesia; and also 16% in South America with business gaining strength in the last half of the year.

—Drilling & Production Services revenue increased: 12% higher at Forex Neptune, 21% at Flopetrol and 36% at Johnston. Dowell Schlumberger (50% owned) was up 17%. Increased drilling revenue from higher activity in North Africa and the Middle East was partially offset by pressure on offshore drilling rates.

In Europe, Measurement & Control revenue increased 13%, expressed in local currency; however, because of the weakness of the French franc and the pound sterling, revenue was only 3% higher when translated to U.S. dollars.

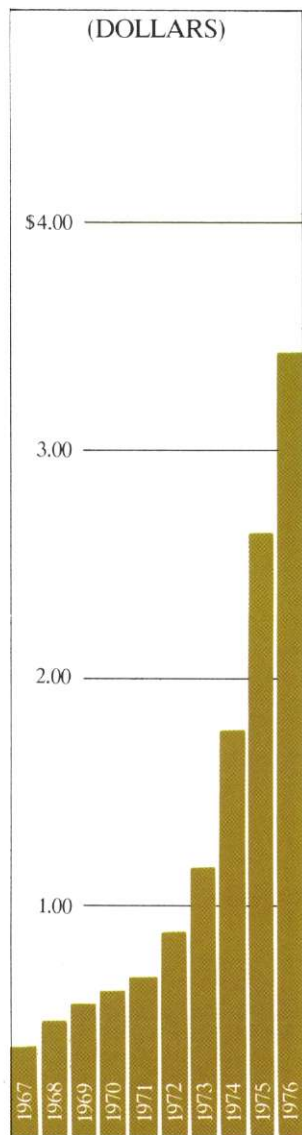
Measurement & Control revenue in North America was substantially higher than last year. Heath sales were up 10% and sales of Sangamo watt-hour meters were particularly strong; results of Sangamo, acquired in mid-1975, were included for the full year in 1976.

RESEARCH & ENGINEERING

Expenditures for research & engineering in 1976 were \$60 million compared to \$54 million in 1975. About half of this expense was incurred in French francs and the relative weakness of the franc compared to the U.S. dollar had the effect of decreasing the dollar amount in 1976. On a constant dollar basis, research & engineering increased 17% in 1976. Expenditures were \$30 million for Oilfield Services and \$30 million for Measurement & Control.

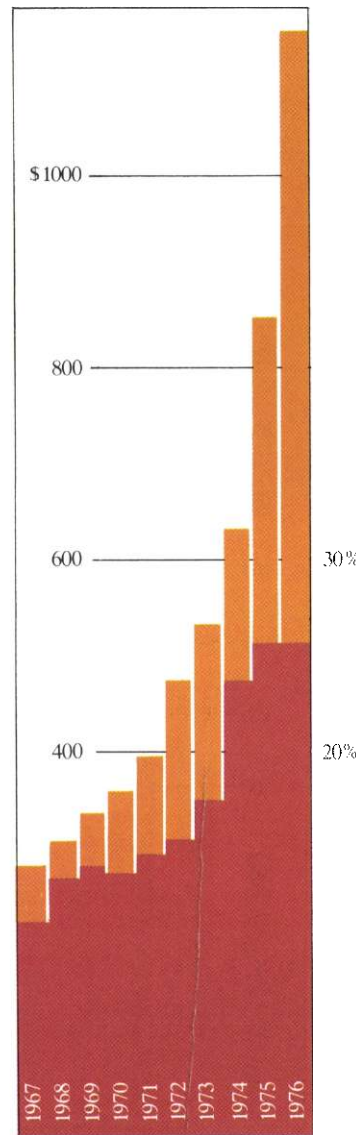
TAXES ON INCOME

Estimated liability for income taxes at the end of 1976 was \$235 million, up \$65 million from December 31, 1975. Higher earnings accounted for a large part of the increased liability. Also contributing to the increase were additional provisions for taxes which may be payable in the future to various countries depending on the interpretation of applicable laws and regulations. The effective tax rate was 36%, the same as the previous year.



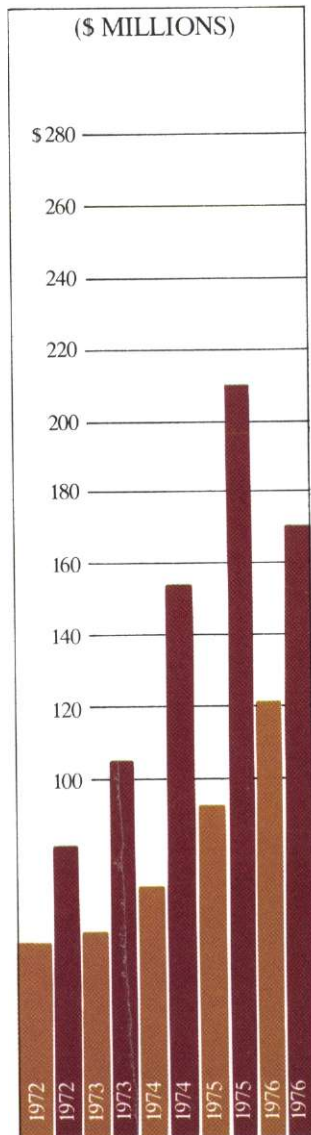
EARNINGS PER SHARE

Adjusted for three-for-two stock split in May 1969; three-for-one stock split in September 1972; three-for-two stock split in March 1975 and three-for-two stock split in December 1976.



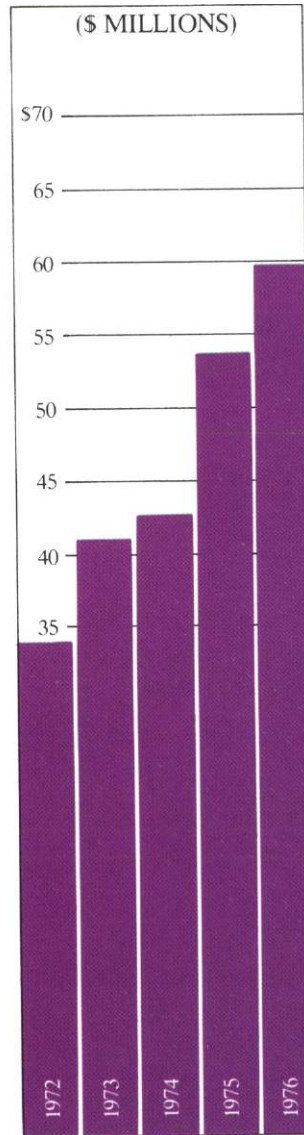
AVERAGE SHAREHOLDERS' EQUITY (\$ MILLIONS)

RETURN ON AVERAGE SHAREHOLDERS' EQUITY (%)



NET FIXED ASSET
■ ADDITIONS*
■ DEPRECIATION

*Net of retirement



**RESEARCH
& ENGINEERING**

CURRENCY

The French franc weakened in relation to the U.S. dollar which had the effect of depressing the dollar equivalent of franc sales and earnings compared to 1975. However, the effect on consolidated results was not material.

The decline of the Argentine peso throughout 1975 continued in early 1976 but stabilized somewhat in the second quarter; as a result, the peso exchange loss in 1976 was approximately \$2 million compared to \$6 million in 1975.

FIXED ASSETS

Fixed asset additions were \$187 million, a decline of 16% from 1975 when expenditures for wireline equipment were unusually high because of the surge in oilfield activity in 1974 and 1975. Additions by business sector were as follows:

	1976	1975
(Stated in millions)		
Oilfield:		
Wireline Services	\$ 87.1	\$115.7
Drilling & Production Services	67.8	64.2
	<u>154.9</u>	<u>179.9</u>
Measurement & Control:		
North America	5.2	4.3
Europe	24.3	33.5
Other	2.5	4.4
	<u>\$186.9</u>	<u>\$222.1</u>

Depreciation expense in 1976 was \$130 million compared to \$99 million in 1975. Fixed asset expenditures are budgeted at \$228 million for 1977.

**COMMON STOCK
AND DIVIDENDS**

In December, the Board of Directors voted a three-for-two split of the Common Stock of the Company and raised the annual dividend rate from \$0.80 to \$1.20 per share (presplit), a 50% increase. This results in an annual dividend rate of \$0.80 per share after the split.

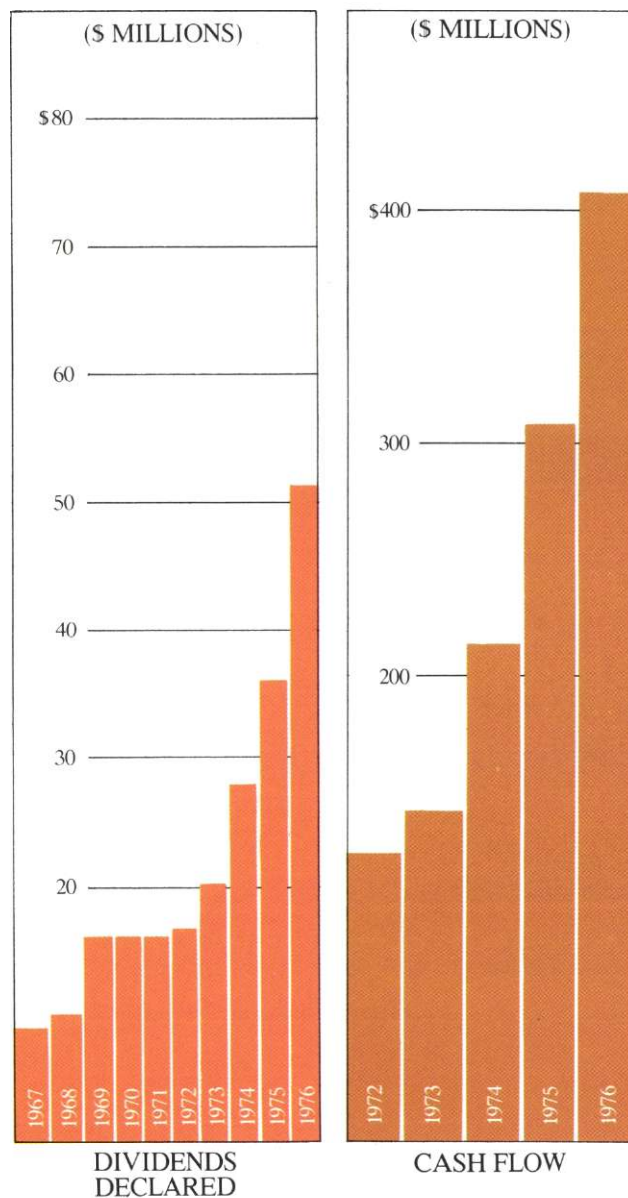
During the year, 153,256 previously

unissued shares were sold to employees under stock option plans. At year end, 85,930,785 shares were outstanding compared to 85,852,529 at December 31, 1975. Outstanding shares at the end of 1976 and 1975 exclude 2,536,038 and 2,461,038 shares, respectively, held in the Treasury. During the year, 75,000 shares of treasury stock were purchased at market from the Schlumberger Limited Pension Trust; no treasury shares were issued.

At their meeting on February 24, 1977, the Board of Directors authorized the purchase from time to time of up to one million shares of the Company's Common Stock depending on market conditions and other factors. Any shares so acquired would be held in the Treasury or used for general corporate purposes. Also on February 24, the Board adopted a resolution recommending that the stockholders approve an increase in the authorized Common Stock from 120 million to 200 million shares.

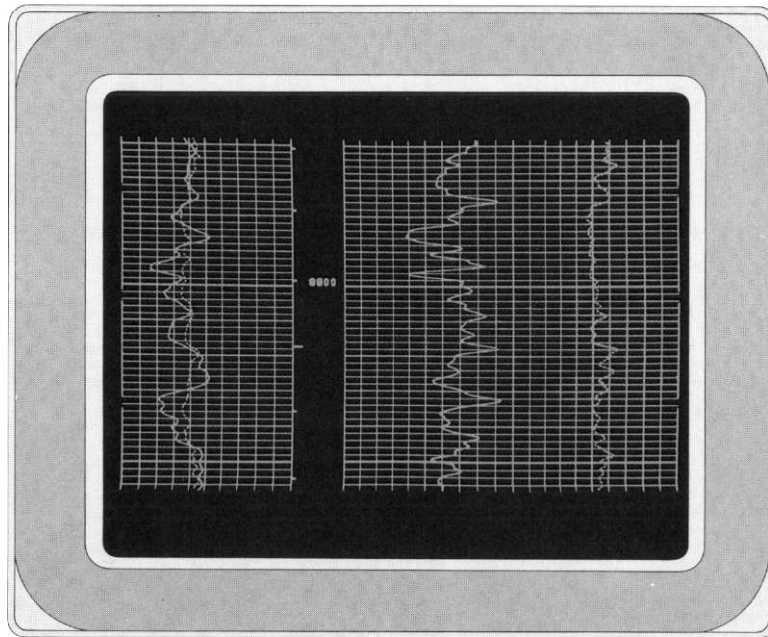
OTHER

The strong financial position of the Company improved further in 1976. At year end working capital was \$625 million, an increase of \$169 million during the year. Despite the increased volume of business in 1976, receivables and inventory were held at about the same level as the previous year; as a result the ratio of current assets to current liabilities at year end was 2.1 compared to 1.9 at the end of 1975.



OILFIELD SERVICES

Revenue from oilfield service business in 1976 topped one billion dollars for the first time—an increase of 19% over the previous year: Wireline Services gained 22%, Drilling 12%, and Production Services were ahead 18%. Growth was strong in all major areas except the Far East; business was excellent in the U.S. and was up in Canada and South America.



Video display of log in CYBER SERVICE UNIT

WIRELINE SERVICES

Wireline services are used to evaluate oil wells by measuring physical properties of underground formations. Measuring devices are lowered into a well by a cable called a "wireline". Measurements are transmitted to the surface and are recorded on a graph called a "log". Interpretation of this log helps to determine the location and quantity of oil and gas.

Once again, technical improvement was a key factor in wireline service growth:

—The data communication network which feeds well-logging information to large-scale computers in Houston and Paris was extended. In North America, ten wireline field centers are now equipped with computing terminals; any number of these can simultaneously communicate with the central computer without interfering with each other. Also supplemental log data processing centers now include London, Singapore, Caracas and Lagos, Nigeria. Analysis on these computers provides more refined oil-well evaluation and, with computer power brought closer to the well site, it means more and better service to the customer.

—Minicomputer systems were incorporated in new logging units; these are the mobile electronic laboratories which perform wireline services at the well site. This Schlumberger Cyber Service Unit (CSU) increases speed and quality of service: automation reduces setup and calibration time, also most logging tools can be run faster in the borehole; further, the convenient data format shortens analysis and interpretation time. The customer gets a more useful product and saves valuable drilling rig time. After five years of development, including over three years of field testing, twelve units were completed in 1976 and another seventy are planned for 1977.

—Combination logging services combine two or more logging tools in a single assembly for simultaneous measurements during a logging run. In 1976 these

combinations were increased in scope and application: expanded to all geographical areas and new combinations were developed. Combination services not only save drilling rig time but also give the customer logs that are easier to interpret.

—Two new wireline services help geophysicists to refine interpretation of seismic data as an aid to further exploration: the first is Geogram Survey which provides a geophysical analysis using wireline data from a borehole. Computer processing produces a synthetic seismogram that can be correlated with original seismic records made on the surface. The second is the Well Seismic Tool in which a geophone, anchored at selected depths in the well, measures the time it takes a sound pulse to travel from the surface; this data can be used to improve the precision of seismic records.

NORTH AMERICA

Every division in North America contributed to a 30% increase in revenue—largest gains were in Canada and the offshore Gulf Coast. Business was especially strong in the second half. At the end of the year, the number of active rotary drilling rigs in the U.S. was the highest in 15 years; in Canada, the count was up 32% following two years of sharp decline.

—The Repeat Formation Tester made a good contribution to revenue growth; this service is now available in all areas. The tool can take an unlimited number of pressure measurements and recover samples of formation fluid from two different zones on one trip into the well.

—Compensated Density with Neutron, a combination tool which provides basic porosity data and detects potential gas zones, gained further industry acceptance with a 40% growth.

—Revenue from work on completed wells (cased hole) kept pace with revenue from newly drilled wells (open hole). Several new centers were set up to specialize in cased-hole work and others

were enlarged. Cement Bond Logging increased substantially; this service evaluates the quality of cement bonding which isolates producing zones from nonproducing zones.

—Several large offshore lease sales were held for the Gulf Coast, California, and the Gulf of Alaska.

SOUTH AMERICA

Revenue was 16% ahead in South America compared to only a small gain in 1975; wells drilled increased 11% and footage was up 5%. Gains were strong in Argentina, Brazil, Bolivia, Colombia and Trinidad. Activity in Venezuela is now beginning to pick up gradually following nationalization of the oil companies. The downturn in Peru continues in the absence of new discoveries. Year-end drilling activity was strong indicating that the upward trend in South America will continue into 1977 in most areas.

EASTERN HEMISPHERE

Wireline revenue gained 16% in the Eastern Hemisphere after several years of much stronger growth; land revenue increased 17% as active rig count was up 6%. Offshore revenue increased 15%; development drilling was higher but exploration was down.

—Biggest gains were in the Middle East, the North Sea and North Africa; those areas generally enjoyed relative political and economic stability. Activity continued to decline in West Africa and Indonesia where political and economic considerations discouraged the industry—the abrupt drop in Indonesia had an adverse impact on earnings from this area.

—Revenue from Data Processing services grew 44%; decentralized centers in the Far East and London were expanded and more centers are planned for 1977.

—Computerized Cyber Service Units (CSU) were introduced in Europe in late 1976; this service will be initiated in other key areas of the Eastern Hemisphere for the first time in 1977.

DRILLING & PRODUCTION SERVICES

FOREX NEPTUNE

Schlumberger maintained a utilization rate close to 100% for drilling rigs throughout 1976 even though the drilling business softened in some areas of the Eastern Hemisphere and there was an industry surplus of offshore rigs.

Revenue was 12% ahead but net income was level with 1975 in spite of pressure on offshore prices. Nearly two-thirds of the revenue was from land activity, somewhat more than in 1975; present indications are that this trend will continue but the outlook for offshore is reasonably good as all major units are under contract.

In 1976 the company spent \$53 million on capital items for drilling operations:

—A tender rig, Searex, was completed early in the year and began operations in the Persian Gulf.

—Three heavy land rigs were completed: a super heavy rig began working in Iraq early in 1976; two others began in Algeria in mid-1976.

—A new jack-up rig, Trident II, left Singapore in December 1976 for the Persian Gulf where it has begun drilling under contract.

To maintain full utilization of equipment, several large rigs have been moved to new areas: Pentagone 81, a semisubmersible which worked in the North Sea in 1976, has been transferred to the Mediterranean; three land rigs were moved to France (two from Gabon, one from Tunisia); two rigs moved from Nigeria—one to Algeria and one to Libya.

FLOPETROL

In 1976 revenue increased 21% and earnings were much higher than the previous year. Better margins resulted from more efficient operations—higher utilization of personnel and favorable currency parities. The largest expansion was again in the Middle East, the Far East and West Africa. Improvement was modest

in South America and in the Mediterranean area. Well testing is still the leading service and continues to grow at a good pace.

Early Production Facilities service is rapidly gaining acceptance by the industry. This service was introduced by Flopetrol to help the oil companies put new offshore oilfields into production sooner; Forex Neptune engineering is assisting in design of offshore support equipment. Three installations are running offshore Indonesia and a fourth one started operating in January 1977 offshore Spain. To implement this service, Flopetrol provides the customer with specialized production equipment and trained personnel.

New products include the High Accuracy Permanent Downhole Pressure Gauge and the Wireline Retrievable Sub-Surface Safety Valve; disposal of oil base drilling mud by burning is a new Flopetrol service which was introduced successfully in the North Sea and will be expanded to other areas.

JOHNSTON

Johnston furnishes the oil industry with testing, workover and drilling tool services in the U.S. and Canada. Outside of North America, Johnston services and products are provided to oil operators worldwide through Dowell Schlumberger and Flopetrol.

Revenue in 1976 was higher than in 1975, mainly from increased services in North America.

In 1976 Johnston oil well production testing service in the U.S. and Canada was increased substantially using Flopetrol techniques and equipment. This is now the fastest growing segment of the Johnston service business.

The E-Z Tree, a testing device for subsea wellheads, has made a significant impact; this was designed by Johnston with assistance from Flopetrol.

DOWELL SCHLUMBERGER (50% OWNED)

Revenue was 17% ahead of 1975. Strongest gains were in the Middle East, Europe

and Africa; also South America improved. However, business activity in the Far East was slower.

Several new products were introduced by Dowell Schlumberger in 1976:

- Super X Emulsion acid solution improves acidizing of limestone formations; this is used in conjunction with a new Duo-Frac technique, which allows for maximum penetration of reactive acid into oil and gas producing limestone.
- Liquid additives for cement replace solid additives reducing time and space required for cementing jobs.
- A new generation of Drill Stem Test Tools with larger internal diameter allows safe testing up to 10,000 barrels of oil per day even with hydrogen sulphide gas present in the produced fluid.

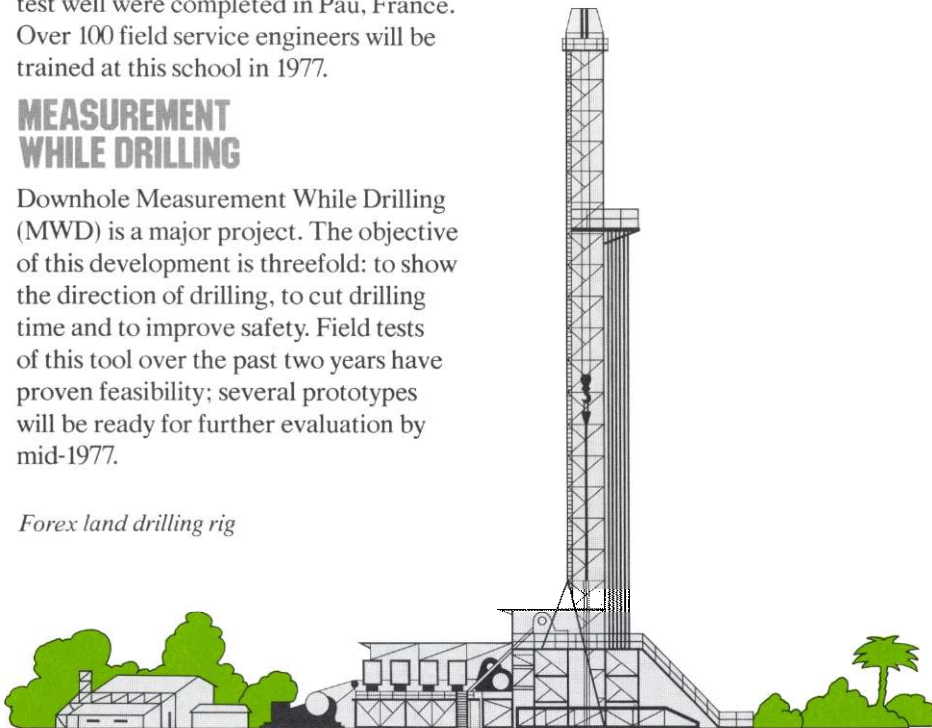
In 1976 another offshore service vessel, BIGORANGE IX, was added to the fleet. This vessel is equipped with the latest automated equipment for stimulation work and will operate offshore Brazil.

A manufacturing facility for the assembly of pumping equipment was completed in Saint Etienne, France, in May at a cost of \$1.5 million. Also, in November, a modern training center and test well were completed in Pau, France. Over 100 field service engineers will be trained at this school in 1977.

MEASUREMENT WHILE DRILLING

Downhole Measurement While Drilling (MWD) is a major project. The objective of this development is threefold: to show the direction of drilling, to cut drilling time and to improve safety. Field tests of this tool over the past two years have proven feasibility; several prototypes will be ready for further evaluation by mid-1977.

Forex land drilling rig



MEASUREMENT & CONTROL

EUROPE

European Measurement & Control operations of Schlumberger continued to improve in 1976. Progress was good in France and the United Kingdom throughout the year and showed satisfactory improvement elsewhere in the latter part of 1976.

Sales were 13% higher expressed in local currency and net income gained substantially more. However, because of the weakness of several European currencies, operating results were about level with the previous year when translated to U.S. dollars.

Operations in France are now organized into four major groups:

—Electricity-Electronics—with emphasis on three markets:

- Electric utilities: meters, relays, load management systems, transformers.
- Industrial and scientific laboratories: tape recorders, data acquisition systems, electronic instruments.
- Communication networks: professional audio equipment.

—Industrial—with emphasis on the process control market: industrial controls, gauges and specialized valves.

—Fluids and Mechanical—products related to fluid measurement: water meters and systems, gas meters, heating controls; in addition the Mechanical Division makes castings and plastic parts; also products such as parking meters and time clocks.

—Services—products and services related to water and energy distribution.

Measurement & Control activities in Austria, Belgium, Holland, Spain, Argentina, Brazil and Chile are now managed by the International Division. In the United Kingdom, the two principal operations are Solartron and Sangamo Weston.

Year-to-year comparisons of revenue from the operating divisions refer to local currency before translation to U.S. dollars.

ELECTRICITY-ELECTRONICS

Revenue increased 18% in 1976 because of substantial sales of domestic electricity meters and load management systems in France, and large shipments of audio equipment to Indonesia and Zaire.

Sales of industrial electricity meters, analog panel instruments and electronic instruments in France were generally low as a result of the industrial recession in Europe. A significant order was received from the French telephone agency for six automatic test systems for communication lines.

INDUSTRIAL

Sales remained at the same level as the previous year; petroleum valves did not sustain the exceptional performance of 1975 due to reduced capital investment by refineries and petrochemical plants in Europe. However, an \$8 million order was received from the USSR.

In December 1976 the first delivery was made to the Eurodif uranium enrichment plant under a multimillion dollar contract for nuclear valves; also operations are on schedule for large shipments in 1977.

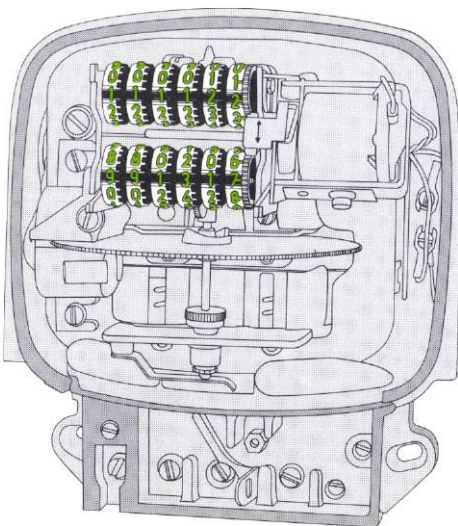
Industrial control continued to grow due mainly to new products: regulators and cage valves.

FLUIDS AND MECHANICAL

Sales of water meters and irrigation systems improved: TM 16000, tele-transmission equipment, used for monitoring and control of water production and distribution, was well accepted by customers; orders for irrigation equipment were received from Iraq, Greece and Algeria. In 1976, the company made a large investment in computerized equipment for water meter tests required by new Common Market standards.

Sales of gas meters—both domestic and industrial—continued to decrease

Dual-tariff meter



in France, Italy and Germany. However, orders for gas pressure reduction equipment improved throughout the year.

Elimination of unprofitable products, cost reductions, and improvement of manufacturing quality brought the Gas Division to a break-even level at year end, following several years of heavy losses.

Despite depressed conditions in the building industry, pressures to economize on energy increased the demand for heating controls: BTU meters for large urban steam heating systems, and for small apartment water heating. A new thermostatic valve to control water heating systems was introduced in the third quarter.

Sales of the Mechanical Division were ahead of 1975 despite a recession in the aerospace industry. Results were best in plastic molding and nonferrous foundry operations. Efforts to expand proprietary products continued: parking meters and time clocks at the Besançon plant; environmental test chambers and vacuum cooling equipment at the Sapratin plant in Franconville.

SERVICES

Revenue in 1976 was up 14% due mainly to three factors:

- Increased rentals of hot water meters used to save energy.
- Improved productivity of ducting operations.
- Recovery of gasoline pump sales after three years of poor business.

A new device for allocating heating expense in cooperative apartments was put on the market in 1976.

INTERNATIONAL DIVISION

Sales increased only 9% as the recovery in Europe did not begin until late in the year; however, sales in South America made good progress, mainly in Brazil and Chile.

In Belgium sales improved: the general business climate was better and product lines were expanded. Due to strong competition in a weak market for gas

meters, operations in Holland were still unprofitable; cost reduction measures brought this unit to breakeven at year end for the first time in several years. Business in Spain was good.

In Brazil, revenue increased substantially as sales of both water meters and electricity meters were strong. Production of protective relays for electric power networks was started during the year. In Chile, assembly of electricity meters will begin early in 1977; sales of water meters continued at a good pace.

SOLARTRON SANGAMO WESTON (U.K.)

Despite generally adverse economic conditions in the United Kingdom and much of Western Europe, Solartron revenue increased 45% and net income was significantly higher. Improvement was due largely to higher shipments of systems simulation products: sales of both Simfire tank gunnery simulators and radar training simulators doubled over 1975 levels; deliveries were made on several large contracts including a \$1.4 million ASTT (radar simulator) for the Royal Dutch Navy.

Orders for instruments and transducers improved late in the year as a result of: introduction of the 7000 series digital laboratory meters which extend the instrumentation line; first deliveries of new pressure transducers for the Tornado multirole combat aircraft (MRCA); decreased value of the pound sterling which helped export sales.

Sangamo Weston revenue increased 13% in 1976, mainly reflecting the effect of inflation. Deliveries of electricity meters to government-owned utilities remained low throughout the year and sales volume of industrial instruments declined 10%. However, sales of aircraft instruments improved. There was a good backlog at the beginning of 1977. A new torquemeter was developed for the joint British-French Lynx helicopter program. Also the market for industrial transducers and protective systems for steam power generators continued to grow.

NORTH AMERICA

Revenue and net income of Measurement & Control operations in North America improved at both Sangamo Weston and Heath. This reflects a strong recovery from a 20 week strike at Sangamo in 1975 and a rebound in Heath mail order and retail sales to record levels.

SANGAMO WESTON

Sangamo Weston sales were \$172 million in 1976. Statistical comparison with the previous year is not meaningful because Sangamo was acquired in mid-1975; however, Sangamo sales were considerably higher than in the same periods of 1975 reflecting stronger markets for domestic electricity meters. Weston and EMR product sales were about even.

Sangamo sales of watt-hour meters increased sharply as the economy improved in the U.S. and Canada.

Sales of magnetic-tape cassette readers for residential surveys by electric utilities expanded in 1976. Utilities use the recorded data as a basis for modifications to rate structures. A new recorder, featuring a tape cartridge, will be introduced in 1977 for billing to large customers.

Responding to the need for more efficient load management, Sangamo recently introduced a load and rate control system which will help U.S. utilities to defer costly generator expansion. This is the "ripple control" system which has been successfully marketed by Schlumberger in Europe and other areas. This system is explained more fully later in this report. Also, energy management and control products are now provided by Sangamo to industrial and commercial customers through a nationwide chain of over thirty Sangamo Energy Management Centers.

Sales of data recorders were higher despite lower Government orders. The new lightweight Sabre VI portable recorder is rapidly gaining favor for industrial, medical, military and aerospace applications. Engineering is near

completion on Sabre X, an advanced laboratory recorder scheduled for introduction by Sangamo in 1977.

Weston sales of instruments were at about the same level as 1975 but margins were somewhat better. Several new products were introduced during the year including:

—Digital volt-ohm-milliammeter, DVOM 6000, which uses a liquid crystal display and an advanced digital microcircuit to upgrade performance. Customer reaction was favorable.

—Three-inch laboratory thermometer with dual-scale reading in both English and metric values.

Weston subcontract sales were lower because of reduced intercompany orders, mainly for Schlumberger wireline components on which volume was unusually high in 1975. However, shipments and backlog improved on nuclear reactor instrumentation. In 1976 Weston was also awarded a large commercial contract for a protective system on an experimental fast-breeder nuclear reactor.

EMR Telemetry sales were somewhat higher; increased shipments of systems to customers outside the U.S. more than offset a decline in domestic business. Also a computer-controlled telemetry system introduced in 1976 resulted in several orders for large vibration testing systems; one application is for analysis of vibration damage to automobiles during rail shipment; another is analysis of mechanical vibrations due to high-speed fluid flow in a nuclear reactor.

EMR Photoelectric sales were lower as shipments of photomultiplier tubes, used as radiation detectors in wireline logging tools, returned to normal levels after an unusual surge in the previous year.

HEATH

Heath sales and profit reached new highs in 1976. Sales increased 10% to \$92 million with all major product lines showing improvement. Largest gains were in amateur radio/communication kits, laboratory/test equipment and a new

line of educational products designed to teach electronic subjects through individual self-paced learning programs.

Mail order sales were up 7% for the year, with most of the growth coming in the last half. Retail sales by Schlumberger Products Corporation increased 11%. Contract sales to technical correspondence schools exceeded the prior year, but are expected to decline in 1977.

More than 40 major new kit products were introduced during the year:

—For the instrumentation and test equipment market, a 10Mhz dual-trace oscilloscope, an AC voltmeter, a portable color alignment generator, distortion analyzers, digital meters, testers and frequency counters.

—For the home entertainment market, a new series of audio components highlighted by the attractive AR-1515 stereo receiver which offers digital frequency readout for precise tuning, 70 watts per channel, and exceptionally low 0.08% total harmonic distortion for unmatched sound reproduction.

—For the GR 2001 computer color TV receiver, Heath has developed an optional programmer for selection of programs up to 24 hours in advance; also, an accessory control is available that positions the antenna for best reception on each programmed channel.

—Home convenience items include a central electrostatic air cleaner, and fire and smoke detectors.

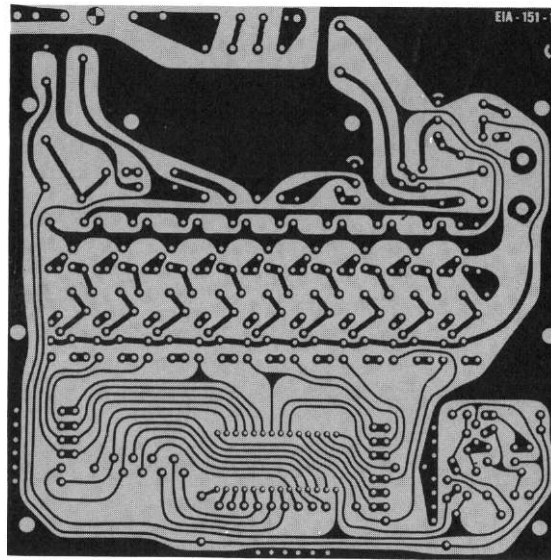
—For boating enthusiasts, a chart-recording depth sounder was well accepted, and for automotive customers, the first commercially available digital miles-per-gallon meter was introduced.

—Amateur radio operators responded with substantial orders for a new two-meter synthesized transceiver. Dollar volume set a new record for a single product in a quarter.

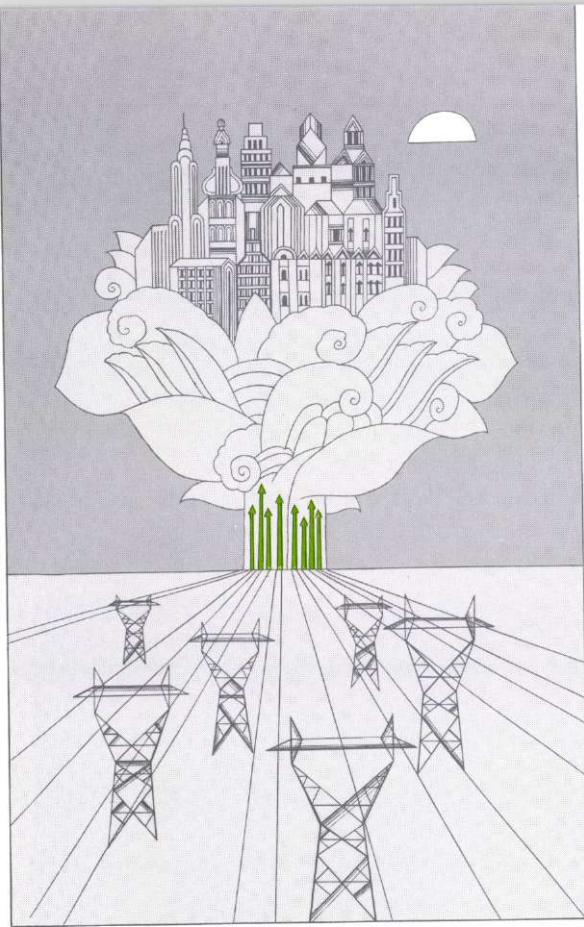
—For owners of Heathkit solid state television sets, a new electronic TV game kit was introduced. Unit sales were the highest ever recorded by Heath during a three month period.

Volume from mail order and retail

outlets was almost equally split in 1976. Three new retail outlets will be opened in 1977, bringing the number of U.S. Heathkit Electronic Centers to 50. Outside the U.S., Heath sales were more than \$11 million in 1976, mainly from Canada and Western Europe. Six retail outlets are located in Canada and eight in Europe.



Heathkit circuit board



ENERGY MANAGEMENT OPPORTUNITIES AND OBJECTIVES

In recent years Schlumberger annual reports have included a feature article on a major part of the business. For the past three years it has been Oilfield Services: Wireline, Drilling, Production services.

The feature this year is on a major segment of Measurement & Control operations of Schlumberger. It describes the contribution of Schlumberger to energy management, that is, equipment and systems to aid efficient production, transmission and distribution of electrical energy.

The economic growth of industrial nations has become increasingly dependent on an abundance of low cost energy, and electricity has had an increasing role. More than a 100 years have passed since generators were first installed to supply electricity for the newly invented light bulb. Consumption of electricity has doubled every decade since then, increasing in the U.S. 30-fold in the past 50 years alone.

Electricity is produced in power stations, either thermal plants (using coal, oil, gas or nuclear fuel) or hydroelectric plants. As demand kept increasing the cost of a unit of energy—the kilowatt-hour—became relatively lower, in part as a result of a larger supply of oil and natural gas. But in recent years the trend has reversed due mainly to sharply higher oil prices, to the declining availability of convenient sites for hydroelectric plants and to the investment required by nuclear plants, not to mention the associated environmental problems.

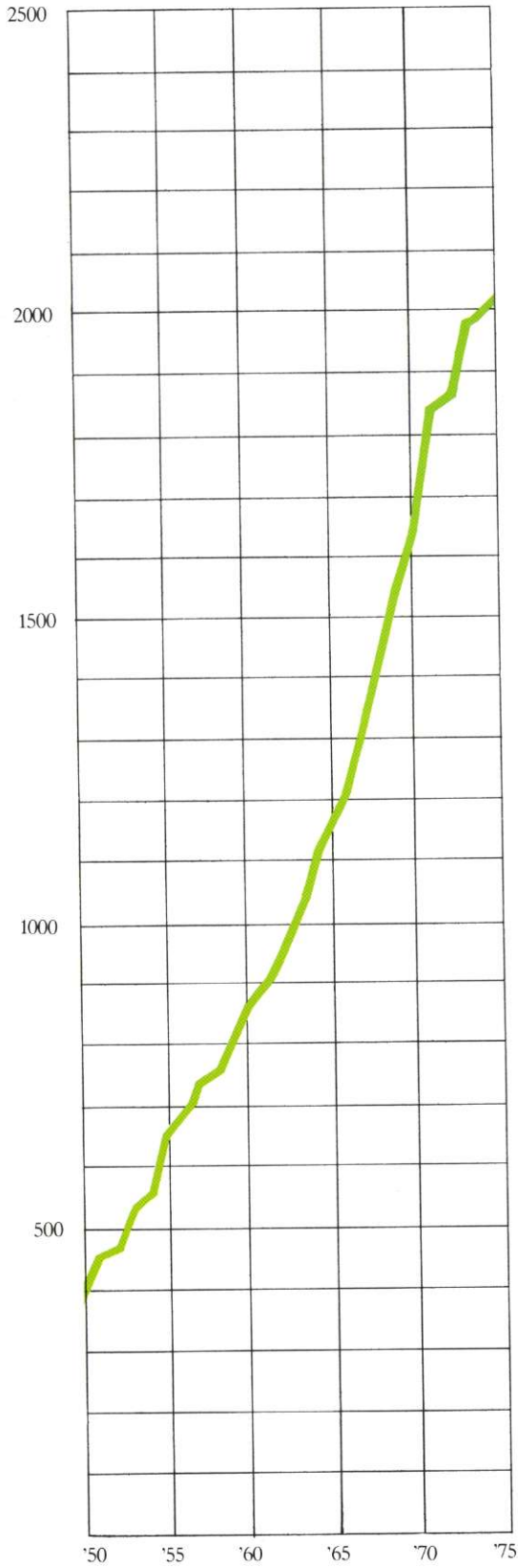
To sum it up—the day of cheap electricity is over—the need for better management of electrical power consumption is clear—one practical solution lies in measurement and control techniques.

Schlumberger is a leader in energy management technology and has a strong technical and commercial base on which to market energy management equipment worldwide.

The next few pages briefly explain how electric power is generated and distributed, and illustrate some of the energy management techniques developed by Schlumberger.

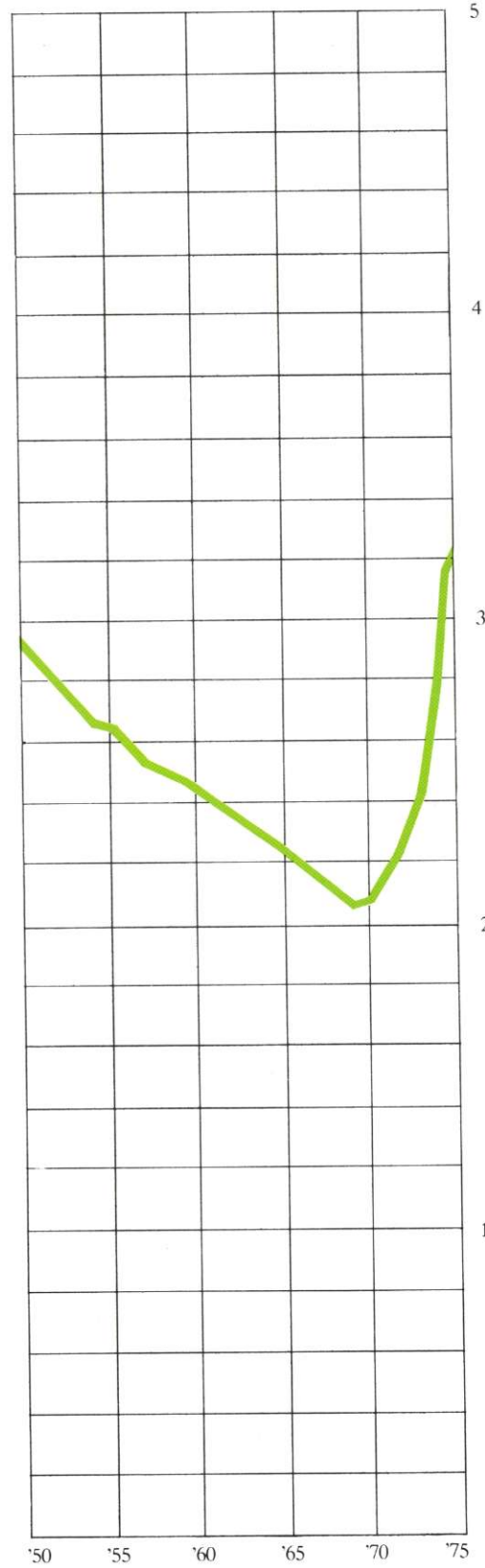
U.S. ELECTRICITY CONSUMPTION

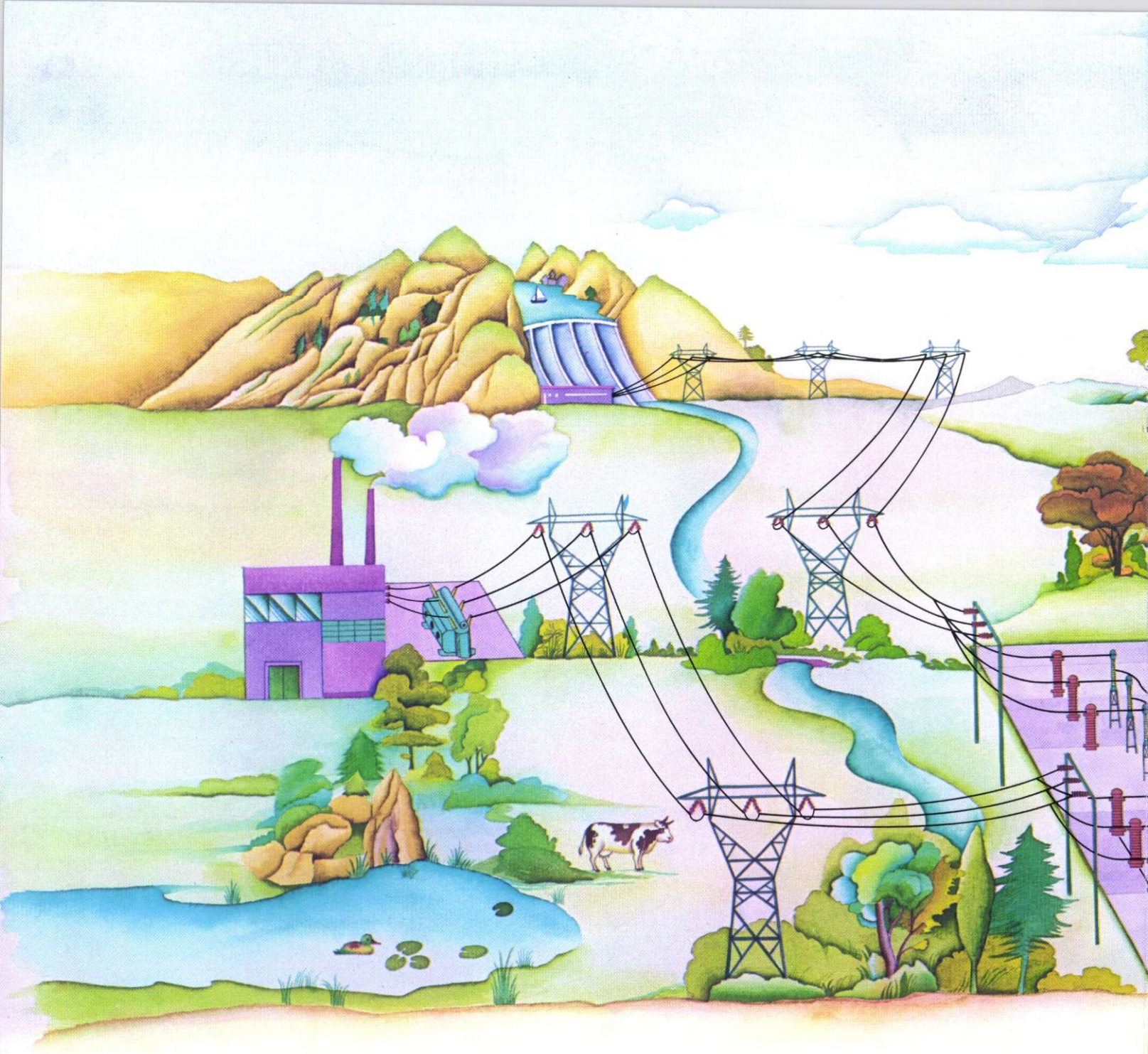
(Billions of kilowatt hours)



AVERAGE COST OF ELECTRICITY FOR U.S. RESIDENTIAL CUSTOMERS

(Cents per kilowatt hour)



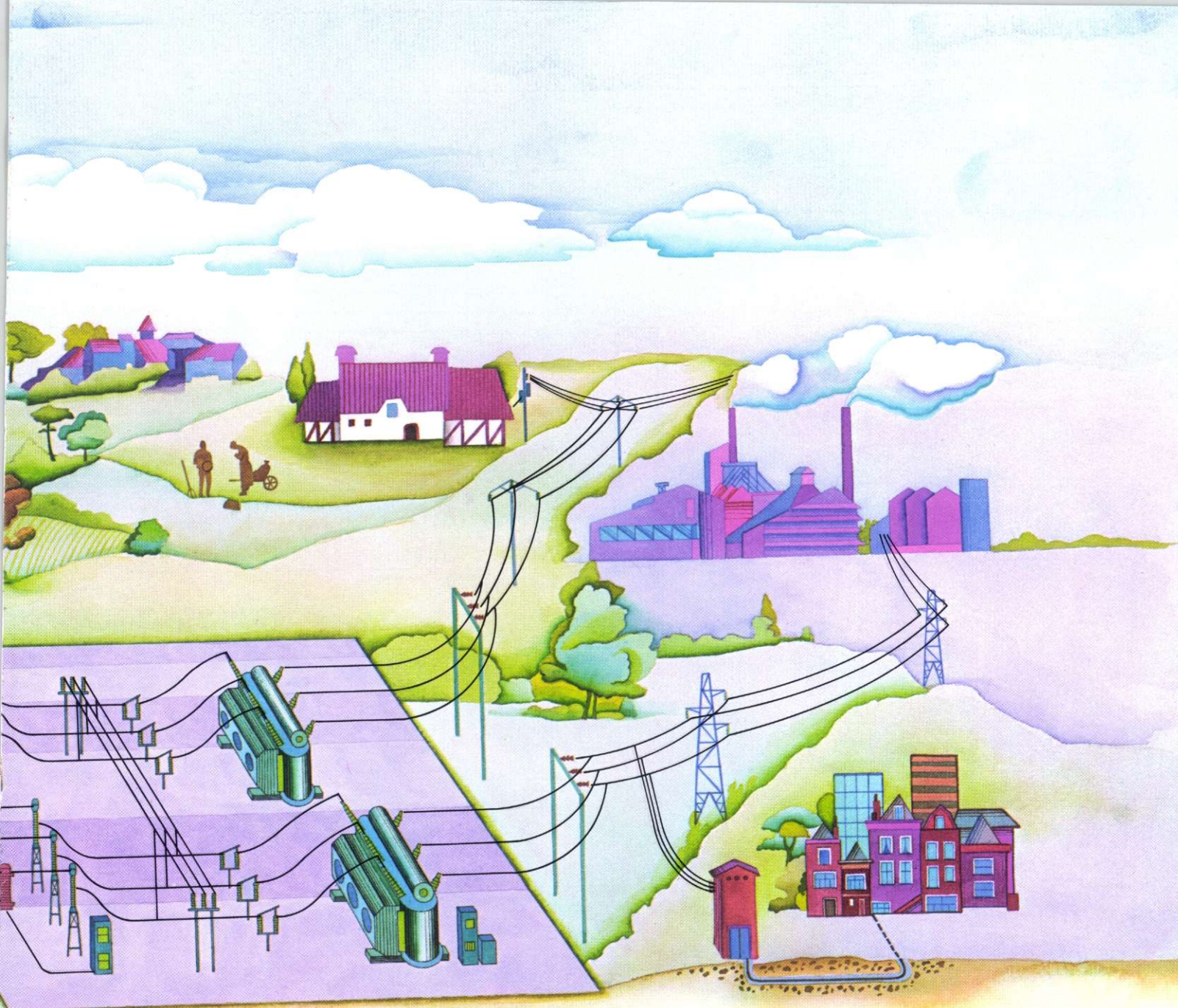


Electrical power is produced by a generator, usually driven by a turbine which gets power from one of several natural energy sources: water power; combustion of coal, oil or natural gas; or nuclear energy.

Power stations are frequently located far from large population centers to be near primary energy supplies and large amounts of water needed for steam and cooling. So electricity which is generated at moderate

voltage in the power station has to be stepped up to high voltage (60,000 to 380,000 volts or more) for economical transmission on long distance overhead cables.

High-voltage lines from several power plants are interconnected through a network of substations where the voltage is reduced for direct distribution to industry. Also, power lines go from these substations into suburban and urban areas, where the voltage

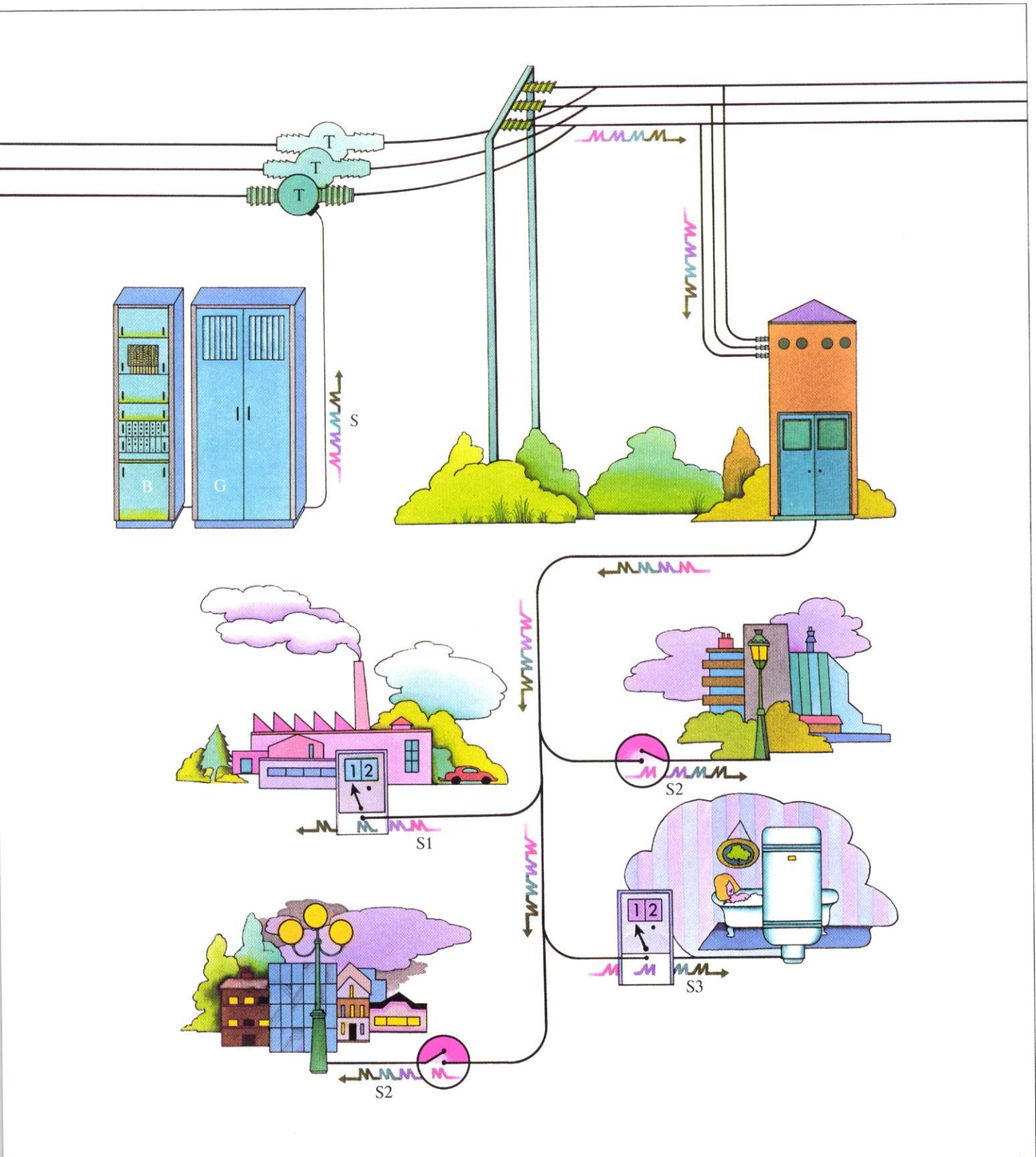


is further reduced locally for household use.

This complex network of lines carrying different voltages and power levels requires constant monitoring to assure all consumers a continuous supply of electricity.

Schlumberger makes equipment to measure and record voltage, current and power to all stages of a power network. Single or multiple tariff watt-hour meters, demand meters and recorders, gather billing data.

Some energy consuming equipment on the premises of the customer can be controlled remotely from substations by means of Schlumberger ripple controls. Also Schlumberger systems protect the network against disastrous consequences of equipment failures, lightning, or other accidents.



LOAD MANAGEMENT

I ncreasing demand for electric power during a period of escalating cost raises extraordinary problems for electric utilities. This situation is aggravated by the way power is used—demand for electricity is higher at certain times of day and also during certain seasons of the year. Electrical energy cannot be stored in significant quantities, so expensive generators must be kept in reserve to supply the extra power needed for peak loads. As a result the cost of generating peak power soars to more than 10 times the cost of normal production of electricity. It's easy to see that savings for utilities, hence for customers, can be significant if demand can be leveled off. This requires shifting some loads into periods of lighter demand. Joint action by both consumer and supplier is essential to make this effective.

Two methods can be used to control peak loads. One method is to shut off power selectively for a limited time. This is done most effectively with a *ripple-control* system. The other method is by *rate management*—to charge more for power used at the “wrong time”, conversely to reward customers who shift consumption from peak to off-peak hours; this can be done with multitariff meters.

Both methods have been used successfully in Europe and other parts of the Eastern Hemisphere for two decades, where it is common practice today for

electric utilities, in agreement with customers, to reduce loads at peak hours; also time-of-day pricing has been widely adopted. In North America, however, neither of these techniques has been used extensively as yet but numerous trials are underway and considerable interest has developed.

RIPPLE CONTROL

Ripple control is a centralized remote control system which can be operated manually or preprogrammed by the electric utility to shut off power to selected appliances such as hot water heaters or air conditioners for specific periods of time to shave peak loads. Ripple control gets its name from the higher frequency signal that is superimposed on the power-line voltage; this “ripple” voltage carries command codes.

Schlumberger makes both the transmitter which sends ripple-control signals over the power lines, and the individual receivers, installed at consumer locations, which respond to the signal to turn appliances off and on. This system has gained widespread acceptance in Europe and many systems are operating in other parts of the Eastern Hemisphere. Currently nearly 1,000 Schlumberger ripple-control systems are installed, serving several million control points.

Ripple-control equipment is also used to regulate street lighting in cities, to control elements of the power distribution system itself, and to switch registers in multitariff meters for time-of-day metering.

Ripple control has significant advantages over other systems:

—flexibility: the electric utility determines the timing and extent of control action and can send thousands of different control messages from a centralized point.

—reliability: weather or terrain have no effect because transmission is over the power lines; therefore the system is not subject to regulations which are imposed on radio communications.

At the substation, a programming unit (B) controls a carrier-frequency generator (G) that sends coded signals (S) over the power line through an injection transformer (T). The program is preset on a programming panel. A large number of codes can be sent, each code corresponding to a particular command to be executed. For instance, commands can switch from one register to another on multitariff meters (S1), control public lighting (S2), switch heaters on and off (S3). These signals travel on the power network to all the users simultaneously. Selective relays, sensitive to the carrier frequency and programmed for a particular code, react only to that code to carry out the desired action.

amount of energy consumed must be recorded continuously. Schlumberger pulse recording systems make such records on magnetic tape. This tape is processed by computer which can deliver billing printouts according to the pricing agreement.

Simplified versions of these recording instruments are used to measure consumption patterns; these data are needed to establish rate structures designed to encourage more efficient use of power. Also continuous measurements by these instruments over a period of time may show changing load patterns that indicate a need for alterations in the electric power system.

For residential and small industrial customers, there are also less elaborate systems used to establish differential rates and to apply equitable pricing:

- Peak demand meters provide a basis to charge a premium for demand in excess of a subscribed power level.
- Multitariff meters with separate registers total the power used during each time interval for which different rates are to be charged; these registers are activated either by a built-in time switch or by external means such as ripple control. Thus, different rates may be charged at different times of day.
- Premium demand meters combine multitariff and peak demand functions in a single meter.

Data collected by these instruments also are used for monitoring demand cycles as well as for billing purposes.

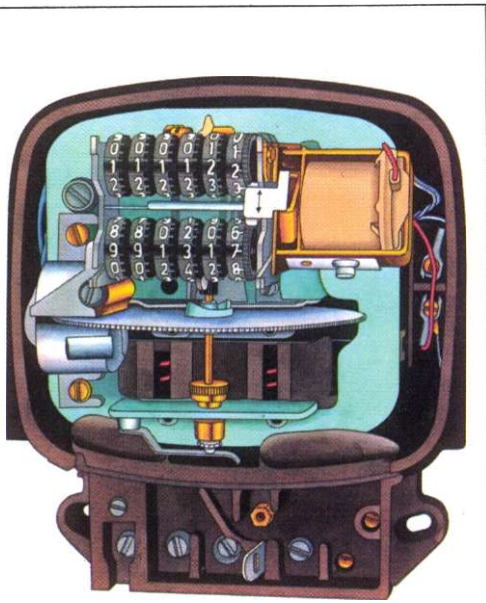
Schlumberger also supplies instruments to industry specifically designed to help control the amount of electricity consumed. These controllers continuously compare demand with preset limits. When limits are exceeded, deferrable loads are automatically disconnected according to a preprogrammed priority sequence until power consumption falls within the limit. A good deal of flexibility is available—some controllers incorporate time switches that can change programs and priorities at different times of day.

RATE MANAGEMENT

Economic incentives are an effective way to control overall power consumption as well as to solve peak load problems. Industry is the biggest consumer of electricity and consequently has the most influence on both the quantity of power consumed and on peak demand. Therefore, industry has much to gain from a rate structure which provides incentives for shifting loads and much to lose from economic penalties for heavy consumption at peak times. Multiple rate systems establish the basis for these incentives or penalties.

For example, a pricing agreement with a large industrial or commercial customer may set different rates for power used during certain times of day, and also for demand in excess of specified peaks. To establish a basis for setting rates the

active at a time; the count is switched from one register to the other by a signal from a time switch or a ripple control relay. Thus, it is possible to measure separately the energy consumed at different times of day—peak and off-peak—and then apply separate rates.



A typical dual-tariff meter—A8C1 series—manufactured by Schlumberger in Poitiers, France. The amount of electric power consumed is measured by the number of revolutions of the disk. The revolutions are counted by the numbered dials. Only one register is

NETWORK PROTECTION

In a typical electric power system, a number of generators in widely separated locations supply power to the network. All these power lines are interconnected via substations where transformers insure continuity of energy transmission among lines having different voltage levels. These interconnection stations also make it possible for the electricity to be rerouted to consumers in the event of a line failure, and power line failures do occur.

The same problems which consumers have at home, such as short circuits and burned out motors, can be encountered at any stage in the power network right back to the power station itself. These may be due to wear and tear, whether normal or accelerated because of overloads, external disturbances like lightning, or accidents which cause a power-line break.

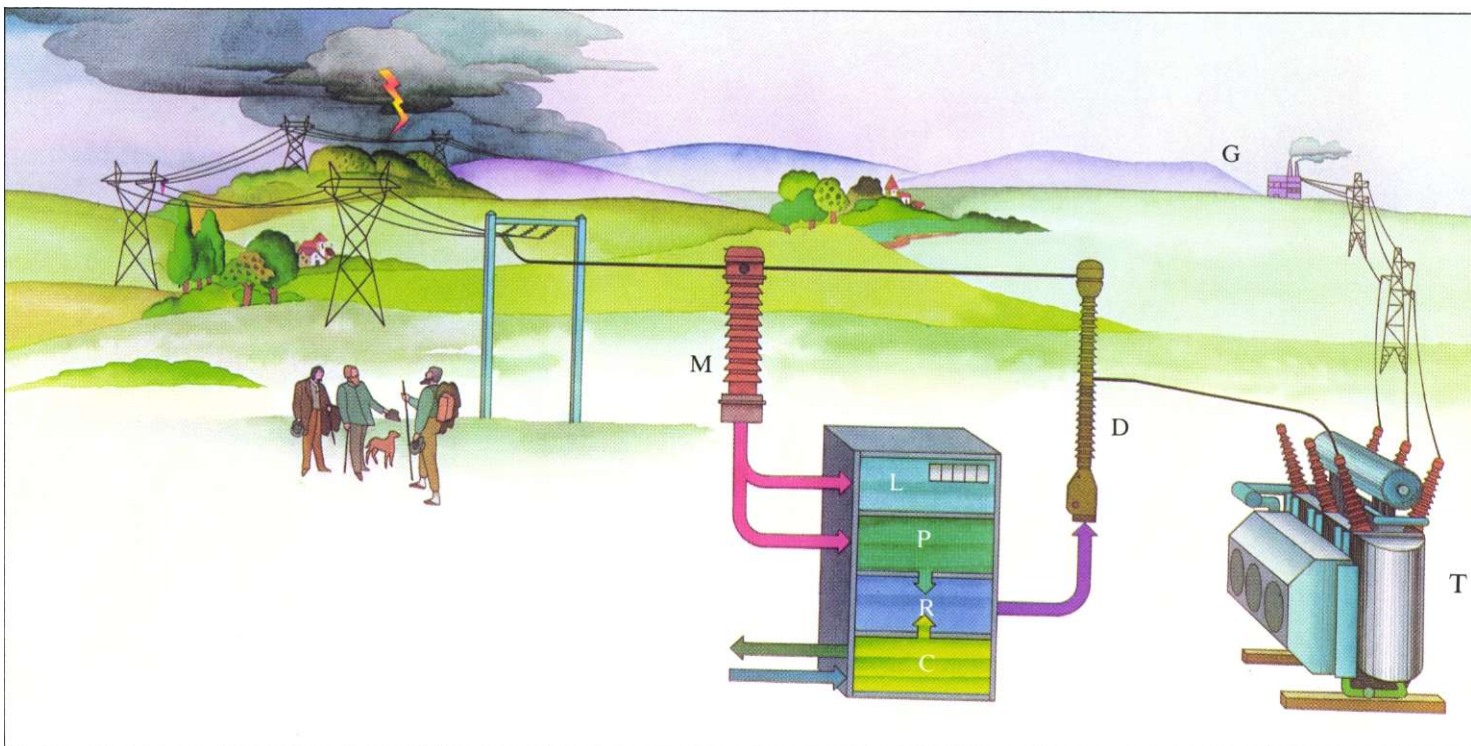
Because of the extremely high power involved, these problems can be very costly to electric utilities in terms of damage to expensive equipment, lack of continuity of service to customers, and

accident liability.

Schlumberger protection systems detect a fault in the power network by analyzing current and voltage data, using Schlumberger measuring transformers. A selective protection device operates circuit breakers that isolate the faulty section of the network cutting off power to that section. A reset device can automatically restore service in case of a temporary fault. The present Schlumberger controls react three times as fast as previous systems. Today, this protection equipment is used by many electric utility companies throughout the world.

A high voltage overhead line is fed from a power plant (G) through a transformer (T). During a storm, lightning may strike near the insulator at the pole, and can create a short circuit from the line to the pole. The distance protection system (P) operates within a few milliseconds. It continuously receives and analyzes current and voltage data from the line, through a Schlumberger measuring transformer (M). When a fault is detected, the Schlumberger system operates the circuit breaker (D)

through the set/reset device (R). After a short time, the device automatically tries to reset the circuit breaker. If the fault was temporary, the connection is restored. However, if the damage still exists, the line is definitely switched off. On-the-spot repair is then necessary. The fault locator (L) shows the distance to the fault. Communication equipment (C) transmits data from the substation to a central control facility when the substation is not manned.



CONSOLIDATED BALANCE SHEET

ASSETS

	December 31,	
	1976	1975
	(Stated in thousands)	
CURRENT ASSETS:		
Cash	\$ 15,636	\$ 17,774
Short-term investments, at cost (approximately market)	476,442	256,195
Receivables less allowance for doubtful accounts (1976—\$14,960; 1975—\$9,645)	424,464	410,053
Inventories	265,345	271,896
Other current assets	26,973	24,480
	1,208,860	980,398
INVESTMENTS IN AFFILIATED COMPANIES	63,478	53,671
LONG-TERM INVESTMENTS AND RECEIVABLES	18,335	24,683
FIXED ASSETS less accumulated depreciation	631,574	580,254
INTANGIBLE ASSETS	35,389	38,212
RECOVERABLE U.S. INCOME TAX ASSESSMENT	24,745	24,745
OTHER ASSETS	12,687	13,706
	\$1,995,068	\$1,715,669

SEE NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED BALANCE SHEET

LIABILITIES & STOCKHOLDERS' EQUITY

	December 31,	
	1976	1975
	(Stated in thousands)	
CURRENT LIABILITIES:		
Accounts payable and accrued liabilities	\$ 262,556	\$ 247,330
Estimated liability for taxes on income	234,636	169,312
Bank loans	47,392	77,729
Dividend payable	17,200	11,459
Long-term debt due within one year	21,924	17,928
	583,708	523,758
LONG-TERM DEBT	72,041	99,974
OTHER LIABILITIES	40,503	33,822
MINORITY INTEREST IN SUBSIDIARIES	19,216	19,974
	715,468	677,528
STOCKHOLDERS' EQUITY:		
Common stock	303,569	299,086
Income retained for use in the business	976,031	739,055
	1,279,600	1,038,141
	\$1,995,068	\$1,715,669

SEE NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED STATEMENT OF INCOME

	Year ended December 31,	
	1976	1975
	(Stated in thousands)	
REVENUE:		
Sales and services	\$1,810,358	\$1,565,574
Interest and other income	29,580	21,997
	1,839,938	1,587,571
EXPENSES:		
Cost of goods sold and services	1,071,265	950,199
Research & engineering	59,899	54,003
Marketing	101,965	92,703
General	130,900	121,983
Interest	15,121	23,955
Taxes on income	167,626	125,391
	1,546,776	1,368,234
NET INCOME	\$ 293,162	\$ 219,337
Net income per share*	\$ 3.41	\$ 2.61
Average number of shares outstanding (thousands)*	85,919	83,886

*Adjusted for three-for-two stock split in December 1976

SEE NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY*

	<u>Common stock</u>		Income retained for use in the business
	<u>Shares outstanding</u>	<u>Amount</u>	
			(Stated in thousands)
Balance, January 1, 1975	82,654,791	\$141,951	\$556,293
Sale of common shares	3,000,000	154,404	—
Shares sold to optionees	197,738	2,731	—
Net income	—	—	219,337
Dividends declared (\$0.43 per share)	—	—	(36,575)
Balance, December 31, 1975	85,852,529	299,086	739,055
Purchase of treasury shares	(75,000)	(267)	(4,630)
Shares sold to optionees	153,256	4,750	—
Net income	—	—	293,162
Dividends declared (\$0.60 per share)	—	—	(51,556)
Balance, December 31, 1976	85,930,785	\$303,569	\$976,031

*Shares and per share amounts adjusted for three-for-two stock split in December 1976

SEE NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED STATEMENT OF CHANGES IN FINANCIAL POSITION

	Year ended December 31,	
	1976	1975
	(Stated in thousands)	
SOURCE OF WORKING CAPITAL:		
Net income	\$293,162	\$219,337
Add (deduct) amounts not affecting working capital:		
Depreciation	130,289	99,088
Amortization of intangibles	2,077	1,383
Earnings of companies carried at equity, less dividends received (1976-\$4,153; 1975-\$5,124)	(10,577)	(9,433)
Other—net	(8,592)	(3,268)
Working capital provided from operations	406,359	307,107
Decrease in investments and long-term receivables	7,118	—
Proceeds from sale of common stock	—	154,404
Increase in long-term debt	1,612	17,977
Retirement of fixed assets	14,564	10,758
Proceeds from sale of shares to optionees	4,750	2,731
Total working capital provided	434,403	492,977
APPLICATION OF WORKING CAPITAL:		
Net noncurrent assets of companies acquired and consolidated	—	40,341
Additions to fixed assets	186,904	222,105
Dividends declared	51,556	36,575
Increase in investments and long-term receivables	—	671
Reduction of long-term debt	29,545	18,363
Payment of recoverable U.S. income tax assessment	—	24,745
Purchase of treasury shares	4,897	—
Other—net	(7,011)	2,637
Total working capital applied	265,891	345,437
NET INCREASE IN WORKING CAPITAL	\$168,512	\$147,540
INCREASE IN WORKING CAPITAL CONSISTS OF:		
Increase (decrease) in current assets:		
Cash and short-term investments	\$218,109	\$ 89,395
Receivables	14,411	53,599
Inventories	(6,551)	34,682
Other current assets	2,493	614
(Increase) decrease in current liabilities:		
Accounts and dividend payable	(20,967)	(30,972)
Estimated liability for taxes on income	(65,324)	(46,091)
Bank loans and debt due within one year	26,341	46,313
NET INCREASE IN WORKING CAPITAL	\$168,512	\$147,540

SEE NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

SUMMARY OF ACCOUNTING POLICIES

The Consolidated Financial Statements of Schlumberger Limited have been prepared in accordance with accounting principles generally accepted in the United States of America. Within those principles, the Company's more important accounting policies are set forth below.

PRINCIPLES OF CONSOLIDATION

The Consolidated Financial Statements include the accounts of all significant majority-owned subsidiaries. Significant 20%-50% owned companies are carried in "Investments in Affiliated Companies" at Schlumberger's share of net assets. The pro rata share of revenue and expenses of Dowell Schlumberger, a 50% owned oilfield services company, has been included in the individual captions in the Consolidated Statement of Income. Schlumberger's pro rata share of after-tax earnings of other equity companies is included in "Interest and Other Income". Other investments in affiliated companies are carried at cost less allowances

for possible losses which, based in part on unaudited figures, approximates Schlumberger's share of underlying equity.

TRANSLATION OF NON-U.S. CURRENCIES

Balance sheet items recorded in currencies other than U.S. dollars are translated at current exchange rates except for oilfield inventories, fixed and intangible assets and long-term investments which are translated at historical rates. Revenue and expenses are translated at average current rates of exchange except that depreciation of fixed assets and amortization of intangible assets are translated at historical rates. Translation adjustments and gains or losses on forward exchange contracts are taken up in income currently. See note under "Supplementary Information" for comments on translation principles regarding nonoilfield inventories maintained in other than U.S. dollars (Financial Accounting Standards Board Statement Number 8).

INVENTORIES

Inventories are stated principally at average or standard cost, which approximates average cost, or at market, if lower.

FIXED ASSETS AND DEPRECIATION

Fixed assets are stated at cost less depreciation, which is provided for by charges to income over the estimated useful lives of the assets by the straight-line method. Fixed assets include the cost of Company manufactured oilfield technical equipment for use in wireline operations. Expenditures for renewals, replacements and betterments are capitalized. Upon sale or other disposition, the applicable amounts of asset cost and accumulated depreciation are removed from the accounts and the net amount, less proceeds from disposal, is charged or credited to income.

Maintenance and repairs are charged to operating expenses as incurred.

INTANGIBLE ASSETS

Intangible assets represent largely the excess of purchase price over fair value of net tangible assets of businesses acquired. Amounts relating to acquisitions which took place principally in 1970 will not be amortized unless a diminution of value occurs. Most of the remainder is being amortized over 25 years.

DEFERRED BENEFIT PLANS

The Company and its subsidiaries have several voluntary pension and other deferred benefit plans covering substantially all officers and employees, including those in countries other than the United States. These plans are substantially fully funded with trustees in respect of past and current services. Charges to expense are based upon costs computed by independent actuaries.

In France, the principal pensions are provided for by union agreements negotiated by all employers within an industry on a nationwide basis. Rights to future retirement benefits vest currently, but monetary amounts are not assigned to these rights until year of payment. Benefits when paid are not identified with particular employers, but are made from funds obtained through

concurrent compulsory contributions from all employers within each industry based on employee salaries. These plans are accounted for on the defined contribution basis and each year's contributions are charged currently to expense.

TAXES ON INCOME

Schlumberger and its affiliated companies compute income taxes payable in accordance with the tax rules and regulations of the many taxing authorities where the income is earned. The income tax rates imposed by these taxing authorities vary substantially. Taxable income may differ from pretax income for financial accounting purposes. To the extent that differences are due to revenue and expense items reported in one period for tax purposes and in another period for financial accounting purposes, appropriate provision for deferred income taxes is made. The provisions were not significant in 1976 or 1975.

Investment credits and other allowances provided by income tax laws of the United States and other countries are credited to current income tax expense on the flow-through method of accounting.

Approximately \$894 million of consolidated income retained for use in the business at December 31, 1976 represents undistributed earnings of consolidated subsidiaries and Schlumberger's pro rata share of 20%-50% owned companies. Since it is the policy of the Company to reinvest substantially all such undistributed earnings in the business, no provision has been made for income taxes which would be payable at rates of 3% to 10% on most of these earnings if they were to be remitted to the parent company.

COMMON STOCK

Common Stock is carried at the stated value or proceeds of issued shares, increased by proceeds from sales of treasury

shares and reduced pro rata for shares reacquired. Any excess of cost of reacquired shares over the pro rata amount is treated as a reduction of income retained for use in the business.

NET INCOME PER SHARE

Net income per share is computed by dividing net income by the average number of common shares outstanding during the year.

RESEARCH & ENGINEERING

All research & engineering expenditures are expensed as incurred, including costs relating to patents or rights which may result from such expenditures.

ACQUISITION OF SANGAMO ELECTRIC COMPANY

Effective July 1, 1975, the Company acquired all of the outstanding common stock of Sangamo Electric Company at a cost of \$63 million (including expenses). The acquisition was accounted for as a purchase and the accounts of Sangamo have been consolidated with those of Schlumberger as from that date. Cost in excess of net assets acquired in the amount of \$15.6 million is being amortized on a straight-line basis over 25 years.

If Sangamo had been owned for the full year 1975 then Schlumberger's consolidated pro forma results for that year would have been; revenue—\$1,643.9 million, net income—\$217.2 million and net income per share—\$2.59.

GEOGRAPHICAL DISTRIBUTION OF OPERATING REVENUE AND NET ASSETS

The geographical distribution of revenue from sales and services in 1976 and 1975 and net assets at December 31, 1976 and 1975 was approximately as follows:

	Revenue from sales and services		Net assets at Dec. 31,	
	1976	1975	1976	1975
U.S.A. & Canada	29%	25%	34%	39%
France	23	27	14	17
Other	48	48	52	44
	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>

FIXED ASSETS

A summary of fixed assets follows:

	December 31,	
	1976	1975
	(Stated in millions)	
Land	\$ 25.0	\$ 25.5
Buildings & improvements	162.5	153.2
Machinery and equipment	933.5	817.3
Total cost	1,121.0	996.0
Less—accumulated depreciation	489.4	415.7
	<u>\$631.6</u>	<u>\$580.3</u>

LONG-TERM DEBT

At December 31, 1976, consolidated long-term debt, excluding amounts maturing within one year, consisted of the following:

	(Stated in millions)
Payable in French francs:	
Loans from French banks (banking pool), 8.75%-10.15% due 1978-1981	\$44.9
Other loans, 5%-10% due 1978-1987	18.7
	<u>63.6</u>
Payable in U.S. dollars	6.7
Payable in other currencies	1.7
	<u>\$72.0</u>

Long-term debt will be due \$17.5 million in 1978, \$17.2 million in 1979, \$16.3 million in 1980, \$13.1 million in 1981 and \$7.9 million thereafter.

COMMON STOCK

On December 9, 1976 the Board of Directors approved a three-for-two split of Common Stock to stockholders of record on December 20, 1976.

Options to officers and key employees to purchase shares of the Company's Common Stock are granted at prices equal to 100% of fair market value at date of grant.

Transactions under stock option plans during 1976 and 1975 after giving effect to the 1976 stock split, were as follows:

	Number of shares under option	
	1976	1975
January 1,	795,532	896,313
Options granted for five years	208,875	105,750
Options exercised	(153,256)	(197,738)
Options lapsed or terminated	(59,499)	(8,793)
December 31,	<u>791,652</u>	<u>795,532</u>

The 791,652 shares under option at December 31, 1976 were held by 298 officers and key employees at option prices ranging from \$13.22 to \$67.29; options for 330,317 shares were exercisable at that date. A balance of 722,604 shares of Common Stock remained available for future option under the plans.

During 1976 and 1975, 153,256 and 197,738 previously unissued shares, respectively, were sold on exercise of stock options.

Common Stock outstanding at December 31, 1976 and 1975 excluded 560,799 and 485,799 reacquired shares held in Treasury and, at both dates, 1,975,239 shares issued to a wholly-owned subsidiary in 1971.

LEASES AND LEASE COMMITMENTS

Total rental expense was \$30.3 million in 1976 and \$26.5 million in 1975.

Future minimum rental commitments under noncancelable leases for years ending December 31 are: 1977—\$7.8 million; 1978—\$5.6 million; 1979—\$3.5 million; 1980—\$2.5 million and 1981—\$1.9 million. For the ensuing three five-year periods, these commitments decrease from \$5.9 million to \$1.2 million. The minimum rentals over the remaining terms of the leases aggregate \$11.8 million. Noncancelable rental commitments are principally for real estate and office space. Noncapitalized financing lease commitments are not material.

TAX ASSESSMENTS

As previously reported, the U.S. Internal Revenue Service has completed its examination of Schlumberger's U.S. income tax returns for 1967-1969 and has assessed additional tax. The principal parts of the assessment (excluding interest) arise from nonrecurring transfers of assets from a subsidiary to the parent company (\$24 million) and from continuing wireline operations on the U.S. outer continental shelf (\$6 million). The Company maintains that the tax effects of these transactions were properly determined and reported. While the principal issues in the case involve novel questions as to which there is no direct authority, independent counsel is of the opinion that the Company's position will prevail. The Company is contesting this assessment and, in connection therewith, tax payments totaling \$24.7 million were made in June 1975, recorded as recoverable and did not affect net income. Suit for recovery was filed in the U.S. District Court.

The U.S. Internal Revenue Service is currently examining Schlumberger's U.S. income tax returns for 1970-1972 and is expected to propose additional assessments including, consistent with its earlier position, a deficiency of \$8

million (excluding interest) based upon income from continuing wireline operations on the U.S. outer continental shelf. A determination for the earlier years does not necessarily resolve the taxability of this income subsequent to 1969.

Management is of the opinion that the reserve for estimated liability for taxes on income is adequate and that any adjustments which may ultimately be determined will not materially affect the financial position or results of operations.

SUPPLEMENTARY INFORMATION

Short-term investments are collectible mainly in U.S. dollars and include interest bearing time deposits of \$467 million and \$254 million at December 31, 1976 and 1975, respectively.

Interest income was \$24 million in 1976 and \$16.8 million in 1975.

Inventories at December 31, 1976 comprised \$66.8 million of operating materials and supplies for oilfield services and \$198.5 million applicable to other operations—principally electronic equipment and gas, water and electricity meters of which \$134 million represents inventories maintained in other than U.S. dollars.

Investments in affiliated companies are summarized as follows:

	December 31,	
	1976	1975
	(Stated in thousands)	
20%-50% owned companies	\$58,131	\$47,525
Other	5,347	6,146
	<u>\$63,478</u>	<u>\$53,671</u>

In 1976 expense of the pension and deferred benefit plans was \$27.4 million and of the compulsory contributions for French retirement benefits was \$11.6 million; 1975 amounts for such plans were \$20.3 million and \$10.5 million.

Minor amendments have been made to certain U.S. pension plans to comply fully with the U.S. Pension Reform Act

of 1974 (ERISA) the cost of which was not material.

Operating loss carryforwards available to certain non-U.S. subsidiaries as deductions from future income, if earned, amounted to \$14.2 million at December 31, 1976. Of this amount, \$1.4 million expires in 1977, \$1.7 million in 1978, \$1.2 million in 1979, \$1.7 million in 1980 and \$.7 million in 1981. Substantially all of the remainder can be carried forward indefinitely.

Foreign exchange losses in 1976 and 1975 were \$1.9 million and \$10.3 million, respectively.

Under provisions of Financial Accounting Standards Board Statement Number 8, commencing January 1, 1976 nonoilfield inventories maintained in other than U.S. dollars should be translated at historical exchange rates rather than current exchange rates and, if practicable, prior period earnings restated on the same basis. Substantially all of these inventories are owned by a French subsidiary engaged in the manufacture and sale of measurement and control equipment, primarily in France and other countries of Western Europe.

While it is impracticable for the Company to restate periods prior to 1976, it is apparent that the cumulative effect of this change to January 1, 1976 would not be significant on consolidated earnings or financial position. Current exchange rates were used to value non-oilfield inventories at December 31, 1976. A detailed study on 1976 accumulation and turnover of these inventories indicated that translation at historical exchange rates rather than current rates would have had a negligible effect on the consolidated statement of income for the year ended December 31, 1976 and the consolidated financial position at that date.

QUARTERLY RESULTS (UNAUDITED)

The following table summarizes results for each of the four quarters for the year

ended December 31, 1976:

	Sales and services		Net income	
	Revenue	Gross profit*	Amount	Per share
	(Stated in millions)		(Dollars)	
Quarters				
First	\$ 438.1	\$175.5	\$ 56.3	\$0.66
Second	460.3	187.8	76.7	0.89
Third	433.0	184.5	79.2	0.92
Fourth	479.0	191.3	81.0	0.94
Total	\$1,810.4	\$739.1	\$293.2	\$3.41

*Revenue from sales and services less cost of goods sold and services.

REPLACEMENT COST DATA (UNAUDITED)

In general, changes in the prices of pur-

chased goods and services, when combined with the effect of technological upgrading of plant and equipment, have had no significant adverse impact on net income.

The Company's annual report on Form 20-K to be filed with the United States Securities and Exchange Commission by June 30, 1977 will contain unaudited replacement cost data. The data provided will include replacement cost of productive capacity (certain fixed assets) and inventories at December 31, 1976 and the approximate impact on cost of goods sold and services and depreciation expense for the year then ended.

REPORT OF INDEPENDENT ACCOUNTANTS

PRICE WATERHOUSE & CO.

Sixty Broad Street, New York 10004
February 16, 1977

TO THE BOARD OF DIRECTORS AND STOCKHOLDERS OF
SCHLUMBERGER LIMITED:

In our opinion, the accompanying consolidated balance sheet and related consolidated statements of income, stockholders' equity and changes in financial position present fairly the financial position of Schlumberger Limited and its subsidiaries at December 31, 1976 and 1975, the results of their operations and the changes in financial position for the years then ended, in conformity with generally accepted accounting principles consistently applied. Our examinations of these statements were 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.

Price Waterhouse & Co.

CONSOLIDATED SUMMARY OF OPERATIONS

	1976(b)	Year ended December 31,			1972
		1975(b)	1974	1973	
(Stated in millions)					
Operating revenue from sales and services:					
Oilfield Services	\$1,004.4	\$ 844.2	\$ 625.3	\$452.9	\$380.0
Measurement & Control	805.3	720.7	574.4	510.3	433.0
Other	.7	.7	.5	.4	12.2
	1,810.4	1,565.6	1,200.2	963.6	825.2
Cost of goods sold and services	1,071.3	950.2	742.6	612.4	541.3
Other operating expenses	279.2	254.2	202.0	187.4	161.3
	1,350.5	1,204.4	944.6	799.8	702.6
Operating income:					
Oilfield Services	382.7	299.3	218.0	134.9	107.5
Measurement & Control	77.4	63.7	38.0	29.7	15.4
Other	(.2)	(1.8)	(.4)	(.8)	(.3)
	459.9	361.2	255.6	163.8	122.6
Other income (expense)					
Interest expense	(15.1)	(24.0)	(21.5)	(15.9)	(13.7)
Other income—net (including interest income)	16.0	7.5	(2.9)	2.2	7.1
	.9	(16.5)	(24.4)	(13.7)	(6.6)
Income before taxes on income	460.8	344.7	231.2	150.1	116.0
Provision for taxes on income	167.6	125.4	83.6	57.7	45.8
Net income	\$ 293.2	\$ 219.3	\$ 147.6	\$ 92.4	\$ 70.2
Per common share (a):					
Net income	\$3.41	\$2.61	\$1.79	\$1.13	\$0.86
Cash dividends declared	\$0.60	\$0.43	\$0.34	\$0.24	\$0.22
Average number of common shares outstanding (thousands) (a)					
	85,919	83,886	82,557	82,058	82,349
Common stock price range (a):					
High	68-5/8	60-3/8	59-1/2	61-3/4	42
Low	46-5/8	40-3/8	32-1/2	36-5/8	21-1/2

(a) Net income per share for 1972 was computed by dividing net income plus interest on convertible debentures (during the period they were outstanding—to May 1972) by the average number of shares outstanding plus the number of shares equivalent to debenture conversion and assumed exercise of stock options. Average number of shares and per share amounts have been retroactively adjusted for stock splits: three-for-two in March 1975 and three-for-two in December 1976.

(b) Results of Sangamo Electric Company have been consolidated with Schlumberger beginning July 1, 1975.

OPERATING UNITS

OILFIELD SERVICES

Operating centers are located in the U.S., France, Singapore, Venezuela, Nigeria, and Canada.

WIRELINE SERVICES

Measurement of physical properties of underground formations which helps to locate and define oil and gas reservoirs and to assist in completion, development and production phases of oil wells. Operations are conducted in over 70 countries.

VECTOR

Manufacture of cables for well logging, oceanography and geophysical exploration.

DRILLING & PRODUCTION SERVICES

FOREX NEPTUNE

Offshore and land drilling mainly in the Eastern Hemisphere.

FLOPETROL

Services and tools for oil well completion, production and secondary recovery.

JOHNSTON

Services and equipment for well completion, production and well testing.

MACCO UDELL

Gas lift and safety valves; gas lift systems.

DOWELL SCHLUMBERGER (50% OWNED)

Cementing, acidizing, fracturing, formation testing and directional drilling services.

MEASUREMENT & CONTROL

EUROPE

Major plants: Austria, Belgium, England, France, Germany, Holland, Italy, Spain.

ELECTRICITY— ELECTRONICS

Electricity meters, equipment for electric power systems, electronic measuring and test instruments, data systems, transducers, professional audio equipment.

INDUSTRIAL

Regulating equipment, gauges and valves, industrial control systems.

FLUIDS AND MECHANICAL

Water and gas meters and industrial meters for other fluids, heating controls; castings, plastic parts, timing mechanisms.

SERVICES

Products and services related to water and energy distribution.

INTERNATIONAL DIVISION

Electricity, water and gas meters and systems manufactured in several countries of Europe and in Argentina, Brazil and Chile.

SOLARTRON/SANGAMO WESTON (U.K.)

Electricity meters, electrical and electronic measuring instruments.

NORTH AMERICA

SANGAMO WESTON

SANGAMO

Watt-hour meters, electrical load and rate control systems, equipment for electric power systems, electronic components, data recorders.

WESTON

Nuclear instruments, x-ray gauges, potentiometers, subcontract manufacturing, panel and portable meters, aircraft instruments, vehicle performance recorders.

EMR

Telemetry data systems and instruments, photomultiplier tubes, data communication products.

HEATH

Electronic equipment in kit form for home entertainment, electronic testing, amateur radio; assembled educational and laboratory instruments.

DIRECTORS & OFFICERS

DIRECTORS

JACQUES DE FOUCHIER[°]
Chairman, Compagnie financière de
Paris et des Pays-Bas, Paris

ROLAND GENIN
Executive Vice President—Operations,
Schlumberger

WILLIAM J. GILLINGHAM*
Senior Advisor to the Chairman,
Schlumberger

CHARLES GOODWIN, JR.
Partner, Shearman & Sterling, attorneys,
New York City

ELISHA GRAY II[°]□
Former Chairman Finance Committee
and Former Director, Whirlpool Corp.,
Benton Harbor, Michigan

GEORGE H. JEWELL[°]
Partner, Baker & Botts, attorneys,
Houston, Texas

PAUL LEPERCQ*□
Managing Director, Lepercq
International N.V., investment bankers,
London

GEORGE DE MENIL
Economist, Cambridge, Massachusetts

Mrs. SCHLUMBERGER PRIMAT
Director Schlumberger Museum, France

HERBERT G. REID □
Executive Vice President, and Chairman
Finance Committee, Schlumberger

JOHN E. RHODES □
Vice President, Schlumberger

JEAN RIBOUD*□
Chairman and President, Schlumberger

BENNO C. SCHMIDT[°]□
Managing Partner, J.H. Whitney & Co.,
private investment firm, New York City

JEROME SEYDOUX
President, Pricel, Paris

AME VENNEMA*□
Former Chairman Executive Committee,
Schlumberger

JEROME B. WIESNER
President, Massachusetts Institute of
Technology, Cambridge, Massachusetts

OFFICERS

JEAN RIBOUD
Chairman and President

ROLAND GENIN
Executive Vice President—Operations

HERBERT G. REID
Executive Vice President, Chairman of
the Finance Committee

WILLIAM J. GILLINGHAM
Senior Advisor to the Chairman

CHARLES B. EVANS
Executive Vice President

MICHEL VAILLAUD
Executive Vice President

BERNARD ALPAERTS
Vice President

JEAN BABAUD
Vice President

CARL W. BUCHHOLZ
Vice President

CHARLES M. KIRKLAND
Vice President

LOUIS E. MAGNE
Vice President

JAMES H. POYNER
Vice President and Controller

JOHN E. RHODES
Vice President

NICK A. SCHUSTER
Vice President

DAVID S. BROWNING
Secretary and General Counsel

RICHARD B. STEARNS, JR.
Treasurer

SAMUEL S. CROCKER
Assistant Secretary

* Member Executive Committee

□ Member Finance Committee

° Member Audit Committee

STOCK TRANSFER AGENTS

Citibank, N.A.
New York City

Bank of the Southwest
Houston, Texas

REGISTRARS

Citibank, N.A.
New York City

First City National Bank
Houston, Texas

SCHLUMBERGER STOCK IS LISTED
ON THE FOLLOWING EXCHANGES:

New York (trading symbol: SLB)

Paris

London

Amsterdam

Geneva

