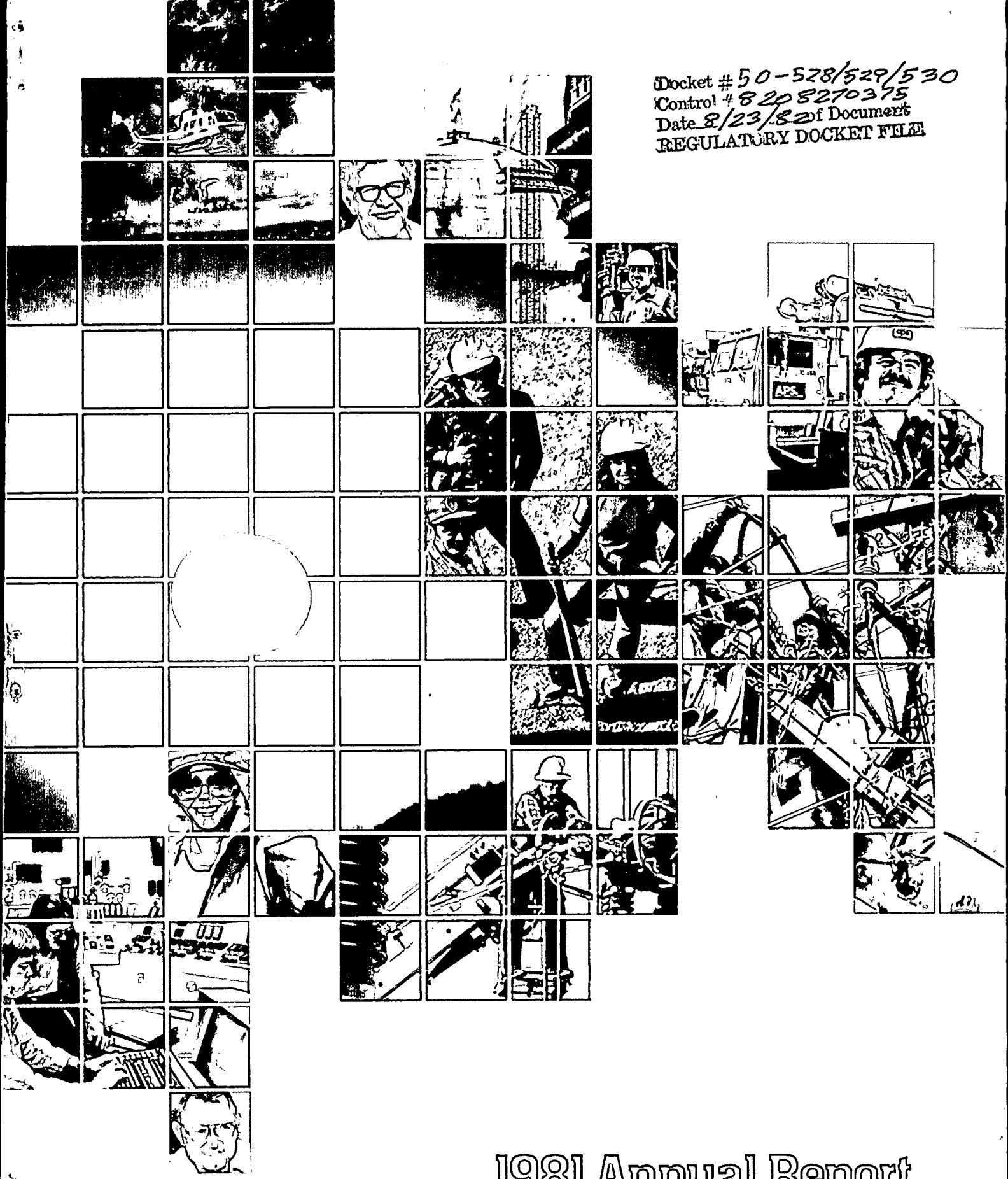


1981 Annual Report
Arizona Public Service Company

Annual Report

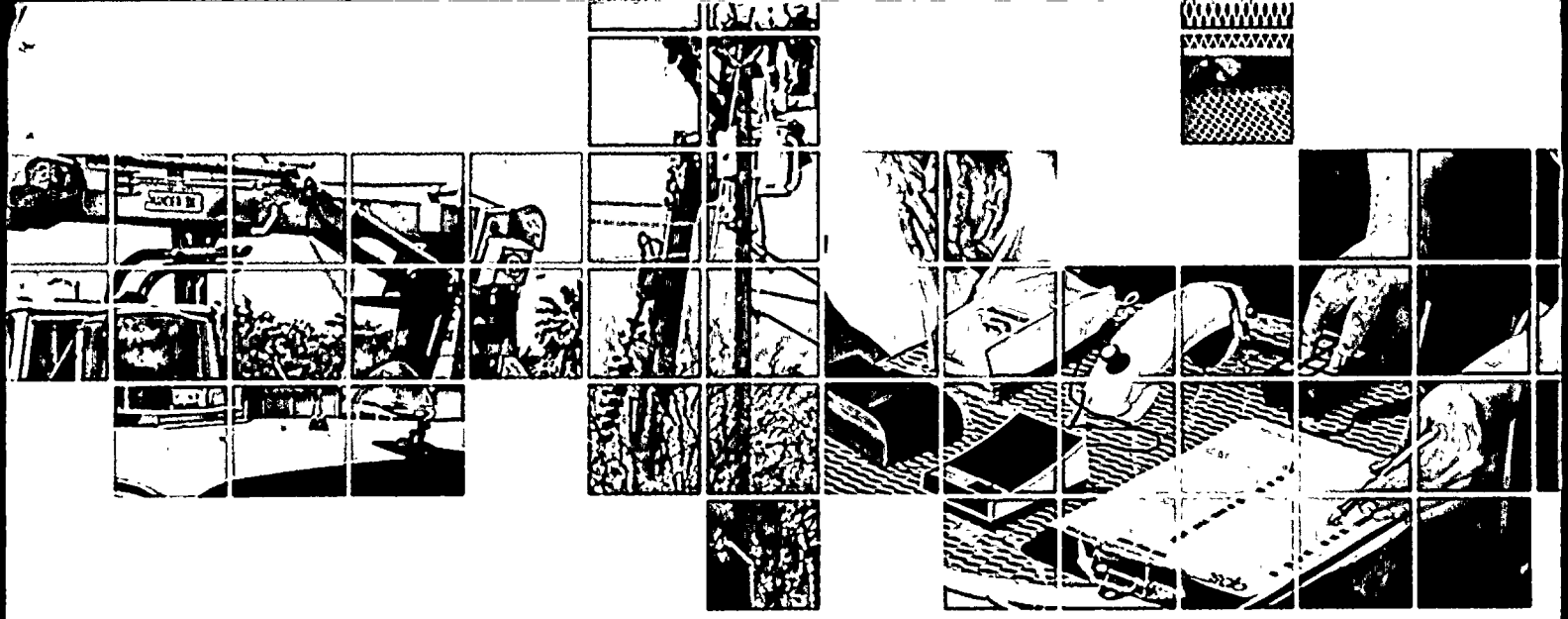
This report is published to provide general information concerning the company and not in connection with any sale, offer for sale, or solicitation of an offer to buy, any securities.

Annual Meeting of Stockholders

All stockholders are invited to attend the company's sixty-second annual meeting. It will be held at 10 a.m. Thursday, April 22, in The Grand Ballroom of the Ramada Townehouse, 100 West Clarendon, Phoenix, Arizona.

The year 1981 brought sobering reminders of just how important people are to the spirit and personality of an organization. In April, Chairman Ralph M. Bilby, succumbed to cancer. In October, Vice President of Gas Operations Howard M. Hersey also passed away. These gentlemen were not only important members of our management team, but the character of their leadership gave us reason to be proud of our association with this industry and this company.

Arizona Public Service Company, 411 North Central Avenue, Phoenix, Arizona—(602) 271-7900
Mailing address: P.O. Box 21666, Phoenix, AZ 85036



Highlights 1981

	1981	1980	1979
Property and Plant:			
Total utility plant, year end	$3,688,270,000	$3,199,927,000	$2,735,073,000
Capital expenditures	$ 558,453,000	$ 504,120,000	$ 468,116,000
Sales and Customers:			
Total operating revenues	$ 882,154,000	$ 765,760,000	$ 664,423,000
Total electric sales (mwh)	13,387,998	11,877,722	11,584,898
Electric customers, year end	438,853	421,803	401,983
Total gas sales (m therms)	412,846	432,277	467,088
Gas customers, year end	341,184	340,248	340,343
Income, Earnings, Dividends:			
Net income	$ 197,434,000	$ 143,290,000	$ 121,578,000
Earnings for common stock	$ 170,648,000	$ 118,228,000	$ 99,696,000
Average common shares outstanding	52,289,259	42,960,655	34,426,346
Earnings (based on average shares outstanding)	$ 3.26	$ 2.75	$ 2.90
Dividends paid per share of common stock	$ 2.20	$ 2.06	$ 1.94
Shareholders:			
Common	119,825	110,416	92,396
Preferred	6,339	6,745	7,049
Employees, year end:	6,333	5,538	5,263

Contents

To Our Shareholders

As consumers become increasingly discriminating and demanding, the intelligent direction of corporate enterprise to meet rising expectations of quality and value in goods and services has never been more critical.

Investors in American business . . . those who provide its life blood . . . also have rising expectations. If they are to be the engine behind the renewal of a vigorous, growing economy, investors must be offered an overall return that is competitive with that offered by an unprecedented number of investment alternatives.

Meeting the needs of these important groups presents a tremendous challenge. This is particularly true of the electric utility industry, which traditionally has been a prime mover of economic expansion and requires large quantities of capital to meet its service obligations.

Regulatory climate changing

In recent years, our industry's opportunity to perform up to expectation has been circumscribed by restrictive policy positions and regulatory constraints at the federal level, and by inadequate rate decisions by state regulatory commissions.

But things are changing. Regulatory reform is on the way. New tax laws provide incentives and financing opportunities.

And perhaps most significant of all, more and more state commissions, including the Arizona Corporation Commission, are recognizing the problems faced by electric utilities and are more willing to take steps to restore the industry's financial health.

In short, the freedom to perform in the balanced best interest of shareholders and customers is slowly being improved.

Our performance in 1981 reflects a concerted effort to take advantage of this improved environment. But our effort must be sustained if we are to see additional financial improvement in the years ahead.

Challenges met in 1981

We received major rate relief in 1981 which, along with favorable weather, produced record earnings, $3.26 per share. In our rate case, we also sought and received a number of very significant accounting changes, detailed in the following report, that will improve the quality of our earnings.

In 1981, our power plants operated very economically indeed. Fully 89.2 percent of our power generation was produced by the burning of coal, the most economical fuel currently used in our system. The efficiency of our coal-fired power plants, as measured by capacity factor, was substantially better than the industry average and nearly three percentage points better than our record mark for 1980. This performance was directly responsible for holding down customer bills last summer through a reduction in our fuel adjustment clause.

We are pleased with progress at the Palo Verde Nuclear Generation Station, for which we have responsibility as operating agent and project manager. Its record of quality construction, smooth and expeditious licensing progress, effective cost control, and adherence to schedule reflects the desire — of all those who are a part of the project — to make it the best in the nation.

Customers were provided a major new rate option which offers them the opportunity to hold down electric utility bills by controlling their peak demand. Going beyond rate options, the company also put into effect a program in January of 1982 which provides a direct bill credit to customers who install equipment and materials that help reduce peak electric demand, thus helping to offset the cost of such improvements. Both of these programs benefit customers by providing the opportunity for both immediate and long-term savings. But the program also benefits the company, by allowing us to reduce the amount of expensive new power generation that would otherwise be required.

Rising to new challenges also means reacting forthrightly to adverse developments. In 1981, it became apparent that a problem may exist with a particular type of plastic pipe used in our gas distribution system. We quickly initiated an inspection program to measure the dimensions of the problem and began replacing services that could be susceptible to failure. Our intent is to take whatever action may be necessary to ensure the safety of our gas system.

Management structure improved

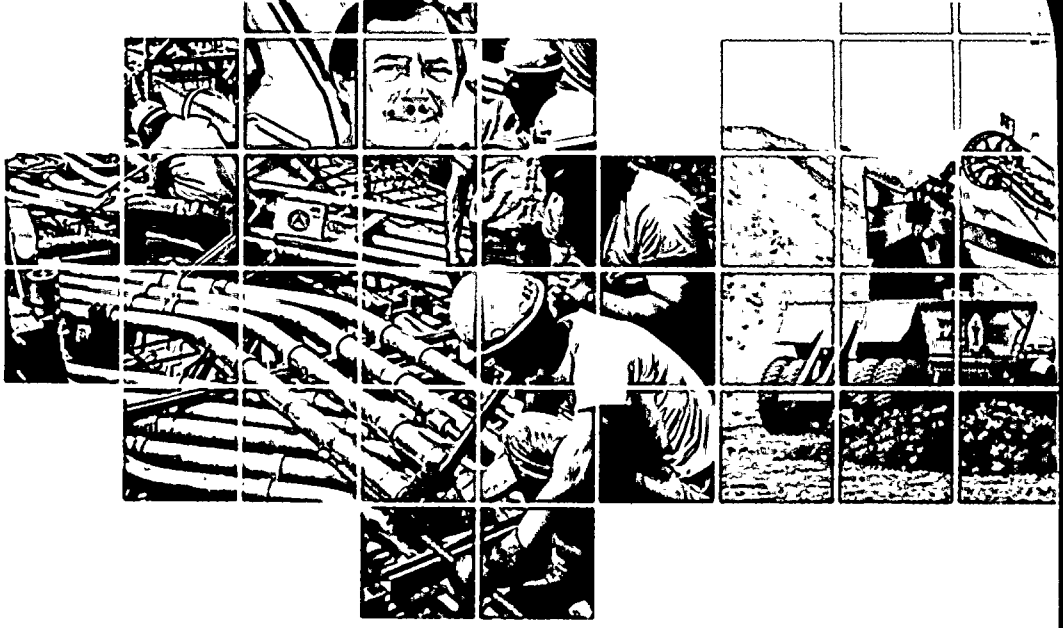
In 1981 we moved to improve the structure of our executive management organization in order to facilitate strategic planning and broaden participation in executive decision-making. Three executive vice presidents have joined me in a newly-created Office of the President. Together, we have responsibility for all key areas of the company's operations. The training, experience and unique perspective of each member of the office provides an added dimension as we deal with the present and plan for the future.

Along with sound management, good employees are a vital ingredient of any successful business performance. And it is to our employees that this report is dedicated, for without their hard work, clear thinking and dedication, the excellent year just past would not have been possible. In the following pages you'll read what some of them have to say about their jobs and the challenges they are meeting.

Thank you for your investment in our company. We will continue to merit your confidence and support.

Keith L. Turley
Chairman and President

February 25, 1982



The year 1981 in review

For Arizona Public Service Company, 1981 brought both encouraging financial success and regulatory progress, improvements that give us reason to be optimistic about the year ahead.

Approval of much-needed increases in both electric and natural gas rates and a record hot Arizona summer combined to produce record high earnings per share.

Common Stock Price Ranges (Symbol: AZP)

1981	High	Low	Dividend Per Share
1st Quarter	$18-7/8	$15-1/2	$ .53
2nd Quarter	18-1/8	15-1/8	.53
3rd Quarter	17-7/8	16-3/8	.57
4th Quarter	19-5/8	16-5/8	.57
1980			
1st Quarter	$18-3/4	$14-5/8	$ .50
2nd Quarter	19-5/8	15	.50
3rd Quarter	19-3/8	17	.53
4th Quarter	18-3/8	15-1/2	.53

Our year-end earnings in 1981 were $3.26 per share, up substantially from $2.75 per share last year. This occurred despite an increase of over 9.8 million common shares.

Dividends paid per common share totaled $2.20 in 1981, up from the $2.06 paid in 1980. The current annual dividend rate is $2.28 per share and represents the sixth consecutive year in which the company has increased its dividend on common stock.

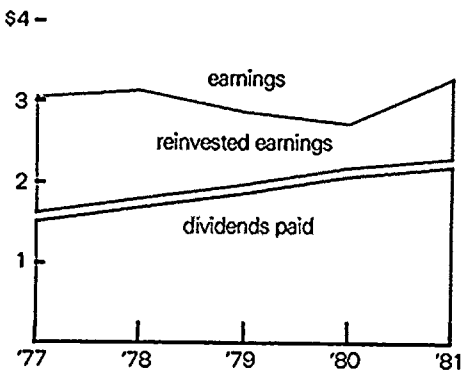
ACC approves state's first negotiated electric and gas rate settlement

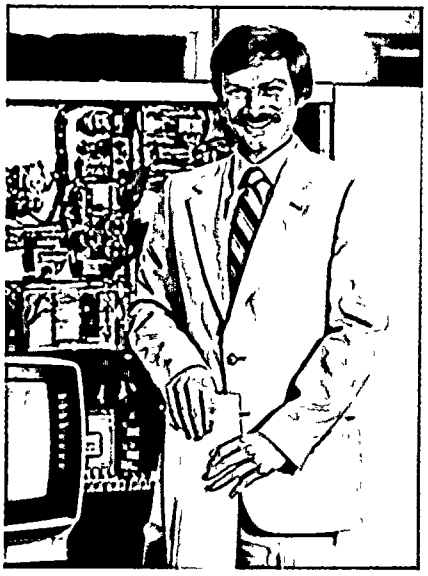
On October 27, 1981 the Arizona Corporation Commission approved a $78.9 million settlement of our May 1 request for an increase in both electric and natural gas rates. Negotiated by the commission's staff, intervenors and our own representatives, the settlement was either supported or not opposed by the negotiating parties and was a first for Arizona.

Approved were a 10.4 percent electric rate increase and a 6.9 percent overall gas increase, both of which became effective November 1. The agreement also made permanent a $79.5 million, 14 percent interim electric rate increase granted in February of 1981.

As a part of the settlement, the company agreed not to file for further general rate increases that would become effective before January 1 of 1983.

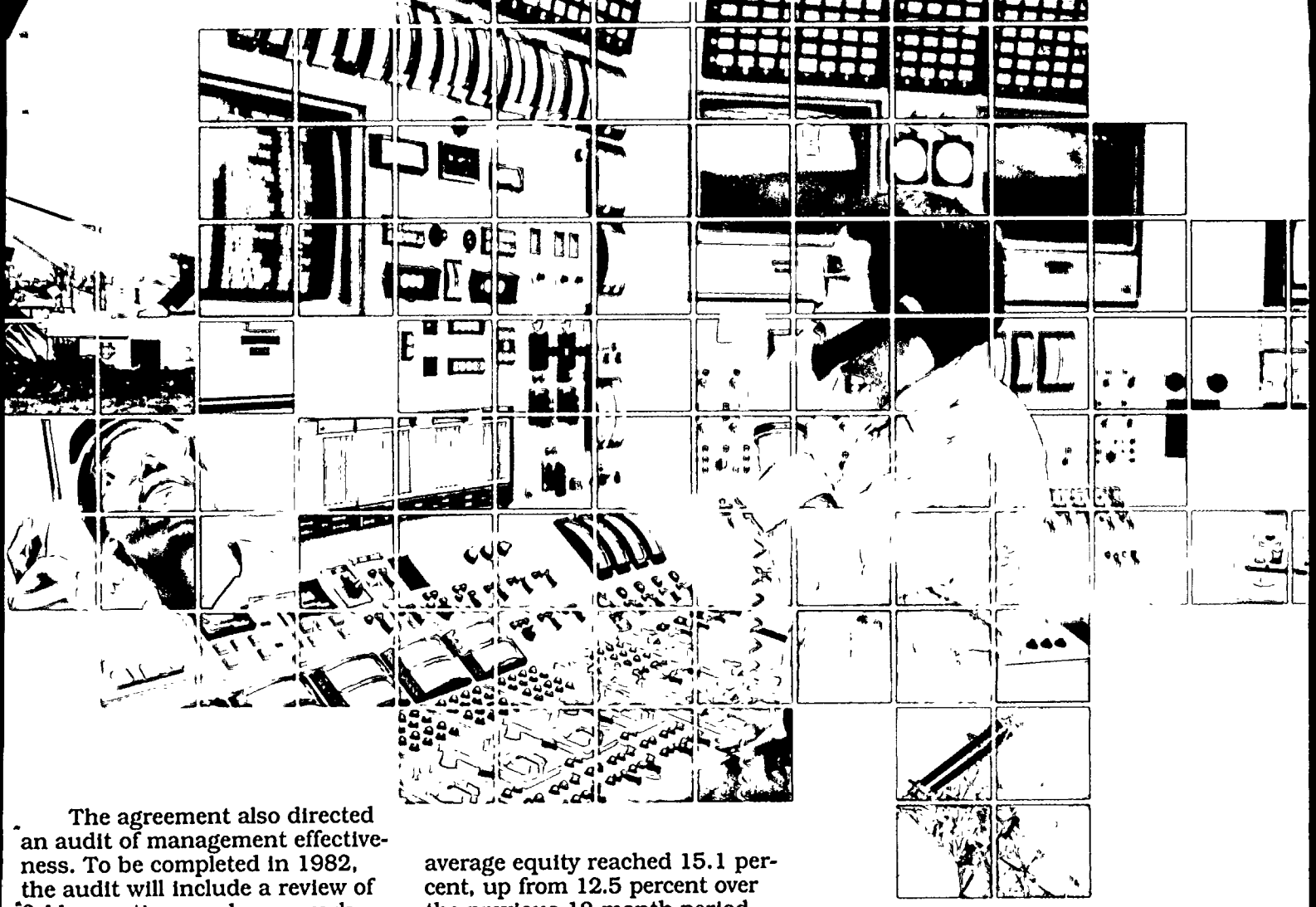
Earnings, Dividends, and Reinvested Earnings per Average Share of Common Stock





"Long-term planning is imperative if we are to meet our customers' needs at the lowest possible cost. Faced with new power plant lead times of eight to ten years, we must accurately anticipate future demands for electricity, incorporating such variables as expected population growth, conservation levels, technological advances and customer lifestyle."

Bill Post, Manager
Budgets and Forecasts



The agreement also directed an audit of management effectiveness. To be completed in 1982, the audit will include a review of field operations and crew work practices.

A 1976 study gave the company an overall favorable rating, and a 1980 progress review showed that APS had responded "expeditiously and with unusual vigor" in its implementation of the study's recommendations. We believe that our upcoming audit will also be favorable while identifying opportunities for improvement.

As a result of an improving financial picture, Duff & Phelps upgraded the company's bond rating from 7 to 6, the equivalent of an 'A' rating by Moody's Investors Service. Shortly thereafter, Moody's upgraded our commercial paper rating from Prime 3 to Prime 2.

In granting the rate increase, the commission indicated that the company could earn up to 16.5 percent on common equity. For the 12-month period ending December of 1981, APS' return on average equity reached 15.1 percent, up from 12.5 percent over the previous 12-month period.

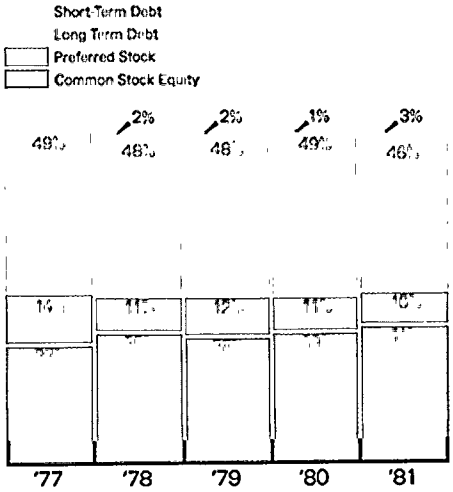
The foundation is laid for improved performance in 1982

The provisions of new tax legislation, coupled with accounting changes allowed by the commission in its rate decision, will provide us with both increased cash flow and higher interest coverages during 1982.

Specifically, the commission allowed the full normalization of investment tax credits commencing January 1, 1982; full normalization of income tax benefits from liberalized depreciation at statutory rates commencing January 1, 1982; and the amortization of the present deferred income tax under-recovery over a 12-year period.

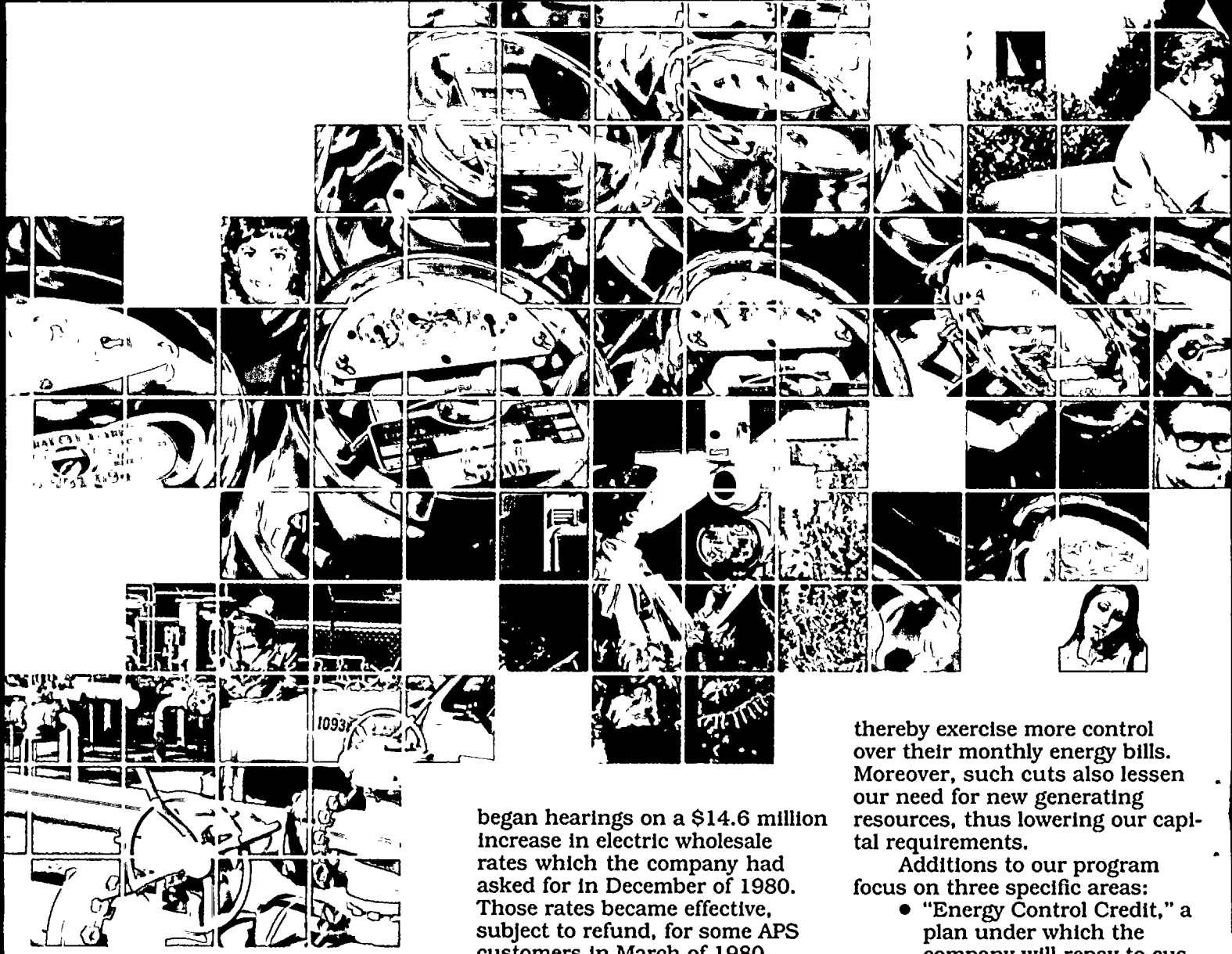
Our projections indicate debt coverage should increase to about 2.75 times, with internal cash generation approximating 20 percent of our 1982 capital requirements and return on average equity equaling or exceeding 1981's level.

Capitalization Ratio Trends



Rate action continues at the federal level

While the company will not be involved in a full-scale Arizona

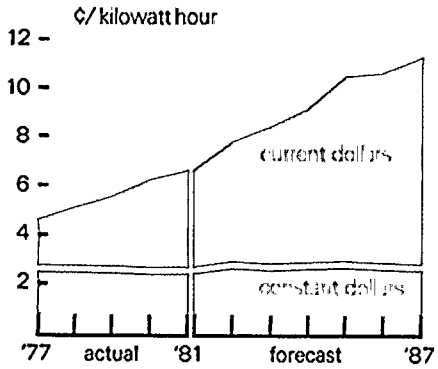


rate hearing during 1982 (pursuant to the rate settlement agreement), rate action will continue to be heavy at the federal level.

In November, the Federal Energy Regulatory Commission began hearings on a $14.6 million increase in electric wholesale rates which the company had asked for in December of 1980. Those rates became effective, subject to refund, for some APS customers in March of 1980. Final action by the commission is pending.

The company also expects to file with the Federal Energy Regulatory Commission for an additional electric wholesale increase in March.

Customer Cost per Kwh—Residential



Programs give customers choices in controlling their energy bills

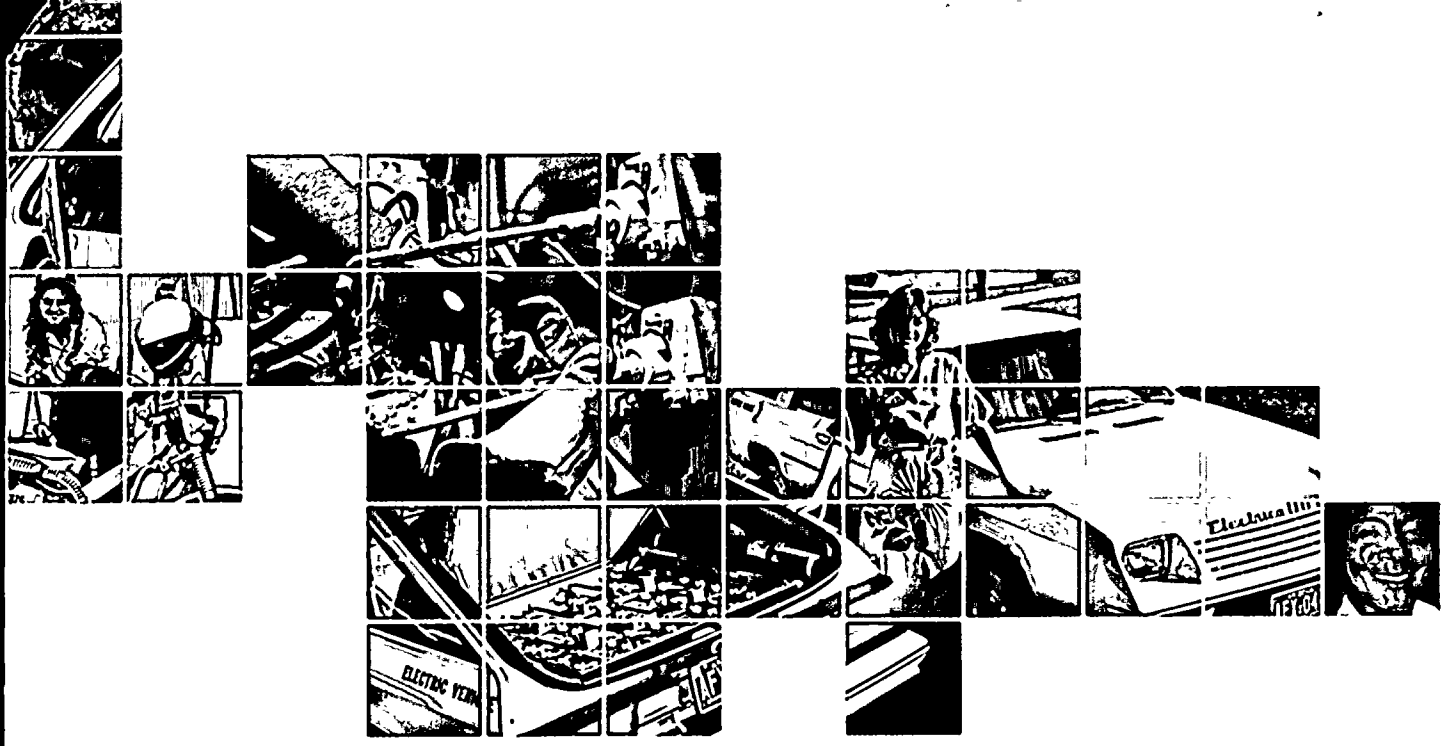
It is certain that our most recent rate increases, which allowed the company to catch up with the effects of inflation on the cost of providing service, will produce substantially higher bills for our customers. This is one of the reasons why we have expanded an already extensive load-management program.

We are offering our customers several incentives to cut their peak electric energy use and thereby exercise more control over their monthly energy bills. Moreover, such cuts also lessen our need for new generating resources, thus lowering our capital requirements.

Additions to our program focus on three specific areas:

- "Energy Control Credit," a plan under which the company will repay to customers, as a bill credit, a portion of the cost of installing hardware such as high-efficiency air conditioning units and replacement compressors, and load-control devices.
- A new load-management audit consultation program for small to medium-sized commercial and industrial customers.
- The EC-1 (energy capacity) residential electric rate that provides an incentive in the form of potentially lower bills to customers who effectively control peak demand during the month.

Meanwhile, we're exploring still other rate options. In November, the Arizona Corporation Commission authorized the company to offer two optional rates, on a trial basis, to 1,000 cus-



tomers each. The first is a straight time-of-use consumption rate; the second combines demand and time-of-use factors.

Our overall goal is to allow customers to choose rates compatible with their lifestyles and our overall load-management goals.

"Flexibility is the key to financing our construction program in the volatile capital markets of the 1980s. Our ability to evaluate innovative financing techniques and to move quickly to implement least-cost alternatives is paramount to minimizing the cost of financing, which is, after all, the common goal of the company, its stockholders and ratepayers."

Paul Williams
Treasurer

Financing highlights

The company was quick to take advantage of new financing opportunities which emerged in 1981. Under new leasing provisions of the Economic Recovery Tax Act of 1981, the company received $50.6 million from the sale of tax benefits — representing investment tax credits and accelerated depreciation — associated with the 350-megawatt Cholla Unit 4.

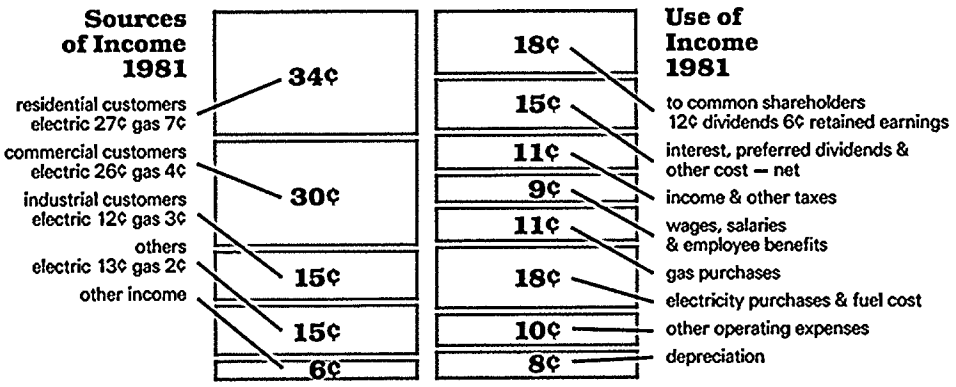
To provide increased flexibility in our financing program, we turned to such options as the issuance, through a subsidiary, of Eurodollar debentures ($50 million at 16.25 percent in July; $60 million at 17.25 percent in October; and $75 million at 16.25 percent and $25 million at 16 percent, both in February of this year).

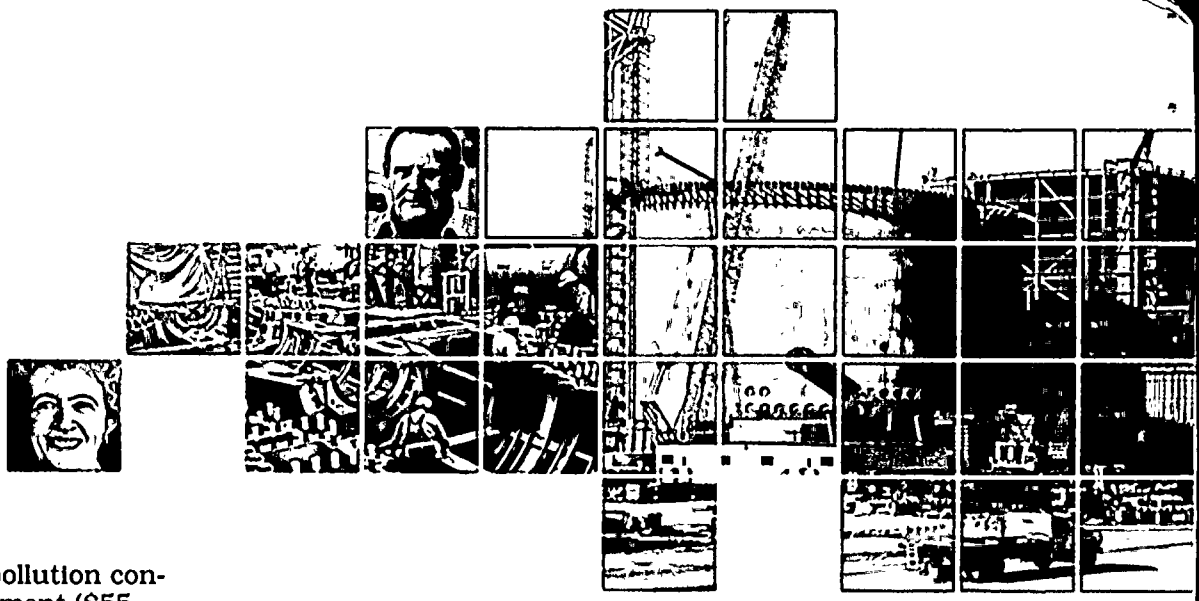
And with the sale of 5 million shares of common stock at $16.75 per share last March, and 4 million shares at $19.125 in November, we improved our common equity ratio to 41.1 percent.

The $155 million realized from these 1981 common stock issues, and the $210 million from the 1981 and 1982 Eurodollar debentures, were used primarily to reduce short-term borrowing in support of the company's construction program.

Additionally, last April, we issued $19.5 million of privately-placed cumulative preferred stock.

The project financing liability relating to Unit 4 of the company's Cholla Power Plant was restructured in May through the use of a five-year, tax-exempt





commercial paper pollution control financing agreement ($55 million) and a three-year term loan agreement ($240 million).

One of our major financial goals has been to strengthen capitalization ratios by reducing the debt portion of total capitalization. Long- and short-term debt now constitute about 49 percent of total capitalization, with preferred and common stock making up the balance.

Financing plans for 1982 include up to $300 million in long-term debt, about $100 million in preferred stock and 4 million shares of common stock, all of which were approved in January by the Arizona Corporation Commission. If interest rates decline to more normal levels and if common stock earnings remain near today's levels, the 1982 common stock issue could be our last of the decade.

"The fact that our coal-fired power plants are currently the most economical generating resource in our system emphasizes the importance of running these plants as much as possible. The remarkable capacity factor we attained in 1981 was due largely to an aggressive maintenance program along with operating innovations which originated in part from employee ideas."

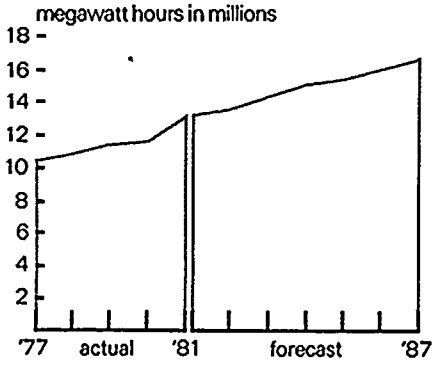
Walt Ekstrom, Manager
Fossil Generation

1981 operations

While our growth is expected to continue, it has slowed considerably compared with past history.

In 1981 we added 17,050 new electric customers to our system, a 4 percent gain from 1980's year-end total. Average residential electric use rose slightly to 10,247 kilowatthours, after dropping in 1980 to just below the 10,000-kilowatthour mark. We attribute this primarily to 1981's record-setting hot weather.

Total Electrical Sales —Actual/Forecast



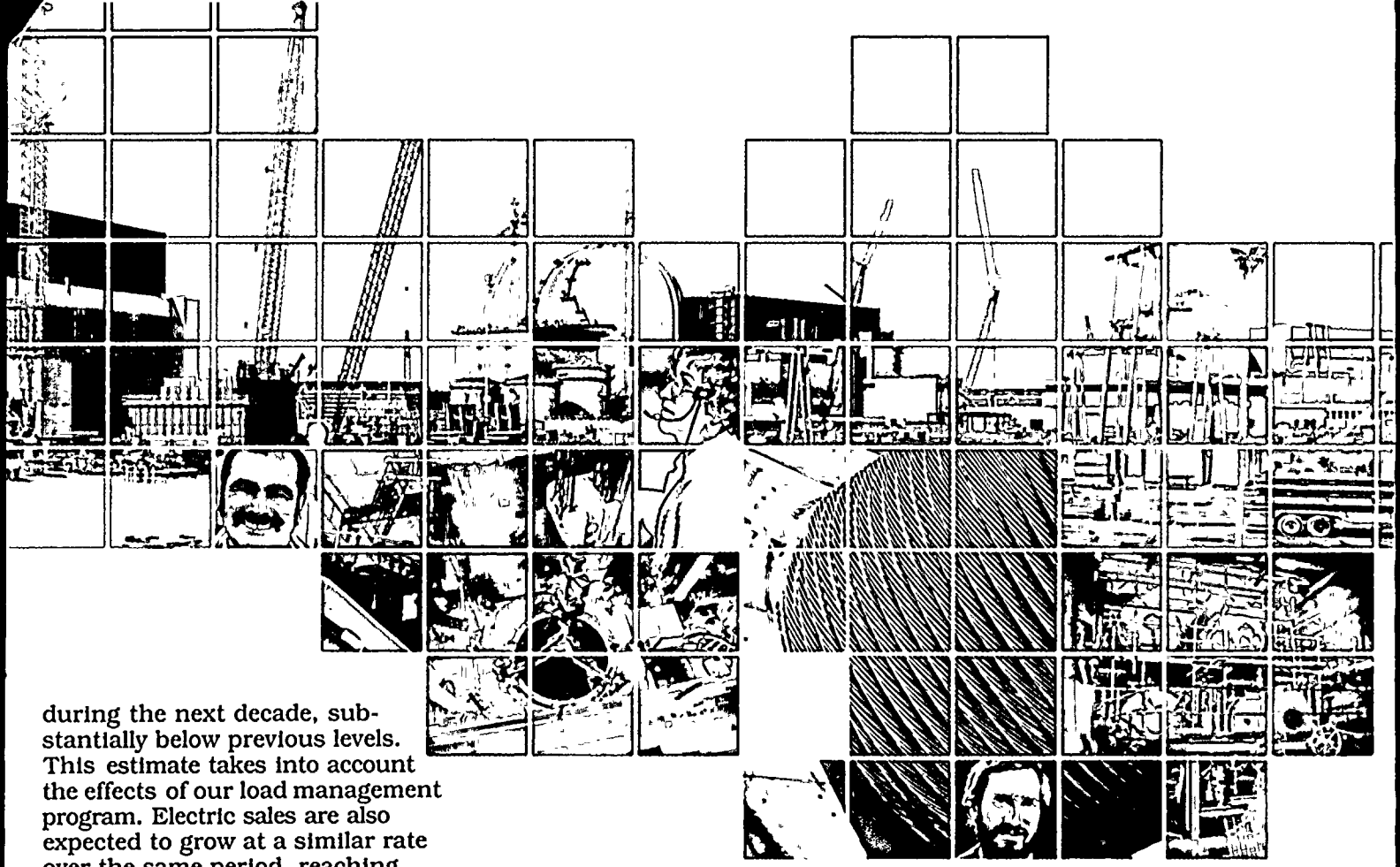
Total electric sales increased by 13 percent, though a part of this increase reflects a recovery from depressed 1980 sales that resulted from a copper industry labor strike.

Our system peak demand for electricity was 3,018,700 kilowatts, up 8.9 percent from the previous year; again, due largely to extremely hot weather at the time of the peak and the addition of new customers.

Electric resources in 1981 totaled 3,634,300 kilowatts, consisting of 3,340,700 kilowatts of our own generation plus 293,600 kilowatts of power available under firm purchase contracts.

Our system's capacity was bolstered by the addition of another new generating unit at the Cholla Power Plant. The 350,000-kilowatt Cholla Unit 4 began its commercial operation in June and, for a while, will mean we have more generating capacity than needed. Accordingly, we have arranged for temporary sales of from 50,000 kilowatts to 350,000 kilowatts of the plant's generating capacity to other utilities for varying periods during the next eight years. Contracts provide for the recapture of that capacity when it will be needed by our own customers.

Taking into account anticipated population growth and other factors, we expect that our peak demand will increase by an estimated 4 percent annually



during the next decade, substantially below previous levels. This estimate takes into account the effects of our load management program. Electric sales are also expected to grow at a similar rate over the same period, reaching approximately 20,500,000 megawatthours in 1991, compared to 13,387,998 megawatthours in 1981.

"Taking into account the resources and upper management support that have been committed, I am confident we are constructing a nuclear plant of the highest quality. Our record in this regard, as demonstrated in the results of NRC inspections, has been recognized as one of the best in the industry."

John Roedel, Manager
Nuclear Quality Assurance

Not all the figures are up, however. With 1981 producing Arizona's warmest weather on record, our natural gas sales totaled 412,846,000 therms during the year, a 4 percent decrease.

Construction level high, but will trend downward

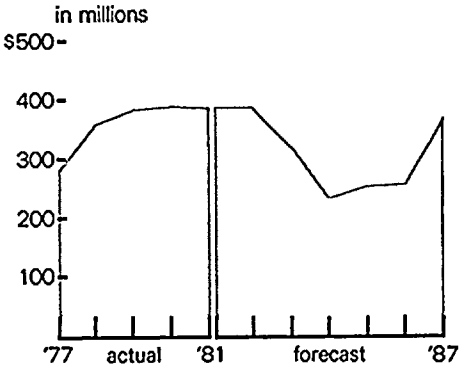
We anticipate that our capital outlays in 1982 will reach approximately $390 million, about the same as in 1981. Our capital requirements should then steadily decrease through at least 1986.

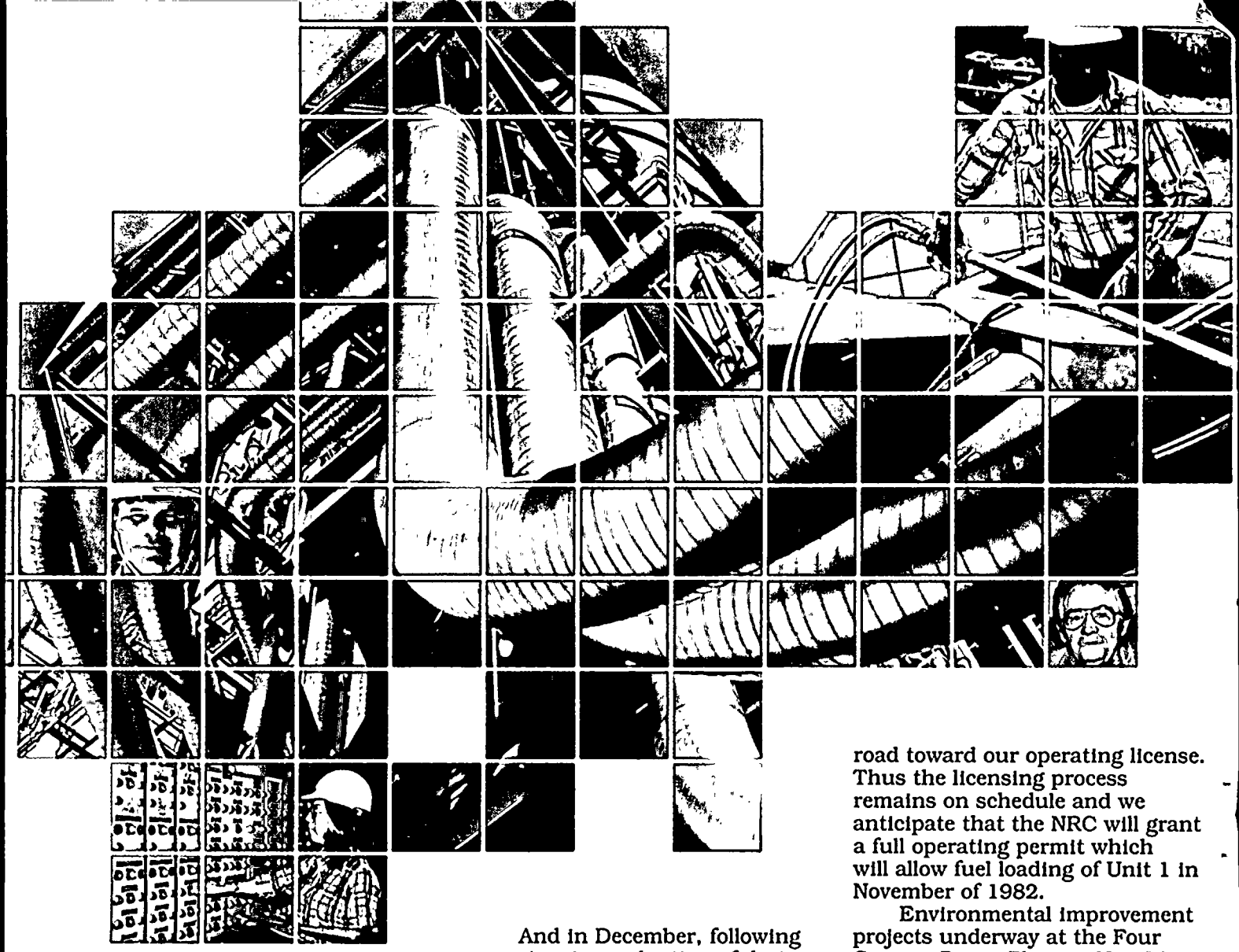
The largest outlay this year will again go to our share of Palo Verde construction costs, approximately $161 million. Other expenditures in connection with the plant include $29 million for nuclear fuel and $35 million for a variety of other items including staffing and training, startup expenses, power usage for startup and power credits.

The most recent estimates indicate the total construction cost of the project will be approximately $3.86 billion. In light of inflation rates that have prevailed through the period, we are pleased that this figure is only 39 percent more than our original baseline cost estimate made in 1974. Our company's share of this cost will be $1.12 billion. We will continue to evaluate Palo Verde cost estimates as a part of our overall cost control effort.

The first of Palo Verde's three 1,270,000 kilowatt units was 95.3 percent complete at year end 1981. Units 2 and 3 were 75.4 and 30.4 percent complete, respectively.

Capital Expenditures —Actual/Forecast



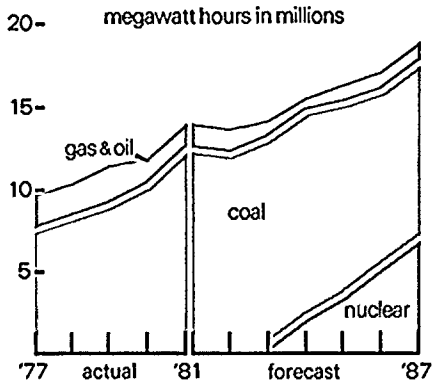


Cold hydrostatic testing, which demonstrates the structural integrity of the reactor coolant system, is scheduled to be completed on the first unit early this year.

Our dedication to building the safest plant possible is paying off. The NRC's most recent appraisal, covering the year ending June 30, 1981, described Palo Verde's overall construction record as "above average," a rating not easily earned. Receiving special notice were the areas of quality assurance and safety, with special commendation given to the company's strong upper management involvement and the project's open lines of communication.

And in December, following an extensive evaluation of design, construction and operational preparation of Palo Verde, the Advisory Committee on Reactor Safeguards gave the plant's three units a positive review. The committee's report to the NRC is an important milestone on the road toward our operating license. Thus the licensing process remains on schedule and we anticipate that the NRC will grant a full operating permit which will allow fuel loading of Unit 1 in November of 1982.

Generation Fuel Mix Trend Based on 1981 Long-Range Forecast

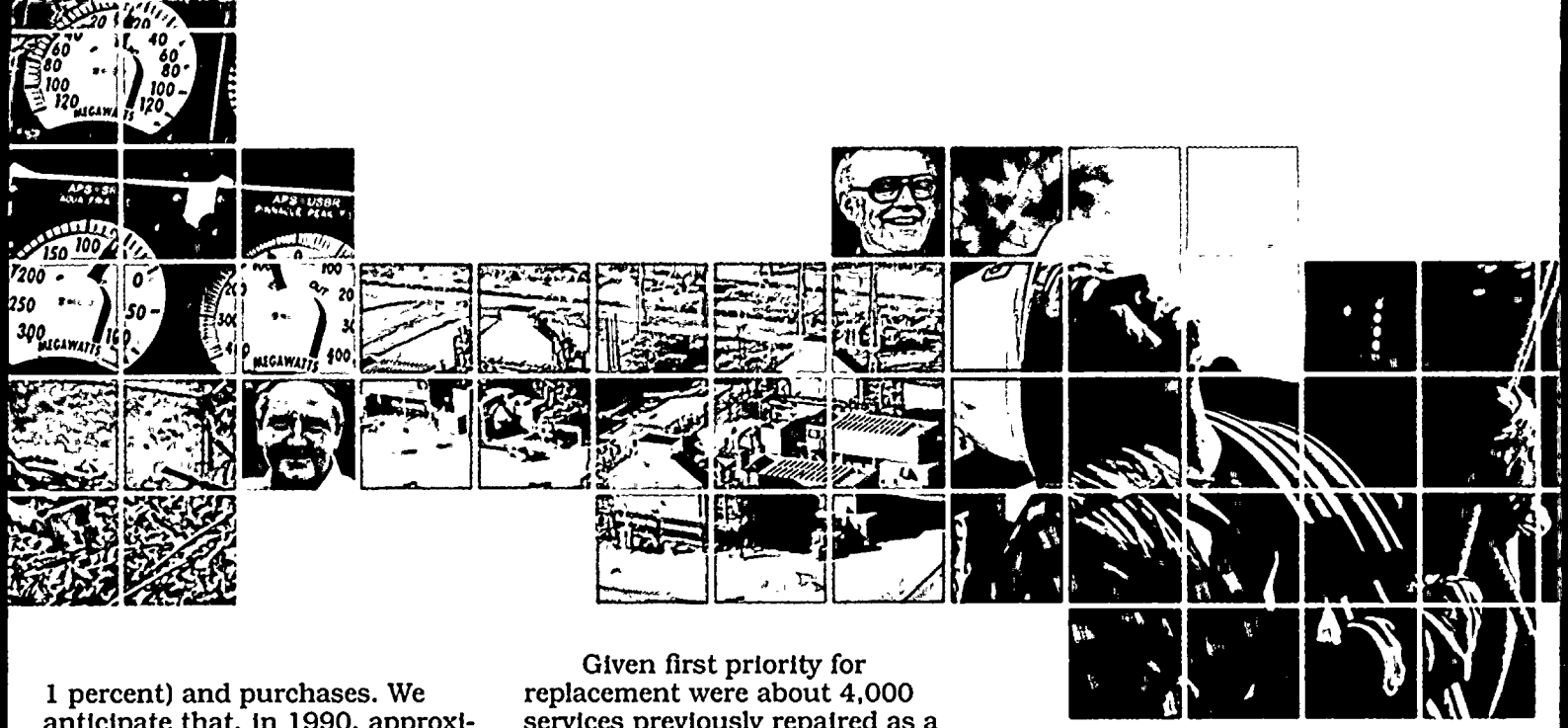


Environmental improvement projects underway at the Four Corners Power Plant in New Mexico are nearly half complete. In 1981 we spent $14.8 million on these projects, and another outlay of $25 million will be made in 1982. The $490 million total cost of the projects is divided among the six owners of Units 4 and 5. APS' share will be nearly $74 million.

We've achieved a more efficient operation

One of our goals for the 80's continues to be the structuring of a generation fuel mix that most economically meets our customers' growing energy needs, while introducing and applying programs that effectively reduce the rate of that growth.

At the end of 1981, 85.3 percent of our system load was met with coal generation. The balance was met with gas, oil (less than



1 percent) and purchases. We anticipate that, in 1990, approximately 62 percent of our system load will be met with coal and 36 percent with nuclear fuel.

Thanks in great part to the efforts of our power production employee team, our coal-fired generating plants set new records for efficiency in 1981.

During the 12 months ended December 31, APS coal-fired generators achieved a record capacity factor of 76.3 percent, thus easing fuel cost burdens on our electric customers. This is significantly better than the industry average and results primarily from a program begun in 1976 to improve power plant efficiency.

Natural gas service replacement program launched

An intensive inspection of residential natural gas service lines, prompted by two explosions that resulted from failures of gas services, was initiated in late 1981. As a result, a decision was made to begin replacement of a particular type of polyethylene gas service pipe installed in the 1970s.

Although the pipe met all industry standards at the time of its manufacture, our testing of samples taken from service lines suggests that it may lose some of its toughness with the passage of time.

Given first priority for replacement were about 4,000 services previously repaired as a result of damage by dig-ins or other accidents. Additional testing will determine whether all of the pipe in question — about 40,000 services — will have to be replaced.

Exploration subsidiary is sold

Last year, we sold Bixco, Inc., our wholly-owned gas exploration subsidiary. The exploration program was implemented in 1978 at a time when the company was experiencing as much as 112 days per year of curtailment to major industrial customers. Though the Bixco program was successful in helping to relieve these curtailments, the rising costs of exploration and an improved supply forecast from our primary supplier triggered our decision to end the venture.

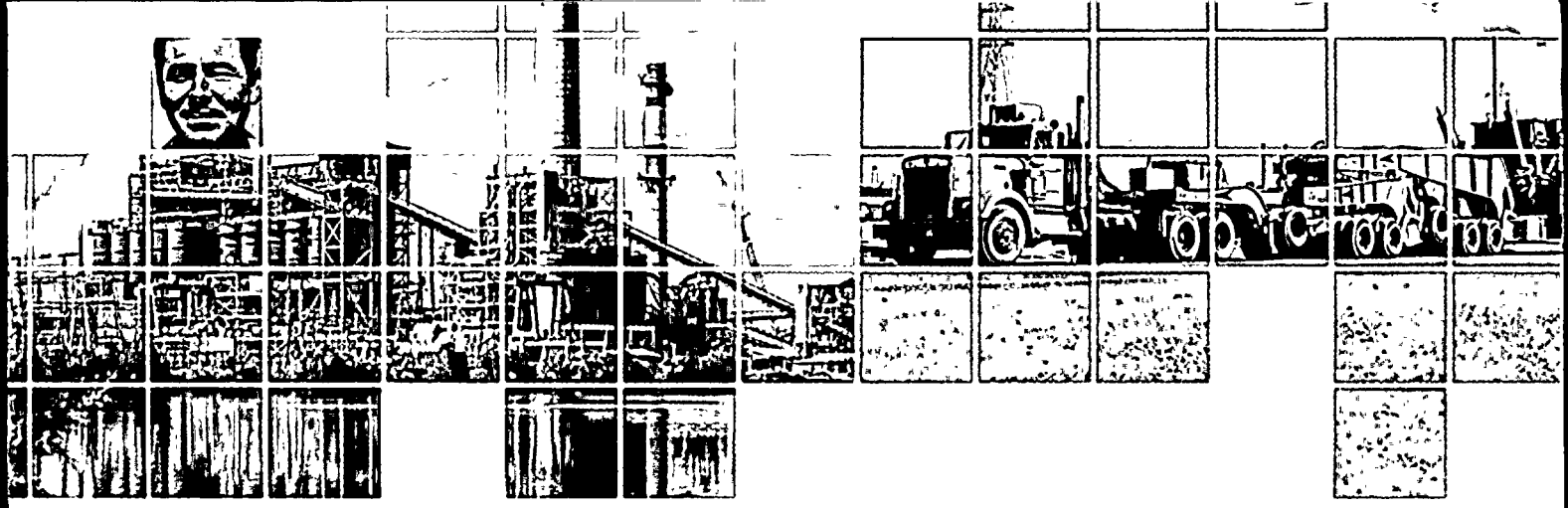
The sale price of approximately $20 million leaves a shortfall in unrecovered investment in Bixco of approximately $20 million. Under the terms of the Arizona Corporation Commission's 1978 order, we have been allowed to recoup most of these costs, from certain customer categories, over a 10-year period.

Communicating our Messages

We began an advertising campaign in the spring of 1981 to help our customers understand the complexities of energy costs, supply and financing. The print and broadcast messages address our customers' concerns about their energy bills. They explain to customers the facts concerning electricity use and the costs inherent in ensuring a reliable future energy supply.

"It's obvious that the complex issues and massive technologies related to nuclear power are best understood when they can be examined firsthand. We've been providing Arizonans this opportunity, which is one of the reasons our Palo Verde plant enjoys greater public acceptance than do plants in many other areas of the country."

Jane Brand, Manager
Community Relations



Other ads introduced the new residential rate (EC-1), designed to help customers control the amount of their monthly energy bills through selective use of major energy-using equipment, and are promoting the new "Energy Control Credit" load management incentive program.

Communicating on nuclear power remains a high-priority

The Nuclear Regulatory Commission is currently reviewing our emergency plan for Palo Verde. Designed to meet both NRC and Federal Emergency Management Agency regulations and guidelines, the plan outlines actions to deal with any technical and operational problems. It also provides for meeting communications requirements should an emergency develop at Palo Verde.

Special efforts have been made to acquaint the people who live or work near Palo Verde with the plant. An open house, personal visits to homes and a monthly newsletter have helped to keep the plant's neighbors informed.

But the interest in Palo Verde extends throughout Arizona. Nearly 17,000 people visited the site last year.

"Utilities today are facing the challenges of a rapidly-changing energy supply situation. Our R&D program is structured to provide us the greatest possible flexibility in meeting these challenges. We're working not only to identify future needs, but to develop timely—and affordable—technical solutions."

Dr. Merwin Brown, Manager
Research Programs

Research continues on alternative energy sources

We broke ground last fall for construction of the 225-kilowatt photovoltaic solar power plant at Sky Harbor International Airport in Phoenix. When completed in late 1982 the facility is expected to supply about 440,000 kilowatthours of energy annually to the APS power grid system — or enough to meet the annual electric needs of about 40 average-size Phoenix area homes.

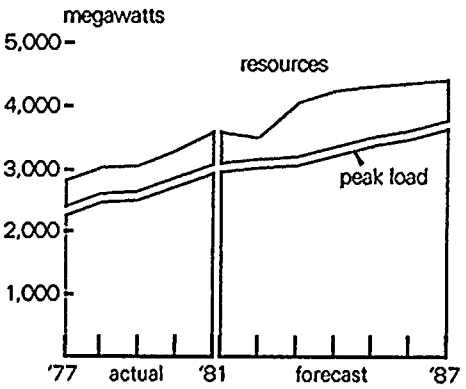
APS will operate the $3.93 million facility, funded primarily by the U.S. Department of Energy, to collect data on its performance. While the Sky Harbor plant is experimental and not expected to be a producer of cheap electricity, it is a necessary step in evaluating the potential for such a power producer in a conventional electric system.

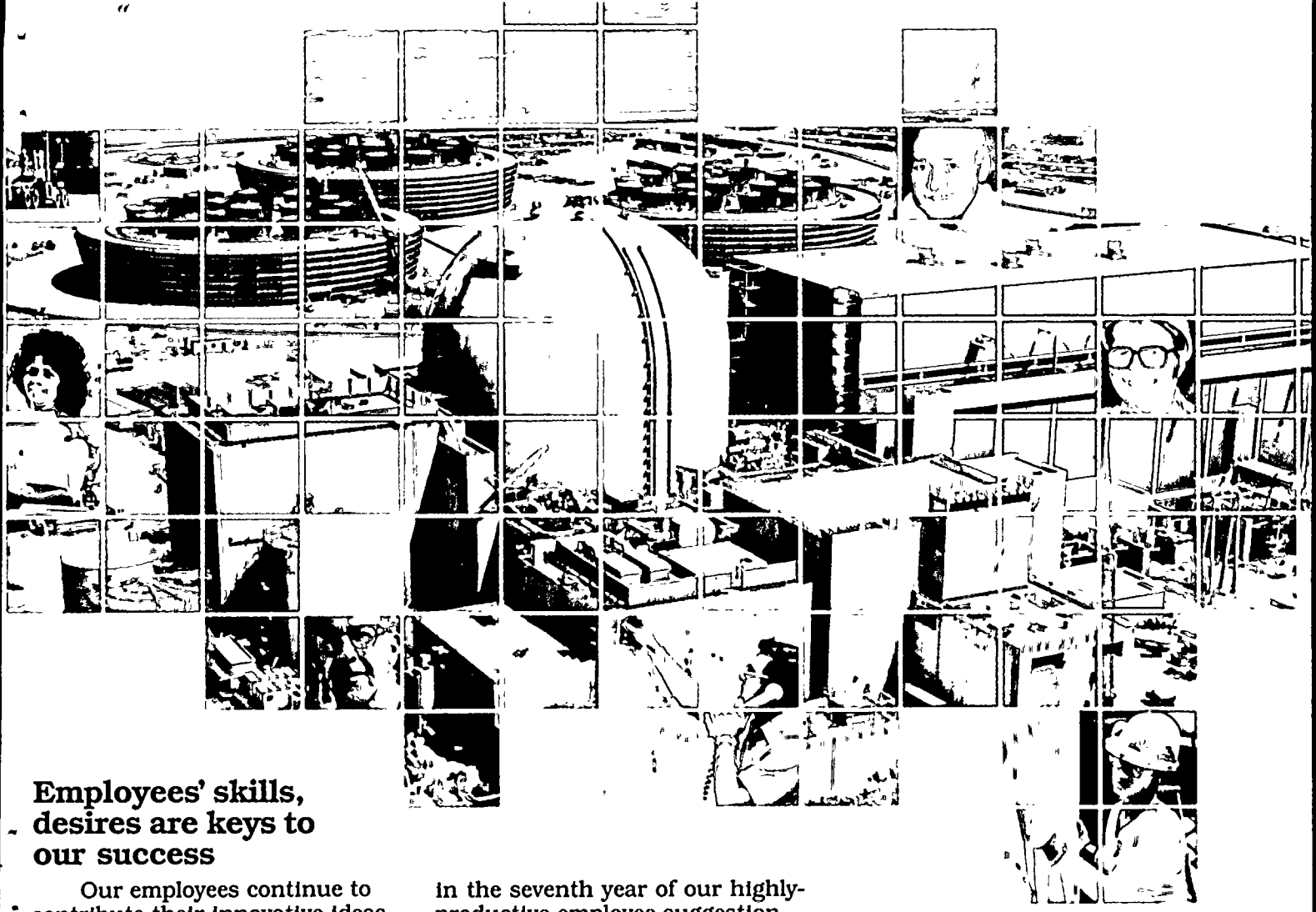
Another solar energy system went into use in early May to cool our Paradise Valley service center and provide excess electricity to the company's grid system. The $1.4 million facility is part of a joint international research venture between the United States and Saudi Arabia.

And research planning continues on another massive solar project at our Saguaro Power Plant near Tucson, where from 60 to 100 megawatts of the plant's output could be provided by solar energy instead of conventional firing by oil or natural gas.

Meanwhile, data on performance of a fleet of 20 electric vehicles has provided valuable and important information about the maintenance, performance and future use of electric vehicles. The U.S. Department of Energy is partially funding this three-year study.

Long-Range Forecast of Peak Load and Electric Resources





Employees' skills, desires are keys to our success

Our employees continue to contribute their innovative ideas in the seventh year of our highly-productive employee suggestion program, *Idealine.* Their suggestions, which help us operate more efficiently and more productively, resulted in record "first-year" savings of more than $4 million in 1981, savings which will continue to accrue in the years ahead.

"Our employees on the front line – those who come in contact each working day with thousands of customers – simply must have the ability to communicate effectively. I believe we have one of the most vigorous programs in the industry to cultivate this ability among our customer contact people."

A. G. (Andy) Anderson
General Manager, Central Region

At Palo Verde, hundreds of top-notch professionals are at work preparing for the 1983 start-up of Unit 1. Their dedication has resulted in the quality construction and smooth licensing process we have experienced, and will help assure the safe operation of the plant.

Training of these high-quality employees continues at an intensive pace. We're fortunate that our original planning included acquisition of Palo Verde's $5.6 million on-site control room simulator, which is already providing realistic operational experience for our operator trainees.

Meanwhile, to meet customers' needs in these difficult economic times, specially-trained customer service representatives are smoothing the way for better customer relations in all our service areas.

Adequate compensation is not only a contributing factor to employee work satisfaction but of significant value to the company's effort to recruit and retain skilled professionals. Thus it is our policy to maintain an equitable, balanced program of wages and benefits.

But we also recognize that there are other needs to be met. Last year we expanded our employee services to include a wide variety of mental and physical health-related programs. And employees have taken advantage of a variety of education and training programs, tuition reimbursement for job-related courses taken outside the company, and a comprehensive program of career counseling.

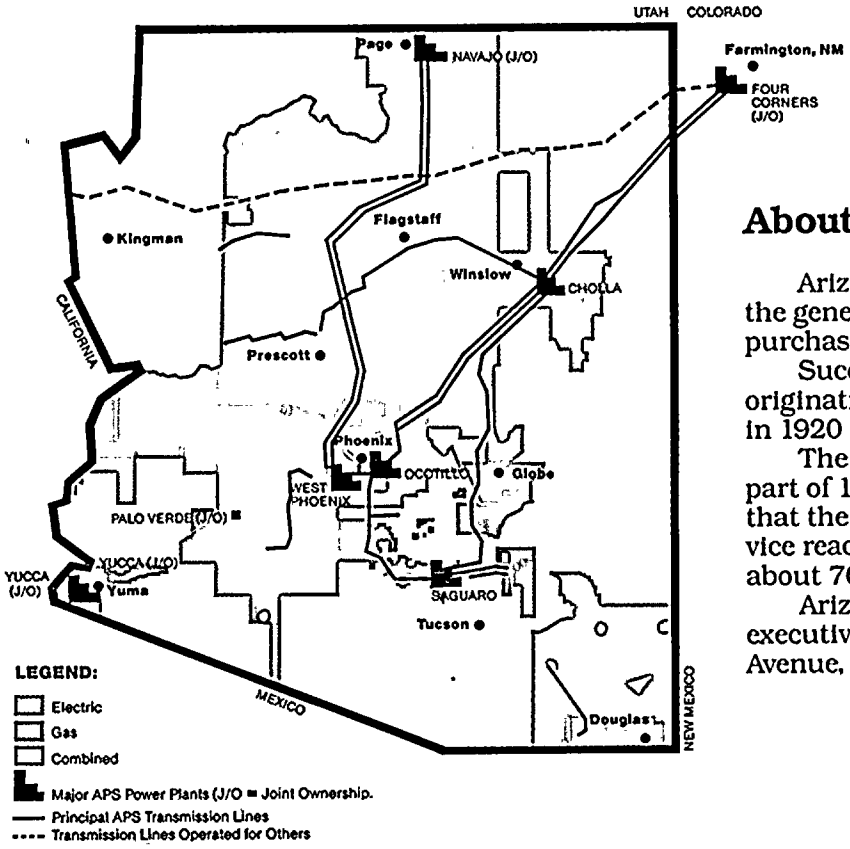
SELECTED FINANCIAL DATA

	1981	1980	1979	1978	1977
	(Thousands of Dollars, Except Common Stock Data)				
Operating Revenues	$ 882,154	$ 765,760	$ 664,423	$ 562,217	$ 493,684
Operating Expenses:					
Operation and maintenance	445,111	432,886	371,983	291,908	269,581
Depreciation and amortization	76,178	64,412	57,021	48,295	40,370
Taxes*	109,947	98,886	84,549	83,314	71,885
Total	631,236	596,184	513,553	423,517	381,836
Operating income	250,918	169,576	150,870	138,700	111,848
Other Income*	58,748	43,341	26,760	14,914	12,662
Interest Deductions—Net	112,232	69,627	56,052	46,855	40,499
Net Income	197,434	143,290	121,578	106,759	84,011
Preferred Dividend Requirements	26,786	25,062	21,882	17,471	14,628
Earnings for Common Stock	$ 170,648	$ 118,228	$ 99,696	$ 89,288	$ 69,383
Total Assets	$ 3,396,790	$ 2,928,484	$ 2,475,332	$ 2,039,420	$ 1,673,171
Long-term Obligations and Redeemable Preferred Stock	$ 1,618,048	$ 1,455,286	$ 1,180,120	$ 991,173	$ 855,534
Common Stock Data:					
Book value per share	$ 22.13	$ 21.97	$ 22.75	$ 22.56	$ 21.83
Earnings per share (based on average shares outstanding)	$ 3.26	$ 2.75	$ 2.90	$ 3.15	$ 3.02
Dividends declared per share	$ 2.20	$ 2.06	$ 1.94	$ 1.73	$ 1.53
Shares of common					
—year end	57,648,791	47,813,847	38,181,297	32,777,258	26,576,428
—average	52,289,259	42,960,655	34,426,346	28,363,223	22,970,741
Number of common shareholders	119,825	110,416	92,396	78,275	66,358

*Federal and State income taxes are included in Taxes, Other Income and, in 1977, Interest Deductions. Total income tax expense was as follows (in thousands): 1981, $19,638; 1980, $16,519; 1979, $14,422; 1978, $13,937; 1977, $6,265.

OTHER FINANCIAL AND OPERATING STATISTICS

	1981	1980	1979	1978	1977
	(Thousands of Dollars)				
Capitalization:					
Common equity	$ 1,275,623	$ 1,050,651	$ 868,658	$ 739,349	$ 580,170
Non-redeemable preferred stock	118,561	118,561	118,561	118,561	118,561
Redeemable preferred stock	199,280	185,280	156,000	100,000	100,000
Long-term debt	1,418,768	1,048,500	828,464	763,450	701,917
Project financing liability	—	221,506	195,656	127,723	53,617
Total	$ 3,012,232	$ 2,624,498	$ 2,167,339	$ 1,849,083	$ 1,554,265
Utility Plant — Gross	$ 3,688,270	$ 3,199,927	$ 2,735,073	$ 2,288,604	$ 1,889,320
Utility Plant — Net	$ 3,111,773	$ 2,694,408	$ 2,292,341	$ 1,901,044	$ 1,547,486
Number of Employees at Year End	6,333	5,538	5,263	4,951	4,570
Average Wage per Hour	$ 11.20	$ 10.53	$ 9.20	$ 8.57	$ 7.99
Electric:					
Electric resources (kw)	3,634,300	3,307,200	3,077,200	3,061,600	2,872,500
Peak load (kw)	3,018,700	2,772,700	2,579,300	2,548,900	2,373,400
Electric sales — total (mwh)	13,387,998	11,877,722	11,584,898	10,912,704	10,481,972
Number of customers at year end	438,853	421,803	401,983	378,553	357,884
Gas:					
Total gas sales (m therms)	412,846	432,277	467,088	449,451	463,643
Number of customers at year end	341,184	340,248	340,343	339,803	339,949



About the Company

Arizona Public Service is engaged principally in the generation and sale of electricity and in the purchase and sale of natural gas.

Successor to a series of small utility operations originating in 1886, the company was incorporated in 1920 under the laws of Arizona.

The company's service territory includes all or part of 11 of Arizona's 14 counties. It is estimated that the company's electric and/or natural gas service reaches approximately 1,946,000 people, or about 70%, of the state's population.

Arizona Public Service Company's principal executive offices are located at 411 North Central Avenue, Phoenix, Arizona. Phone (602) 271-7900.

BUSINESS SEGMENTS

Operating revenues, and operating income before income taxes, attributable to electric and gas operations of the company for each of the five years in the period ended December 31, 1981 were as follows:

	Operating Revenues (Millions of Dollars)				Operating Income Before Income Taxes (Millions of Dollars)			
	Electric		Gas		Electric		Gas	
Year Ended December 31,	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
1981	$730.8	82.8	$151.4	17.2	$272.3	99.6	$ 1.0	0.4
1980	621.9	81.2	143.9	18.8	180.5	96.6	6.3	3.4
1979	533.2	80.3	131.2	19.7	151.5	92.2	12.9	7.8
1978	452.4	80.5	109.8	19.5	141.0	92.4	11.6	7.6
1977	397.3	80.5	96.4	19.5	109.2	91.3	10.4	8.7

See note 12 of Notes to Financial Statements.

OPERATING REVENUES

	1981	1980	1979	1978	1977
	(Thousands of Dollars)				
Electric:					
Residential	$252,907	$220,920	$191,066	$158,383	$135,274
Commercial	238,975	210,226	179,534	155,669	135,585
Industrial	113,736	95,644	86,563	72,677	61,617
Irrigation	22,916	19,215	14,193	12,252	13,512
Other	81,565	59,391	50,402	41,716	39,657
Total	710,099	605,396	521,758	440,697	385,645
Transmission for others	9,173	8,817	8,731	9,021	9,328
Miscellaneous services	11,516	7,651	2,696	2,713	2,291
Total Electric Operating Revenue	730,788	621,864	533,185	452,431	397,264
Gas:					
Residential	66,469	65,470	64,123	53,879	48,351
Commercial	34,307	31,727	29,371	24,223	20,779
Industrial	30,858	27,145	22,128	17,646	13,219
Irrigation	17,274	17,218	13,400	11,969	12,359
Other	1,653	1,510	1,324	1,169	860
Miscellaneous services	805	826	892	900	852
Total Gas Operating Revenue	151,366	143,896	131,238	109,786	96,420
Total Operating Revenues	$882,154	$765,760	$664,423	$562,217	$493,684

MANAGEMENT'S DISCUSSION OF FINANCIAL CONSIDERATIONS

Liquidity and Capital Resources

The company needs large amounts of capital for its on-going construction program and for the refunding of maturing securities and is heavily reliant on external financing to meet these requirements as indicated earlier in this Annual Report and in Notes 3, 4 and 5 to the Financial Statements. As also indicated earlier, the company has a certain degree of flexibility in adjusting its construction program to its financing capability. However, that flexibility is limited, and the company's long-term liquidity will depend on its access to the capital markets, which in turn will depend on sufficiency of the company's rates to provide adequate coverages on its senior securities and an adequate rate of return on its common stock equity. Adequate earnings and coverages are critical to the maintenance (and hopefully the improvement) of credit ratings on the company's senior securities and, as calculated in accordance with the governing instruments, are prerequisite to the company's legal ability to issue such securities.

See page 15 with respect to the company's historical capital structure. Its target structure consists of no more than 50% debt (which, for comparison purposes, would include current maturities and short-term obligations) and 40% common stock equity, with the balance consisting of preferred stock. The company does not contemplate any major "off-balance sheet" financing arrangements in the foreseeable future. The company regards common stock equity as its most expensive form of permanent financing, but it intends to maintain that category at approximately the 40% level in order to support the credit ratings on its senior securities. It appears to the company that purchasers of new issues of long-term debt and preferred stock will continue to demand high interest and dividend rates for some time to come, and that its embedded cost of capital will therefore rise rapidly as maturing securities, bearing relatively low rates, are refunded and the company's plant expands.

See Note 6 to the Financial Statements with respect to short-term borrowings available to the company (there being a statutory limitation on the amount of such borrowings that can be outstanding without an order from the Arizona Corporation Commission). Funds from operations have contributed only marginally to total sources of funds in the last few years (see the Statements of Changes in Financial Position). That situation is expected to continue in some degree until Palo Verde Unit 1 is included in rate base so as to give rise to cash earnings rather than the non-cash allowance for funds used during construction. Another constraint on the company's retention of funds from operations has been the necessity to increase common stock dividends periodically in order to retain investor interest (see the Statements of Income).

Operating Results

Total operating revenues reflect effects of rate increases and adjustment clauses (see Note 1c to the Financial Statements) on prices of units sold. Operating revenues also reflect the volume changes in unit sales shown on page 15. The foregoing factors contributed to annual increases (decreases) in revenues over revenues for the preceding calendar year as follows:

	1981	1980	1979
	(Thousands of Dollars)		
Electric:			
Volume increases (1)	$ 62,615	$12,140	$27,868
Price increases (2)	46,309	76,539	52,886
Total increase	$108,924	$88,679	$80,754
Gas:			
Volume increases (decreases) (1)	$(4,746)	$(8,503)	$4,308
Price increases (2)	12,216	21,161	17,144
Net increase	$ 7,470	$12,658	$21,452

(1) Derived by multiplying year-to-year increases in units sold by the weighted average of rate levels in effect during 1978.

(2) Year-to-year increases in revenues less the amounts shown for volume increases. Relative contributions by rate increases and by effects of the adjustment clauses vary according to the timing of general rate procedings and the extent to which accumulated effects of the adjustment clauses are incorporated in new rates.

Electric sales were affected in all years shown, particularly 1981, by extraordinarily warm summers. Unit sales of electricity in 1980 were depressed by effects of a copper industry labor strike. Conservation efforts by customers in response to higher energy costs have affected unit sales, are expected to continue to do so, and are being aided by the Company's own load management program. Unit sales of gas are affected substantially by weather conditions.

Increases in total operation and maintenance expenses reflect the volume increases in unit sales discussed above. In addition, the cost of fuel for the generation of a given amount of electricity has risen and is expected to rise further. Exceptional fuel cost increases resulted in 1979 from high-priced purchases of boiler gas and from limited availability of purchased power from hydroelectric sources and in 1981 from increased generation for sale to other utilities. Although unit fuel costs continued to rise in 1980 and 1981, increases since 1979 in the Company's cost of fuel per kilowatt hour generated have been relatively modest largely due to a favorable change in fuel mix resulting from the startup of coal-fired Cholla Units 3 and 4 in May 1980 and June 1981, respectively, and improved capacity factors at the Company's coal-fired plants. Any increased prices of gas (whether for boiler fuel or for resale) or fuel oil that may result from price deregulation would accelerate upward cost trends.

Variations in purchased power and interchange—net reflect varying degrees of availability of relatively low-priced power from other sources, the needs of the Company to augment its own generating sources from time to time and the Company's ability to sell energy to neighboring utilities. However, the substantial increase in 1980 was due instead to the accounting treatment for over-recovered fuel and purchased power expense which is discussed in Note 1c of "Notes to Financial Statements". The marked decrease in 1981 resulted from the reversal of this treatment as well as from large interchange sales to other utilities.

See "Effects of Inflation" below in regard to maintenance expense which is also a function of the size of the Company's utility plant and is affected by the timing of major overhauls (as most notably occurred in 1981) and by other factors (including, in the 1981 period, an amount reserved for the gas line inspection program). Other operating expenses and the "other" portion of other income (deductions) include amortization or write-offs of certain assets in 1981, 1980 and 1979 in aggregate amounts of $10,349,000, $474,000 and $2,161,000 respectively.

Depreciation and amortization expenses increase with the size of the company's utility plant, as do ad valorem taxes which are also affected by growth in the company's operating income as used by the taxing authorities in computing assessed valuation. Offsetting factors in "taxes—other than income" for 1979 resulted from a court decision invalidating a New Mexico generating tax and the apparent exercise of restraint by several Arizona taxing authorities. See Note 11 to the Financial Statements for both ad valorem and sales taxes (the latter being a function of operating revenues) which are the principal "taxes—other than income". Income tax details appear in Note 8 to the Financial Statements.

The aggregate amount of the allowance for funds used during construction (AFC), divided between other income and a credit to interest deductions, is

primarily a function of the amount of construction work in progress during any given period. See Note 1(d) to the Financial Statements for increased rates of AFC and cessation of its accrual on those portions of construction work in progress that are included in rate base. See "Liquidity and Capital Resources" above with respect to the non-cash aspect of AFC.

The substantial increase in interest on long-term debt and liability since 1979 reflects large amounts of new borrowings and increases in project financing liability at relatively high interest rates (see "Liquidity and Capital Resources" above and Note 5 to the Financial Statements). The increase in interest on short-term borrowings has resulted primarily from increased borrowings and interest rates (see Note 6 to the Financial Statements).

Issues of preferred stock (giving rise to the increased dividend requirements) and common stock (giving rise to the increased average number of shares outstanding) are summarized in Notes 2 and 3 to the Financial Statements.

The company's net income and its earnings for common stock represent composites of cash and non-cash items (see the Statements of Changes in Financial Position) and, in part, reflect accounting practices unique to regulated public utilities (see Note 1 to the Financial Statements).

Effects of Inflation

In contrast to the analysis of increases in operating revenues in the table at the beginning of "Operating Results" above, it is sometimes difficult, in the case of operation and maintenance expenses, to distinguish between effects of volume increases and rises in unit costs (which, for purposes of this discussion, are all attributed to inflationary pressures).

Certain inflationary effects, such as those on costs of generating fuel, are passed through to customers pursuant to the rate adjustment procedures summarized in Note 1c to the Financial Statements. Nevertheless, the company attempts to minimize such effects by means that include increasing the availability of its coal-fired units to result in a more economical fuel mix; that increase has been achieved by an intensive maintenance program, the cost of which is not covered by the adjustment clauses. There are a number of other major expense items that are also beyond the scope of the adjustment clauses. Inflationary pressures on these items have given rise to a significant earnings attrition between general rate increases.

See Note 14 to the Financial Statements for perspectives of other effects of inflation.

ACCOUNTANTS' OPINION

Arizona Public Service Company:

We have examined the balance sheets of Arizona Public Service Company as of December 31, 1981 and 1980 and the related statements of income, retained earnings and changes in financial position for each of the three years in the period ended December 31, 1981. Our examinations 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.

In our report dated February 25, 1981, our opinion on the 1980 and 1979 financial statements was qualified as being subject to the effects of such adjustments, if any, as might have been required had the outcome of the uncertainty regarding certain retail revenues subject to refund been known. As discussed in Note 10 of Notes to Financial Statements, this uncertainty was resolved in February 1982 at no liability to the Company. Accordingly, our present opinion on the 1980 and 1979 financial statements, expressed herein, is different from that expressed in our previous report.

In our opinion, the accompanying financial statements present fairly the financial position of the Company at December 31, 1981 and 1980 and the results of its operations and the changes in its financial position for each of the three years in the period ended December 31, 1981, in conformity with generally accepted accounting principles applied on a consistent basis.

Deloitte Haskins & Sells

Phoenix, Arizona 85003
February 25, 1982

STATEMENTS OF INCOME

For the Three Years in the Period Ended December 31, 1981

	1981	1980	1979
	(Thousands of Dollars)		
Operating Revenues:			
Electric	$ 730,788	$ 621,864	$ 533,185
Gas	151,366	143,896	131,238
Total	882,154	765,760	664,423
Operating Expenses:			
Operation and maintenance:			
Fuel for electric generation	168,227	133,557	128,472
Purchased gas	101,310	96,695	81,371
Purchased power and interchange—net	(823)	65,292	38,727
Other production expenses	18,414	14,831	12,622
Transmission and distribution	18,604	16,464	14,010
Maintenance	71,160	51,565	48,338
Other operating expenses	68,219	54,482	48,443
Total	445,111	432,886	371,983
Depreciation and amortization	76,178	64,412	57,021
Taxes—other than income	87,566	81,677	70,993
Income taxes (Note 8)	22,381	17,209	13,556
Total	631,236	596,184	513,553
Operating Income	250,918	169,576	150,870
Other Income (Deductions):			
Allowance for equity funds used during construction	57,421	39,076	24,696
Income taxes (Note 8)	2,743	690	(866)
Other—net	(1,416)	3,575	2,930
Total	58,748	43,341	26,760
Gross Income	309,666	212,917	177,630
Interest Deductions:			
Interest on long-term debt and project financing	155,086	118,403	87,609
Interest on short-term borrowings	11,853	8,624	5,912
Debt discount, premium and expense	1,169	710	665
Allowance for borrowed funds used during construction—credit	(55,876)	(58,110)	(38,134)
Total	112,232	69,627	56,052
Net Income	197,434	143,290	121,578
Preferred Stock Dividend Requirements	26,786	25,062	21,882
Earnings for Common Stock	$ 170,648	$ 118,228	$ 99,696
Average Common Shares Outstanding	52,289,259	42,960,655	34,426,346
Per Share of Common Stock:			
Earnings (based on average shares outstanding)	$3.26	$2.75	$2.90
Dividends declared	$2.20	$2.06	$1.94

See Notes to Financial Statements.

BALANCE SHEETS

December 31, 1981 and 1980

Assets	1981	1980
	(Thousands of Dollars)	
Utility Plant:		
Plant in service (Notes 4 and 7):		
Electric	$2,261,437	$1,869,397
Gas	138,333	131,844
Common, used in all services	74,991	67,407
Total	2,474,761	2,068,648
Less accumulated depreciation and amortization	576,497	505,519
Plant in service—net	1,898,264	1,563,129
Construction work in progress (Note 5)	1,195,075	1,123,078
Plant held for future use	18,434	8,201
Utility plant—net	3,111,773	2,694,408
Investments and Other Assets:		
Investments in and receivables from subsidiaries	64,380	35,789
Other investments and notes receivable	2,846	2,540
Other physical property (less accumulated depreciation: 1981, $123,000; 1980, $71,000)	3,032	21,446
Total investments and other assets	70,258	59,775
Current Assets:		
Cash (Note 6)	6,824	6,622
Special deposits and working funds (Note 6)	3,885	3,052
Accounts receivable:		
Service customers	76,701	56,109
Miscellaneous	16,682	20,413
Allowance for doubtful accounts	(1,922)	(1,684)
Materials and supplies (at average cost)	39,484	32,147
Fuel (at average cost)	31,139	40,128
Deferred fuel costs and other	8,802	6,171
Total current assets	181,595	162,958
Deferred Debits:		
Unamortized gas exploration cost	18,539	—
Unamortized debt issue costs	8,952	7,493
Other	5,673	3,850
Total deferred debits	33,164	11,343
Total	$3,396,790	$2,928,484

Liabilities	1981	1980
	(Thousands of Dollars)	
Capitalization (Notes 2, 3, 4 and 5):		
Common stock	$ 144,122	$ 119,535
Premiums and expenses	783,868	639,794
Retained earnings	347,633	291,322
Common stock equity	1,275,623	1,050,651
Non-redeemable preferred stock	118,561	118,561
Redeemable preferred stock	199,280	185,280
Long-term debt less current maturities	1,418,768	1,048,500
Project financing liability less current maturities	—	221,506
Total capitalization	3,012,232	2,624,498
Current Liabilities:		
Notes payable to banks (Note 6)	88,000	7,000
Commercial paper (Note 6)	—	26,000
Current maturities of long-term debt (Note 4)	4,062	3,688
Current maturities of project financing liability (Note 5)	—	45,001
Accounts payable	76,588	78,388
Accrued taxes	51,188	44,600
Accrued interest	40,177	20,953
Accrued dividends	2,270	2,119
Deferred fuel revenue and other	33,439	44,588
Total current liabilities	295,724	272,337
Deferred Credits and Other:		
Unamortized credit related to sale of tax benefits (Note 8)	50,395	—
Customers' advances for construction	13,414	9,241
Deferred income taxes	17,934	12,985
Other	7,091	9,423
Total deferred credits and other	88,834	31,649
Commitments and Contingencies (Note 10)		
Total	$3,396,790	$2,928,484

See Notes to Financial Statements.

STATEMENTS OF CHANGES IN FINANCIAL POSITION

For the Three Years in the Period Ended December 31, 1981

	1981	1980	1979
	(Thousands of Dollars)		
Source of Funds:			
Funds from operations:			
Net income	$197,434	$143,290	$121,578
Principal non-fund charges (credits) to income:			
Depreciation and amortization	76,178	64,412	57,021
Allowance for equity funds used during construction	(57,421)	(39,076)	(24,696)
Deferred income taxes	4,949	5,651	3,733
Other	4,143	2,241	3,336
Total funds from operations	225,283	176,518	160,972
Funds from external sources:			
Common stock	169,017	152,332	97,061
Preferred stock	19,500	48,000	59,370
Long-term debt	426,687	223,905	152,005
Project financing liability	15,000	70,851	67,933
Short-term borrowings—net	55,000	(21,000)	15,000
Sale of tax benefits	50,625	—	—
Total funds from external sources	735,829	474,088	391,369
Other items—net	25,660	6,557	4,308
Decrease in working capital*	—	26,410	—
Total source of funds	$986,772	$683,573	$556,649
Application of Funds:			
Capital expenditures	$558,453	$504,120	$468,116
Allowance for equity funds used during construction	(57,421)	(39,076)	(24,696)
Funds used for capital expenditures	501,032	465,044	443,420
Repayment of long-term debt	51,987	86,639	4,594
Redemption of redeemable preferred stock	5,500	18,720	4,000
Dividends on preferred and common stock	141,123	113,170	88,306
Repayment and assumption of project financing liability	281,507	—	—
Increase in working capital*	5,623	—	16,329
Total application of funds	$986,772	$683,573	$556,649
Increase (Decrease) in Working Capital*:			
Cash and temporary cash investments	$ 1,035	$ 781	$ 1,718
Accounts receivable	16,623	9,408	4,876
Materials, supplies and fuel	(1,652)	9,214	24,216
Deferred fuel costs and other	2,631	(3,186)	732
Accounts payable and accrued expenses	(24,163)	(8,124)	(11,606)
Deferred fuel revenue and other	11,149	(34,503)	(3,607)
Net increase (decrease)	$ 5,623	$ (26,410)	$ 16,329

*Excluding short-term borrowings—net and current maturities of long-term debt and project financing liability.

See Notes to Financial Statements.

STATEMENTS OF RETAINED EARNINGS

For the Three Years in the Period Ended December 31, 1981

	1981	1980	1979
	(Thousands of Dollars)		
Retained earnings at beginning of year	$291,322	$261,202	$227,930
Add—Net income	197,434	143,290	121,578
Total	488,756	404,492	349,508
Deduct—Dividends:			
Preferred stock (see below)	26,786	25,062	21,882
Common stock (Notes 2, 3, 4 and 5)	114,337	88,108	66,424
Total	141,123	113,170	88,306
Retained earnings at end of year	$347,633	$291,322	$261,202
Dividends on preferred stock:			
$1.10 preferred	$ 172	$ 172	$ 172
$2.50 preferred	258	258	258
$2.36 preferred	94	94	94
$4.35 preferred	326	326	326
Serial preferred:			
$2.40 series A	576	576	576
$2.625 series C	630	630	630
$2.275 series D	455	455	455
$3.25 series E	1,040	1,040	1,040
$8.50 series F	201	614	1,737
$8.50 series G	622	683	745
$10 series H	3,627	3,787	3,947
$10.70 series I	3,116	3,210	3,210
$8.32 series J	4,160	4,160	4,160
$8.80 series K	5,280	5,280	4,532
$9.70 series L	4,656	3,777	—
$11.95 series M	1,573	—	—
Total	$ 26,786	$ 25,062	$ 21,882

See Statements of Income for dividends per share of common stock.
See Notes to Financial Statements.

NOTES TO FINANCIAL STATEMENTS

For the Three Years in the Period Ended December 31, 1981

1. Summary of Significant Accounting Policies

(a) System of accounts—The accounting records of the company are maintained in accordance with the uniform system of accounts prescribed by the Federal Energy Regulatory Commission (FERC) and used by the Arizona Corporation Commission (ACC).

(b) Plant and depreciation—Property is stated at original cost as defined for regulatory purposes. The cost of additions to utility plant and replacements of retirement units is capitalized. Replacements of minor items of property are charged to expense as incurred. In addition to direct costs, capitalized items include the present value of certain future lease payments (see Note 4), research and development expenditures pertaining to construction projects, indirect charges for engineering, supervision, transportation and similar costs, and an allowance for funds used during construction. Costs of depreciable units of plant retired are eliminated from plant accounts and such costs plus removal expenses less salvage are charged to accumulated depreciation. Contributions in aid of construction are credited to plant cost.

Depreciation is provided on a straight-line basis at rates authorized by the ACC annually, which have ranged from 2.95% to 4.16% for electric plant, 3.49% for gas plant, and 2.86% to 12.50% for common and general plant.

(c) Revenues and recognition of certain costs—Operating revenues are recorded when billed on a monthly cycle billing basis. Adjustment clauses applicable to the recovery of fuel and purchased power expense through retail rates involve a hearing procedure that can give rise to appreciable timing differences. Under-recovered expense is deferred to be matched against revenues that will result from the procedure in the subsequent period. Over-recoveries are added to "Purchased power and interchange-net" as an expense item in the statement of income and to "Deferred fuel revenue and other" as a liability item on the balance

sheet; when the over-recoveries diminish, such entry is reversed. Other procedures apply to the pass-through of fuel costs to wholesale customers, resale gas costs and specified taxes. The estimated cost of gas purchased from the company's supplier, but not billed to gas customers, is deferred to be matched against revenues in the subsequent period.

(d) Allowance for funds used during construction—in accordance with the regulatory accounting practice prescribed by FERC and the ACC, the company capitalizes an allowance for the cost of funds used to finance its construction program ("AFC"). AFC, which does not represent current cash earnings, is defined as the net cost during the period of construction of borrowed funds used for construction and a reasonable rate on equity funds so used. The calculated amount is capitalized as a part of the cost of utility plant.

AFC has been calculated using composite rates of 9% from January 1, 1979 through June 30, 1979, 10% from July 1, 1979 through December 31, 1979, 11% in 1980 and 12.25% in 1981 except for AFC related to project financing which was computed at the actual rate thereon. AFC ceases to accrue on those portions of construction work in progress included in rate base.

(e) Income taxes—The company uses accelerated depreciation methods for income tax purposes. As prescribed by the ACC for rate making and accounting purposes, deferred income taxes are provided for certain timing differences in the recording for income tax and financial reporting purposes of depreciation of property placed in service after January 1, 1977. Income tax reductions arising from timing differences respecting certain other items of income and expense and from allowable investment tax credits are reflected currently in income, in accordance with orders or practices of the ACC for rate making purposes. Beginning in 1982, the Company, in compliance with a rate making and accounting order, will defer amounts equal to the reduction in federal income taxes resulting from investment tax credits and will amortize such amounts over the estimated life of the related assets. In addition, the amount of such credits previously recognized as a reduction of deferred income taxes (see Note 8) will be recovered over a twelve-year period.

(f) Investments in subsidiaries—Investments in subsidiaries are reported at equity.

(g) Research and development costs—The company expenses research and development costs on a current basis, except that costs which may result in utility plant are deferred for subsequent inclusion in plant or to be written off if the applicable project is abandoned.

(h) Gas exploration costs—The excess of costs over sales proceeds of the company's discontinued gas exploration program has been deferred to be recovered from certain classes of the company's customers and is being amortized over a ten-year period pursuant to an order of the ACC.

2. Common and Non-Redeemable Preferred Stock

The balances at December 31, 1981 and 1980 of common stock, and of preferred stock which is not redeemable except pursuant to call by the company at its option, are shown below.

	Number of Shares			Par Value			
	Authorized	Outstanding		Per Share	Outstanding		Call Price Per Share(b)
					(Thousands of Dollars)		
		December 31, 1981	December 31, 1980		December 31, 1981	December 31, 1980	
Common Stock	100,000,000	57,648,791	47,813,847	$ 2.50	$144,122	$119,535	
Non-redeemable Preferred Stock (cumulative)							
$1.10 preferred	160,000	155,945	155,945	$ 25.00	$ 3,898	$ 3,898	$ 27.50
$2.50 preferred	105,000	103,254	103,254	50.00	5,163	5,163	51.00
$2.36 preferred	120,000	40,000	40,000	50.00	2,000	2,000	51,00
$4.35 preferred	150,000	75,000	75,000	100.00	7,500	7,500	102.00
Serial preferred	1,000,000						
$2.40 series A		240,000	240,000	50.00	12,000	12,000	50.50
$2.625 series C		240,000	240,000	50.00	12,000	12,000	51.00
$2.275 series D		200,000	200,000	50.00	10,000	10,000	50.50
$3.25 series E		320,000	320,000	50.00	16,000	16,000	(c)
Serial preferred	4,000,000(a)						
$8.32 series J		500,000	500,000	100.00	50,000	50,000	(d)
Serial preferred	3,000,000	—	—	25.00	—	—	
Total		1,874,199	1,874,199		$118,561	$118,561	

(a) This authorization covers the outstanding redeemable preferred shares shown in Note 3, as well as the non-redeemable shares indicated above.
(b) In each case plus accrued dividends.
(c) From $51.50 through February 28, 1983; then to $51.00 thereafter.
(d) Not callable prior to September 1, 1982 through certain refunding operations that would result in a lower rate of cost to the company than the dividend rate on the shares to be redeemed; otherwise at $108.32 through August 31, 1982 to $101.00 after August 31, 1992.

The holders of preferred stock are entitled to one vote for each share held of record, as are holders of common stock. Special requirements for favorable votes of holders of preferred stock, voting by the classes respectively prescribed for the several purposes, pertain to (i) certain conversions or exchanges of outstanding preferred stock, (ii) the authorization of any stock ranking prior to the preferred stock, (iii) making any change in the terms and provisions of preferred stock that would adversely affect the rights and preferences of the holders thereof, (iv) the issuance of any addi-

tional shares of preferred stock except under prescribed circumstances or (v) a merger, consolidation or sale of substantially all the assets of the company. The foregoing voting rights attach to both redeemable and non-redeemable preferred stock, as do the rights that would arise out of dividend arrearages as discussed in Note 3.

Common and non-redeemable preferred stock sales and changes in premiums and expenses during each of the three years in the period ended December 31, 1981 were as follows (dollars in thousands):

Description	Common Stock		Non-Redeemable Preferred Stock (cumulative)		Premiums and Expenses Net*
	Number of Shares	Par Value Amount	Number of Shares	Par Value Amount	
Balance, December 31, 1978	32,777,258	$ 81,943	1,874,199	$118,561	$429,476
Common Stock	5,404,039	13,510	—	—	82,527
Balance, December 31, 1979	38,181,297	95,453	1,874,199	118,561	512,003
Common Stock	9,632,550	24,082	—	—	127,791
Balance, December 31, 1980	47,813,847	119,535	1,874,199	118,561	639,794
Common Stock	9,834,944	24,587	—	—	144,074
Balance, December 31, 1981	57,648,791	$144,122	1,874,199	$118,561	$783,868

*Premiums and expenses—net include those of redeemable preferred stock issues (see Note 3).

The company has a dividend reinvestment and stock purchase plan whereby newly issued shares of its common stock may be purchased at market on the applicable dates by any participant in the plan. It also has an employee savings plan under which its own periodic contributions probably would, and the investment of certain funds contributed by participating employees could, involve its issuance of new shares of commmon stock.

3. Redeemable Preferred Stock

The balances at December 31, 1981 and 1980 of preferred stock which is redeemable at the option of the holders or pursuant to sinking fund obligations, in addition to being callable by the company, are shown below.

	Number of Shares Outstanding at December 31,		Par Value			Call Price Per Share(b)
			Per Share	Outstanding at December 31,		
	1981	1980		1981	1980	
				(Thousands of Dollars)		
Redeemable Preferred Stock (cumulative)						
Serial preferred (a)						
$8.50 series F	12,400	29,200	$100.00	$ 1,240	$ 2,920	(c)
$8.50 series G	68,400	75,600	100.00	6,840	7,560	(c)
$10 series H	352,000	368,000	100.00	35,200	36,800	(d)
$10.70 series I	285,000	300,000	100.00	28,500	30,000	(e)
$8.80 series K	600,000	600,000	100.00	60,000	60,000	(f)
$9.70 series L	480,000	480,000	100.00	48,000	48,000	(g)
$11.95 series M	195,000	—	100.00	19,500	—	(h)
Total	1,992,800	1,852,800		$199,280	$185,280	

(a) See Note 2 for authorized number of shares.

(b) In each case plus accrued dividends.

(c) Redeemable at par at the option of either the company or the respective holders, in the case of series F at any time, or in the case of series G after May 30, 1982, (or earlier under certain conditions that could require the company to repurchase series G shares, which conditions did not exist at December 31, 1981), in every case upon 120 days notice. Sinking fund provisions applicable to series F require the redemption of a total of 8,400 shares at par semiannually (representing annual payments of $1,680,000). Sinking fund provisions applicable to series G require the redemption of a total of 3,600 shares at par semiannually (representing annual payments of $720,000).

(d) Not callable by the company prior to September 1, 1984 through certain refunding operations that would involve the issuance of common stock or result in a lower rate of cost to the company than the dividend rate on the shares to be redeemed; otherwise at $107.55 through September 1, 1982 to par after September 1, 2002. Applicable sinking fund provisions require the redemption of 16,000 shares at par annually (representing annual payments of $1,600,000).

(e) Not callable by the company prior to December 1, 1985 through certain refunding operations that would result in a lower rate of cost to the company than the dividend rate on the shares to be redeemed; otherwise at $107 through November 30, 1985 to $101.00 after November 30, 1990. Applicable sinking fund provisions require the redemption of 15,000 shares at par annually (representing annual payments of $1,500,000). The company may, but is not required to, redeem an additional 15,000 shares at par on December 1 in any year.

(f) Not callable by the company prior to March 1, 1984 through certain refunding operations that would result in a lower rate of cost to the company than the dividend rate on the shares to be redeemed; otherwise at $108.80 through February 28, 1984 to $101.00 after March 1, 1994. Applicable sinking fund provisions require the redemption of 22,500 shares at par annually commencing March 1, 1986 (representing annual payments of $2,250,000). The company may, but is not required to,

redeem an additional 22,500 shares at par on March 1 in any year beginning in 1986.

(g) Not callable by the company prior to March 1, 1983; thereafter at $106.47 through February 29, 1984 to $101.07 after March 1, 1989. Applicable sinking fund provisions require the redemption of 96,000 shares at par annually commencing March 1, 1986 (representing annual payments of $9,600,000).

(h) Redeemable on or after May 1, 1986 at the option of the Company at $101.99 until May 1, 1987; thereafter at par. All shares then outstanding are required to be redeemed on May 1, 1988 at par.

If there were to be any arrearage in dividends on any of its preferred stock or in the sinking fund requirements applicable to any of its redeemable preferred stock (each such dividend being cumulative and of equal ranking with other such dividends, and each such requirement being cumulative and of equal ranking with other such requirements), the company could not pay dividends on its common stock or acquire any shares thereof for consideration. If any such dividend arrearage were to equal six or more quarterly dividends, the holders of preferred stock, in addition to their other voting rights and voting by the classes prescribed for this purpose, could elect a total of six directors (all series of serial preferred stock, regardless of par value and whether redeemable or non-redeemable, comprising one such class and being entitled to elect two of the six directors). See Note 2 in regard to other voting rights of holders of preferred stock.

The combined aggregate amount of sinking fund requirements for the above issues each year for the next five years will be as follows: $5,060,000 in 1982, $3,820,000 in 1983 through 1985 and $15,670,000 in 1986.

Redeemable preferred stock transactions during each of the three years in the period ended December 31, 1981 were as follows (dollars in thousands):

Description	Number of Shares	Par Value Amount
Balance, December 31, 1978...	1,000,000	$100,000
Redeemable preferred stock		
$8.80 series K.....	600,000	60,000
Sinking fund retirements:		
$8.50 series F.....	(16,800)	(1,680)
$8.50 series G.....	(7,200)	(720)
$10 series H.....	(16,000)	(1,600)
Balance, December 31, 1979...	1,560,000	156,000
$9.70 series L.....	480,000	48,000
Sinking fund retirements:		
$8.50 series F.....	(164,000)	(16,400)
$8.50 series G.....	(7,200)	(720)
$10 series H.....	(16,000)	(1,600)
Balance, December 31, 1980...	1,852,800	185,280
$11.95 series M.....	195,000	19,500
Sinking fund retirements:		
$8.50 series F.....	(16,800)	(1,680)
$8.50 series G.....	(7,200)	(720)
$10 series H.....	(16,000)	(1,600)
$10.70 series I.....	(15,000)	(1,500)
Balance, December 31, 1981...	1,992,800	$199,280

Premiums and expenses — net of redeemable preferred stock issues are included in the amounts presented in the second table in Note 2.

4. Long-Term Debt

Details of long-term debt outstanding at December 31, 1981 and 1980 are as follows:

	1981	1980
	(Thousands of Dollars)	
First mortgage bonds:		
9.50% series due February 15, 1982 (i)..	$ 100,000	$ 100,000
3½% series due February 1, 1983.....	14,500	14,500
3½% series due November 1, 1983....	5,723	5,723
3¼% series due March 1, 1984.....	15,000	15,000
5⅛% series due October 1, 1987.....	15,000	15,000
4.70% series due March 1, 1989.....	20,000	20,000
4.80% series due November 1, 1991...	35,000	35,000
4.45% series due June 1, 1992.....	25,000	25,000
4.40% series due December 1, 1992....	25,000	25,000
4.50% series due September 1, 1993....	15,000	15,000
6.25% series due September 1, 1997....	25,000	25,000
12.875% series due May 15, 2000.....	185,000	185,000
10.625% series due November 15, 2000.....	72,000	75,000
7.45% series due March 15, 2002.....	60,000	60,000
9.95% series due March 1, 2004.....	75,000	75,000
6.20% series due April 1, 2004.....	50,000	50,000
6.45% series due April 15, 2007.....	43,000	43,000
6% series due January 15, 2008.....	34,000	34,000
12⅛% series due October 15, 2009....	75,000	75,000
Unamortized discount and premium.....	(956)	(1,082)
Total first mortgage bonds.....	888,267	891,141
6.60% pollution control indebtedness due October 1, 1983 (a).....	65,000	65,000
Less securities held by trustee (b)....	(12,109)	(26,386)
Unsecured notes payable due 1983 and 1984 (c).....	192,006	—
Pollution control indebtedness due April 1, 1986 (d).....	55,200	—
16½% unsecured note payable due July 15, 1988 (e).....	50,000	—
17½% unsecured note payable due October 15, 1986 (f).....	60,000	—
Other.....	3,425	—
Unsecured notes payable (g).....	70,000	70,000
Capitalized lease obligation (h).....	51,746	52,433
Unamortized discount.....	(705)	—
Total long-term debt.....	1,422,830	1,052,188
Less current maturities (i):		
Sinking fund requirement on 10.625% series due November 15, 2000.....	(3000)	(3000)
Capitalized lease obligation.....	(740)	(688)
Other.....	(322)	—
Total long-term debt less current maturities.....	$1,418,768	$1,048,500

(a) Secured by a long-term letter of credit from a bank.

(b) Representing pollution control funds deposited with a revenue bond trustee and to be disbursed as construction progresses on the facilities financed.

(c) Consisting of $192,006,000 due in four installments, two each in 1983 and 1984, with interest at 105% of prime to December 31, 1983 and 107% of prime thereafter. As required by the note, the declaration by the company of any dividend on its Common Stock, if the per share dividend thus declared would exceed the previous per share dividend, is subject to certain restrictions related to earnings; for the year ended 1981 up to $145,051,000

could have been paid in dividends on Common Stock compared to the $114,337,000 actually paid.

(d) Consisting of a borrowing from a governmental authority which is funding that amount with a series of commercial paper borrowings supported by irrevocable letters of credit from banks and with five year, revolving loan commitments from the banks allowing the authority to obtain borrowings thereunder in the event of disruptions in the commercial paper market; the cost to the Company of its borrowings from the authority is equal to the latter's cost of money in the commercial paper market plus fees and interest payable to the banks.

(e) Representing an obligation to APS Finance Company N.V. ("Finance") to enable it to repay its 16¼% Guaranteed Debentures Due 1988, together with annual interest payments thereon commencing July 15, 1982. Finance, a Netherlands Antilles corporation, is a wholly-owned subsidiary of the Company which serves as a financing corporation to raise funds outside the United States for the Company and its subsidiaries.

(f) Representing an obligation to Finance to enable it to repay its 17¼% Guaranteed Debentures Due 1986, together with interest payments thereon commencing October 15, 1982.

(g) Consisting of $30,000,000 payable in thirteen equal quarterly installments of $2,143,000 commencing June 1, 1983 and a final installment on September 1, 1986 or, under certain conditions, in ten equal quarterly installments commencing June 1, 1984, with interest through August 31, 1982 at 105% of prime (107% thereafter); and $40,000,000 due February 1, 1985, with interest through December 31, 1981 at 105% (107% thereafter) of the higher of prime or ½% above the current rate on 90 to 119-day, dealer-placed commercial paper.

(h) Represents the present value of future lease payments (discounted at the interest rate of 7.48%) on a combined cycle plant sold and leased back from the independent owner-trustee formed to own the facility. The lease requires semi-annual payments of $2,299,000 through June 1983 and then $2,582,000 through June 2001, and includes renewal and purchase options based on fair market value. This plant is included in plant in service at its original cost of $54,405,000; accumulated amortization at December 31, 1981 was $12,160,000.

(i) The $100,000,000 of 9.50% first mortgage bonds due February 15, 1982 were classified long-term at December 31, 1981, as such debt was refinanced in February 1982 by the Company's borrowing the proceeds of $100,000,000 of guaranteed debentures of Finance, due 1989 at interest rates ranging from 16¼% to 16½%.

Aggregate annual payments which will be due on long-term debt and for sinking fund requirements through 1986 are as follows: 1982, $3,740,000; 1983, $191,734,000; 1984, $124,029,000; 1985, $53,137,000; 1986, $138,645,000. Other sinking fund requirements for each year through 1986 for the outstanding first mortgage bonds will be as follows: 1982, $2,552,000; 1983, $2,350,000; 1984, 1985 and 1986, $2,200,000; as allowed in the bond indenture, requirements of this type have in the past been satisfied by certification of property additions of 1⅔ times the amount stated and the company expects to meet similar requirements in that manner in the future. For sinking fund requirements and redemptions at the option of the holders of redeemable preferred stock, see Note 3.

Substantially all utility plant, other than the combined cycle plant mentioned above, is subject to the lien of the first mortgage bonds. The indenture respecting the first mortgage bonds includes provisions which would restrict the payment of dividends on common stock under certain conditions which did not exist at December 31, 1981.

On February 18, 1982 the Company issued $60,250,000 of 10⅜% first mortgage bonds in connection with the borrowing of the proceeds of an equivalent amount of pollution control bonds.

5. Project Financing

In 1977 the company initiated, and in May 1981 concluded, a "project financing" of the cost of construction of Unit 4 of its Cholla Plant, which went into commercial operation in June 1981. The project financing involved the interim ownership of the Unit by an independent corporation and a commitment by the company to purchase the Unit shortly before its completion for an amount equal to the interim owner's cost of acquiring, completing and financing the Unit. Such financing was provided by bank loans in two categories consisting of conventional loans and pollution control financing provided through a governmental authority.

The project financing had been accounted for by including the costs of construction of the Unit in construction work in progress and net outstanding balances of the bank loans as a liability in the balance sheet.

The company funded its purchase of the Unit in May 1981 with an assumption and modification of the conventional portion of the former project financing and with a new form of pollution control financing as described in Notes 4(c) and (d).

6. Short-Term Borrowings and Compensating Balances

The Company had bank lines of credit of approximately $131,000,000 at December 31, 1981 and 1980. Under the lines, no amounts were outstanding at December 31, 1981, and $7,000,000 was outstanding at December 31, 1980. The lines were segregated into working lines of $51,000,000 and commercial paper backup lines of approximately $80,000,000 for which commitment fees are payable primarily at ½% per annum.

Compensating balances required at banks for the working lines, but which were not legally restricted, were generally 10% of the line plus 5% (10% in some instances) of borrowings. Substantially all cash shown in the Balance Sheets is considered compensating balances.

The bank lines have been augmented by a $60,000,000 credit facility with foreign banks, of which $48,000,000 was outstanding at December 31, 1981 at an effective rate of 14.69%. The commitment fee for such facility is 3/8% per annum, and the rate of interest fluctuates at 1/2% over the applicable London Interbank Offered Rate.

At December 31, 1981, the company also had $40,000,000 of borrowings from a foreign bank which is not a participant in the above mentioned credit facility.

7. Jointly-Owned Facilities

At December 31, 1981, the company owned the following interest in jointly-owned electric generating and transmission facilities:

	Percent owned by Company	Plant in Service	Accumulated Depreciation	Net Plant in Service	Construction Work in Progress
		(Thousands of Dollars)			
Navajo Plant	14.0%	$115,070	$22,800	$ 92,270	$ 1,139
Four Corners Units 4 and 5	15.0	32,535	11,075	21,460	29,771
Palo Verde Nuclear Generating Station Units 1, 2 and 3	29.1	—	—	—	1,025,404
Certain transmission lines from:					
1) the Navajo Plant (the company's interest in which varies from 14% to 100%)	31.4	27,423	5,287	22,136	359
2) the Palo Verde Nuclear Generating Station (the company's interest in which varies from 11% to 100%)	29.7				27,134
Total		$175,028	$39,162	$135,866	$1,083,807

The foregoing dollar amounts correlate to the company's percentage interest in each facility. Financing for all such interests is provided by the company. Its share of related operating and maintenance expenses is included in its corresponding operating expenses.

8. Income Tax Expense

The components of income tax expense for each of the three years in the period ended December 31, 1981 are as follows:

	1981	1980	1979
	(Thousands of Dollars)		
Currently payable:			
Federal	$ 8,206	$ 7,128	$ 6,751
State	6,714	3,740	3,938
Total current	14,920	10,868	10,689
Deferred:			
Federal	2,410	3,630	2,452
State	2,308	2,021	1,281
Total deferred	4,718	5,651	3,733
Total	$19,638	$16,519	$14,422

Deferred income tax expense results primarily from certain timing differences in the depreciation of property placed in service after January 1, 1977, as prescribed by the ACC.

Federal and state income taxes are included in the components of net income as follows:

	1981	1980	1979
	(Thousands of Dollars)		
Operating expenses	$22,381	$17,209	$13,556
Other income	(2,743)	(690)	866
Total	$19,638	$16,519	$14,422

Following is a summary of the difference between income tax expense and the amount obtained by multiplying income before income taxes by the statutory federal income tax rate of 46%.

	Year ended December 31,		
	1981	1980	1979
	(Thousands of Dollars)		
Federal income tax at statutory rate	$99,853	$73,512	$62,560
Increases (reductions) in taxes resulting from:			
Tax under book depreciation	6,055	1,895	777
Allowance for funds used during construction	(42,067)	(29,232)	(19,420)
Investment tax credit	(43,969)	(25,481)	(24,944)
Taxes, pension costs and other items capitalized	(6,868)	(6,202)	(5,122)
State income tax—net of federal income tax benefit	4,869	3,107	2,612
Other	1,765	(1,080)	(2,041)
Total provision for federal and state income tax	$19,638	$16,519	$14,422

At December 31, 1981 the company had approximately $65,000,000 of investment tax credit carryforwards which will expire through 1996. Of this amount, approximately $32,700,000 has been recognized as a reduction of deferred taxes.

On November 12, 1981 the Company consummated the sale to another corporation of certain federal income tax benefits, $25,000,000 of which represents investment tax credits which have been deducted in deriving the carryforward amounts referred to above, in exchange for cash. The Company has recorded the proceeds of the sale as a deferred credit and is amortizing the amount of such proceeds on a straight-line basis over approximately 30 years pursuant to an order of the ACC.

9. Pension Plan

The company's pension plan, a defined benefit plan, covers virtually all employees. Pension expenses for 1981, 1980 and 1979 were $10,019,000, $10,434,000 and $9,567,000 respectively. The company makes annual contributions to the plan equal to the amounts allowed for pension expense.

	January 1,	
	1981	1980
	(Thousands of Dollars)	
Actuarial present value of accumulated plan benefits:		
Vested	$ 62,959	$64,594
Non-vested	2,851	3,251
Total	$ 65,810	$67,845
Net assets available for benefits	$105,171	$84,187

The actuarial present value (assuming rates of return of 9.75% and 8.75% respectively) of accumulated plan benefits presented above has not been calculated with reference to the effects of projected inflation, whereas such effects are considered by the company with reference to the adequacy of plan assets; accordingly, the company considers the utility of the comparison suggested to be extremely limited.

10. Commitments and Contingencies

On February 17, 1982 the ACC issued an order which held that the Company had no refund obligations with respect to $80,386,000 of retail revenues collected between January 1978 and May 1980. Such revenues were collected pursuant to two 5% step increases authorized by a 1977 order of the ACC, a portion of such order being subsequently invalidated by the Arizona Supreme Court (thereby giving rise to the potential refund obligation). Although the February 17 order may still be the subject of judicial action, based on the opinion of its counsel, Snell & Wilmer, the Company believes that the ultimate resolution of this matter will not be material to its financial statements.

At December 31, 1981, the Company had collected approximately $18,500,000 of wholesale revenues subject to refund as a result of federal regulatory proceedings involving the Company. Legal counsel to the Company has assessed its contingent liability with respect to a substantial portion of that amount as remote.

The Four Corners and Navajo plants of the Company are located on the Navajo Indian Reservation, as are certain of its transmission lines and all of its contracted coal sources. The Tribal Council has adopted resolutions which purport to impose taxes that, if valid, would cost the Company an estimated $2,000,000 per quarter. The Company has obtained an order from the ACC that should allow it to recover from its retail customers the amounts of such taxes that are allocable to them if the payment thereof is ultimately required. Based on the opinion of Snell & Wilmer, the Company believes that the final determination of these matters would not be material to its financial statements.

The Company has significant purchase commitments in connection with its continuing construction program. Construction expenditures in 1982 have been estimated at $390,000,000.

11. Supplementary Income Statement Information

General taxes during each of the three years in the period ended December 31, 1981 are as follows:

	Year ended December 31,		
	1981	1980	1979
	(Thousands of Dollars)		
Taxes, other than income taxes:			
Ad valorem	$49,457	$48,191	$45,084
Sales	33,152	29,273	26,415

12. Business Segments

Listed below is selected information relating to the company's electric and gas operations:

	Year Ended December 31,					
	1981		1980		1979	
	Electric	Gas	Electric	Gas	Electric	Gas
	(Thousands of Dollars)					
Operating revenues	$ 730,788	$151,366	$ 621,864	$143,896	$ 533,185	$131,238
Operating income before income taxes	272,343	956	180,455	6,330	151,480	12,946
Utility plant	3,532,518	155,752	3,055,697	144,230	2,597,139	137,934
Accumulated depreciation and amortization	510,585	65,912	444.537	60,982	386,503	56,229
Capital expenditures	538,814	19,639	483,392	20,728	449,104	19,012

13. Selected Quarterly Financial Data (Unaudited)

Quarter	Operating Revenues	Operating Income	Net Income	Earnings for Common Stock	Earnings per Share of Common Stock
	(Thousands of Dollars Except Per Share Data)				
1981					
First	$191,582	$34,628	$26,015	$19,658	$0.41
Second	205,428	53,774	46,285	39,553	0.75
Third	258,678	89,522	67,441	60,569	1.14
Fourth	226,466	72,994	57,693	50,868	0.93
1980					
First	171,772	29,023	23,995	18,168	0.47
Second	174,208	26,370	19,801	13,349	0.31
Third	234,601	68,527	59,879	53,470	1.26
Fourth	185,179	45,656	39,615	33,241	0.70

14. Supplementary Information to Disclose the Effects of Changing Prices (Unaudited)

The following supplementary information is furnished pursuant to Statement No. 33 of the Financial Accounting Standards Board for the purpose of illustrating the effects of changing prices in an inflationary environment. It offers some perspectives of approximated effects of inflation, and is not intended as precise measurements of those effects.

The company and other public utilities similarly situated are subject to rate-making procedures which, by law and practice, in large part utilize the historical cost of utility plant in the determination of the allowed recovery (through depreciation) of the investment therein and return thereon. This precludes or restricts a rate-making response to the effects of realizing such recovery and return in inflated dollars, compared to those in which the investment was made. The first table below presents two approximate measurements of those effects from the perspective of that portion of the investment, restated on alternative bases to reflect intervening cost escalation, which was not reflected in 1981 depreciation or in the company's return, and which is therefore not "recoverable."

For these presentations, "constant dollar" and "current cost" amounts were calculated by applying certain indices (or ratios derived therefrom) to certain historical or other amounts. In the case of constant dollars, the index was the Consumer Price Index for All Urban Consumers, which approximates the upward trend of prices in general during the indicated periods. In the case of current costs, the primary index was the Handy Whitman Index of Public Utility Construction Costs (an estimate of which was used for the last half of 1981), although the Consumer Price Index was used for construction work in progress. The company believes that the Handy Whitman Index is the more accurate of the two in estimating the prices it would incur to duplicate at various times its utility plant in service at the indicated dates. Over the period up to 1979 which is relevant to the information presented below, that index rose faster than the Consumer Price Index, but the reverse occurred in 1979, 1980 and 1981.

Depreciation expense for 1981 was recalculated by applying the company's composite depreciation rate to depreciable base determined by indexing the historical cost of the company's utility plant (or, in the case of the Current Cost presentation, certain appraised values thereof in 1969) from the times of construction (or appraisal). The amount by which the expense so recalculated exceeds that shown on the company's 1981 Statement of Income appears as an adjustment to income from operations. The Current Cost adjustment is the larger of the two because the accumulated Handy Whitman rise through 1981 exceeded the rise in the Consumer Price Index in the same period, thus producing a greater depreciable base (referred to in the discussion below as "Utility Plant at Current Cost").

The sum of the depreciation adjustment in the Constant Dollar column and the figure shown lower in that column as the "reduction to net recoverable cost" was derived through application of 1981 increases in the Consumer Price Index to historical costs of the company's utility plant. The comparable sum in the Current Cost column, again consisting of the depreciation adjustment plus the "reduction to net recoverable cost", reflects the larger depreciation adjustment referred to above, which is more than offset by the difference between the two measurements of cost (or price) escalation in 1981 which are described in the next paragraph.

The first such measurement is that of a hypothetical increase in the dollar value of the company's utility plant, and was derived by applying 1981 index rises (primarily in the Handy Whitman Index) to the Utility Plant at Current Cost, and subtracting the depreciation adjustment shown in the column. The second measurement is that of an assumed, unrecoverable dollar amount computed by applying the 1981 rise in the Consumer Price Index (which exceeded the corresponding rise in the Handy Whitman Index) to the Utility Plant at Current Cost.

In neither measurement did the company make any adjustments to asset values, or related income statement amounts, other than those discussed above in regard to utility plant and depreciation thereon. Fuel inventories and fuel and purchased gas expenses are, in effect, monetary items, due to applicable rate-making procedures which include adjustment clauses. In accordance with Statement No. 33, income taxes were not adjusted.

As contrasted to the assumed net value losses which, in the presentation below, are associated with the holding of assets committed to a regulated business, there is an assumed "holding gain" associated with borrowings that will be repaid with inflated dollars. The 1981 decline in the purchasing power of net amounts owed by the company (measured by the Consumer Price Index) appears in both columns, to result in a "net" difference between the assumed holding losses and gain.

Inferences which, in the case of some industries, may be drawn from information in the nature of that presented below as to the adequacy of future cash flows in relation to future plant replacement requirements are believed by the company to be less valid in the case of public utilities which, like itself, should be able to establish rates to cover increased costs of new plant. However, the information may provide some indication of the expanded capital structure that will be required for making plant replacements and additions with inflated dollars.

Income from Operations Adjusted for Changing Prices for the Year Ended December 31, 1981

	Constant Dollar Average 1981 Dollars	Current Cost Average 1981 Dollars
	(Thousands of Dollars, Except Per Share Amounts)	
Net Income, as reported in Statements of Income	$197,434	$197,434
Adjustment to restate depreciation expense	(63,468)	(73,040)
Income from operations (excluding reduction to net recoverable cost)	$133,966(a)	$124,394
Income per common share (after preferred stock dividend requirements and excluding reduction to net recoverable cost)	$2.05	$1.87
Increase in specific prices (current cost) of utility plant held during the year (b)	$ —	$358,542
Reduction to net recoverable cost	(183,108)	(125,842)
Effect of increase in general price level	—	(406,236)
Excess of increase in general price level over increase in specific prices after reduction to net recoverable cost	—	(173,536)
Gain from decline in purchasing power of net amounts owed	144,614	144,614
Net	$ (38,494)	$ (28,922)

(a) Including the reduction to recoverable net cost, operations on a constant dollar basis would have resulted in a loss of $49,142,000 for 1981.

(b) At December 31, 1981 Utility Plant at Current Cost was $5,136,242,000 while historical cost, or net cost recoverable through depreciation, was $3,111,773,000.

Five-Year Comparison of Selected Supplementary Financial Data
Adjusted for Effect of Changing Prices

	Year Ended December 31,				
	1981	1980	1979	1978	1977
	(Average 1981 Dollars in Thousands, Except for Per Share Amounts)				
Operating revenues	$ 882,154	$ 845,191	$ 832,515	$783,766	$740,934
Historical cost information adjusted for general inflation (1)					
Income from operations (excluding reduction to net recoverable cost)	$ 133,966	$ 102,253	$ 103,873	—	—
Income per common share (after dividend requirements on preferred stock and excluding reduction to net recoverable cost)	$ 2.05	$ 1.73	$ 2.22	—	—
Net assets at year-end at net recoverable cost (2)	$1,349,114	$1,232,559	$1,169,716	—	—
Reduction to net recoverable cost	$ 183,108	$ 263,591	$ 277,933	—	—
Current cost information (1)					
Income from operations (excluding reduction to net recoverable cost)	$ 124,394	$ 89,258	$ 87,252	—	—
Income per common share (after dividend requirements on preferred stock and excluding reduction to net recoverable cost)	$ 1.87	$ 1.43	$ 1.74	—	—
Excess of increase in general price level over increase in specific prices after reduction to net recoverable cost	$ (173,536)	$ (250,597)	$ (261,312)	—	—
Net assets at year-end at net recoverable cost (2)	$1,349,114	$1,232,559	$1,169,716	—	—
Reduction to net recoverable cost	$ 125,842	$ 151,781	$ 95,056	—	—
General information					
Gain from decline in purchasing power of net amounts owed (1)	$ 144,614	$ 188,245	$ 191,900	—	—
Cash dividends declared per common share	$ 2.20	$ 2.27	$ 2.43	$ 2.41	$ 2.30
Market price per common share at year-end	$ 18.75	$ 18.58	$ 20.44	$ 27.35	$ 31.10
Average consumer price index	272.4	246.8	217.4	195.4	181.5

(1) Not required for years prior to 1979.
(2) Consisting of common stock equity and non-redeemable preferred stock.

New Director

A prominent New Mexico state senator joined the company's board of directors in 1981.

Jack M. Morgan, a Farmington attorney, has been a state legislator since 1973. He serves on the New Mexico Senate's conservation and finance committees and is a past chairman of the Southwest Regional Energy Council.

Mr. Morgan received his business and law degrees from the University of Texas. He is a member of the Farmington Chamber of Commerce, the New Mexico State Bar Association, the San Juan County Republican Party and the State Central Committee.

He is a native of Portales, New Mexico.

Board of Directors

†**Joe Acosta, 58,** President, Acosta, Cordova & Pittman, CPAs, P.A. Phoenix, Arizona

Dino DeConcini, 48, Attorney at Law, of counsel to DeConcini McDonald Brammer Yetwin & Lacy, P.C. Phoenix, Arizona

*__Karl Eller, 53,__ President, Columbia Pictures Communications, Phoenix, Arizona

*__William T. Garland, 65,__ Chairman of the Board Garland-Rhuart Development Corporation (land development) Sedona, Arizona

†**Pamela Grant Korf, 42,** Chairman & Chief Executive Officer, Goldwaters, Division of Associated Dry Goods (general mercantile) Scottsdale, Arizona

*__Victor H. Lytle, 70,__ Chartered Life Underwriter Prescott, Arizona

Jack M. Morgan, 58, Attorney at Law and State Senator Farmington, New Mexico

Marvin R. Morrison, 58, Farmer, Cattle Feeder and Dairyman Morrison Brothers Ranch, Higley, Arizona

Henry B. Sargent, Jr., 47, Executive Vice President and Chief Financial Officer of the Company, Phoenix, Arizona

Wilma W. Schwada, 55, Civic Leader and Homemaker Tempe, Arizona

James P. Simmons, 57, Chairman of the Board, United Bank of Arizona, Phoenix, Arizona

Richard Snell, 51, Chairman, President and Chief Executive Officer, Ramada Inns, Inc., Phoenix, Arizona

*__Donald N. Soldwedel, 57,__ Publisher and General Manager, Yuma Daily Sun, Yuma, Arizona

*__Maurice Tanner, 60,__ Chairman of the Board and Chief Executive Officer, The Tanner Companies (construction and materials supply) Phoenix, Arizona

*__Keith L. Turley, 58,__ Chairman, President, and Chief Executive Officer of the Company, Phoenix, Arizona

†**Douglas J. Wall, 55,** Member of the Law Firm of Mangum, Wall, Stoops & Warden, Flagstaff, Arizona

†**Morrison F. Warren, 58,** Professor of School Administration and Supervision and Director of the I.D. Payne Laboratory for Multicultural Education at Arizona State University, Tempe, Arizona

†**Ben F. Williams, Jr., 52,** Mayor of City of Douglas and Attorney at Law, Douglas, Arizona

Thomas G. Woods, Jr., 55, Executive Vice President and Chief Operating Officer of the Company, Phoenix, Arizona

*Member of Executive Committee
†Member of Audit Review Committee

Director Emeritus

E. Ray Cowden, 90, Cattle Feeding and Investments, Phoenix, Arizona

Officers

G. Carl Andognini, 46, Vice President, Electric Operations
D. Louis Broussard, 61, Vice President, Research and Development
O. Mark DeMichele, 48, Executive Vice President, Customer, Employee and Corporate Relations
Karl Eller, 53, Chairman of Executive Committee
Joseph A. Gelinas, 37, Vice President, Employee Relations
Gerald J. Griffin, 61, Assistant Secretary
Russell D. Hulse, 54, Vice President, Resources Planning
Jerry Human, 51, Vice President, Customer Services
Charles D. Jarman, 46, Vice President, Engineering and Construction
John C. Ogden, 36, Vice President and Controller, Economic Planning and Control
Wm. T. Quinsler, 57, Secretary and Assistant Treasurer
H. B. Sargent, Jr., 47, Executive Vice President and Chief Financial Officer, Corporate Finance, Planning and Control
***Keith L. Turley, 58,** Chairman, President and Chief Executive Officer
E. E. Van Brunt, Jr., 50, Vice President, Nuclear Project Management
Paul A. Williams, 36, Treasurer, Finance and Tax Accounting
T. G. Woods, Jr., 55, Executive Vice President and Chief Operating Officer, Operations

(Birthdate ages at Annual Meeting date April 22, 1982)

Regional General Managers

A. G. (Andy) Anderson, 50, Central Region
Jack E. Duffy, 44, Northern Region
Guy W. Lunt, 48, Southern Region

Shareholder Information

Stocklisting
(Symbol: AZP)
Common stock of the company and the $10.70 cumulative preferred stock, Series I, are listed for trading on the New York Stock Exchange. Common stock is also listed on the Pacific Stock Exchange.

Transfer Agent
First Interstate Bank of Arizona, N. A. Phoenix, Arizona
The First National Bank of Boston, Boston, MA (common stock only)

Registrars
The Valley National Bank of Arizona, Phoenix, Arizona.
The First National Bank of Boston, Boston, MA (common stock only)

General Counsel
Snell & Wilmer, Phoenix, Arizona

Auditors
Deloitte Haskins & Sells, Phoenix, Arizona

Dividend Reinvestment and Stock Purchase Plan
A Prospectus describing this plan for holders of the company's common stock is available to shareholders upon request. Write: Office of the Secretary, Sta. 1892, at the address below.

Form 10-K
A copy of our Annual Report to the Securities and Exchange Commission, Form 10-K, will be available after March 31, 1982 without charge, upon written request of shareholders. Write: Office of the Secretary, Sta. 1892, at the address below.

Statistical Report
A detailed Statistical Report for Financial Analysis 1971-1981 will be available by mid-April on request. Write: Office of the Treasurer, Sta. 1820, at the address below.

MAILING ADDRESS:
P. O. Box 21666
Phoenix, Arizona 85036