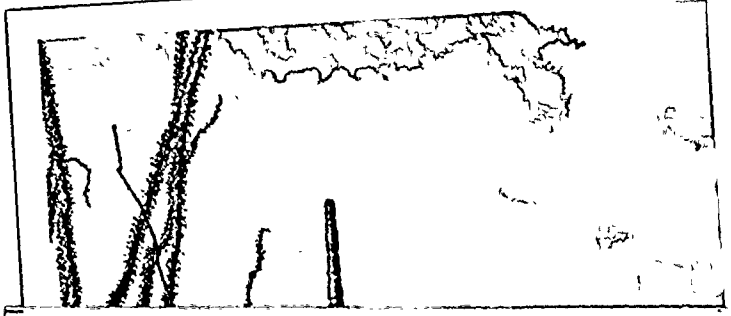
SALT RIVER PROJECT

1982-'83 ANNUAL REPORT



Background

Salt River Project, named for the major river that supplies water to the Phoenix metropolitan area, has played a leading role in the growth of the Salt River Valley, providing water and power to area residents. The Project comprises two organizations—the Salt River Valley Water Users Association (the Association) and the Salt River Project Agricultural Improvement and Power District (the District).

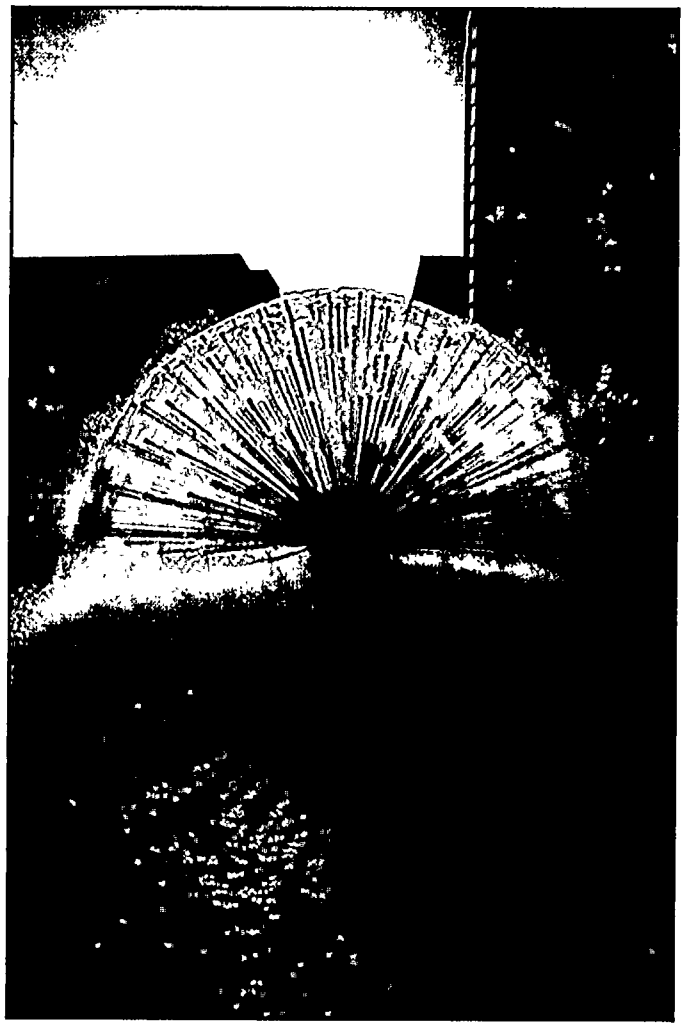
The Association is a private Arizona corporation. It participates in the management of the 13,000-square-mile watersheds of the Salt and Verde rivers, in cooperation with the U.S. Forest Service. The Association administers water rights of the Project's 250,000-acre area and operates and maintains the irrigation transmission system which carries water to agricultural, municipal, industrial and residential users.

The District, a political subdivision of Arizona, operates under contracts with the United States and provides electricity to residential, commercial, industrial and agricultural power users in a 2,900-square-mile service area in parts of Maricopa, Gila and Pinal counties.

In line with the long-standing reclamation principle, SRP uses a portion of its electric revenues to help support its water operations. This practice helps keep water delivery charges to farmers, cities and homeowners at reasonable levels. And SRP also maintains electric rates that are competitive with those of other utilities in the area.

Contents

1 Highlights
2 Letter from management
4 POWER: Keeping it affordable and efficient for customers
8 WATER: It was a year of plenty
12 COMMUNITY INVOLVEMENT: We are dedicated to service
16 FINANCES: Revenue performance was strong
20 Combined financial statements
22 Notes to combined financial statements
26 Statistical review
28 Board and council members and management



PUBLISHER
SRP Communications &
Public Affairs Department
EDITOR
Susanne Jones
DESIGN AND ILLUSTRATION
Larry MacLean
PHOTOGRAPHY
Chet Snellback, Ed Toliver,
Mark Durben

Highlights

Revenues

	Fiscal Year 1983 Dollars ($000)	Percent
Residential	$257,580	39.5%
Commercial and Industrial	212,484	32.6
Sales for Resale	144,074	22.1
Agricultural Pumping, Street and Highway Lighting, and Public Authorities	25,400	3.9
Water and Irrigation Revenues	6,968	1.1
Other	5,633	.8
TOTAL	$652,139	100.0%

Demands on Revenues

Fuel Used for Generation	$162,134	24.9%
Purchased Power	22,572	3.5
Other Operating Expenses	93,300	14.3
Taxes and Tax Equivalents	60,426	9.3
Depreciation and Amortization	65,251	10.0
Maintenance	54,222	8.3
Net Financing Costs	35,069	5.4
Miscellaneous Deductions	1,231	.2
Gain on Sale of Electric Generating Facilities	(9,527)	(1.5)
Loss on Defeasance of Revenue Bonds	7,506	1.1
Reinvested	159,955	24.5
TOTAL	$652,139	100.0%

Power Operations

	Fiscal 1983	Fiscal 1982	Fiscal 1981
Number of Energy Customers	359,561	341,412	330,251
Average Annual Usage Per Residential Customer (KWH)	12,277	12,798	12,310
Average Annual KWH Revenue Per Residential Customer (Cents)	6.47	6.55	5.78
Gross Plant Investment	$3,386,983	$3,265,863	$2,843,247
Long-Term Debt	$2,495,914	$2,430,688	$2,383,366
Ratio of Long-Term Debt to Total Capitalization	76.0	79.4	83.5
Debt Service Coverage Ratio	1.92	2.02	1.74

Water Operations

	Calendar 1982	Calendar 1981
Assessed water accounts	179,532	178,796
Water runoff (acre-feet)	1,667,257*	566,243
Water in storage, Dec. 31 (acre-feet)	1,631,411	1,116,338
Sources of water for deliveries (acre-feet)	1,054,163	1,222,376

**Based on U.S.G.S. provisional records and subject to adjustments*

President
John Lassen

Vice President
Marcel Boulais

General Manager
A.J. Pfister

Letter from Management

Salt River Project overcame the impacts of a slumping economy to produce one of the brightest financial years in its history.

By capitalizing on profitable opportunities in fiscal 1982-83, the Project achieved record net revenues of $160 million.

Aggressive marketing of surplus energy and the sale of 5.91 percent of the Palo Verde Nuclear Generating Station aided revenue performance. A 24.7 percent increase in surplus energy sales offset revenue losses due to reduced sales to Arizona copper mines, cooler than normal temperatures and energy conservation.

Debt service coverage at year end was 1.92, the second best ratio in the past decade. It was a slight decline from an especially high 2.02 in fiscal 1981-82.

SRP's solid financial performance, a very successful bond information program held in December 1982, and the Project's AA/Aa bond ratings all contributed to continued favorable reception of SRP's debt in the municipal market.

SRP also profited from the sale of 5.91 percent (225,000-kilowatts) of surplus generating capacity from the Palo Verde Nuclear Generating Station. The Project recouped its capital investment, and gained $9.5 million in the $266 million transaction. Load forecasts showed the capacity would not be needed until the 1990s. Nevertheless, SRP remains a major participant in Palo Verde and a strong supporter of nuclear power.

The excess energy sales and the Palo Verde capacity sale helped reduce the size of a rate increase that took effect near the end of the fiscal year. Electric rates were raised by an average of 5.5 percent in April. It was the first increase in two years.

A portion of the proceeds from the Palo Verde sale was used to refund $165 million of one-year bond anticipation notes.

Another key financial accomplishment was the refund of high interest revenue bonds issued in 1981. The refunding will save SRP about $7.3 million per year in debt service requirements over the next 38 years. The bonds would have matured in 2021.

Funds for future construction were raised through the sale of $100 million in revenue bonds in February at a negotiated interest rate of 9.75 percent. In January, Arizona residents purchased $16 million in SRP "minibonds," the largest sale to date. Minibonds are sold in denominations of $500.

SRP clamped rising operating costs by reducing fuel inventories by $16.0 million and by eliminating 34 construction and maintenance positions when maintenance work slackened. Most of these employees were able to bid into other areas.

Oil essentially was eliminated as a generating fuel during the fiscal year after the last of SRP's oil-burning generating stations was converted to burn natural gas in May 1982.

The Project continued to increase its use of coal to meet customers' energy requirements. The availability of coal-fired generators allowed SRP to supply 81.1 percent of their electricity with the fossil fuel.

In an effort to ensure a long-term supply of coal at the most reasonable prices, SRP expanded a coal exploration program in New Mexico to develop its own source of the fuel.

The search for new fuel resources only underscored the necessity to conserve the resources in use. Consequently, conservation activities occupied much of SRP's efforts during the year. Energy saver advisers shared water and power conservation tips through new weekend Power Saver Workshops and a novel Power Saver Store located in busy shopping areas.

High runoff into SRP reservoirs quenched concern about another dry year. Surplus water had to be released into the normally dry Salt River channel through metropolitan Phoenix. However, flows were kept at relatively low rates. Due to local bridge-building programs of the past few years, traffic disruption was minimal.

Despite a temporary abundance of water, SRP continued to emphasize the importance of saving water.

SRP water managers met with city of Phoenix officials to evaluate the city's long-term water needs. The Project assisted with short-term solutions to Phoenix' immediate water problems.

Meanwhile, Congress continued to debate responsibility for funding Plan 6, a proposed water control plan for central Arizona. Elements of the plan call for two new dams to increase storage capacity on the Verde and Agua Fria rivers. Included in the plan is a new or modified Roosevelt Dam and a modified Stewart Mountain Dam on the Salt River. The modifications are needed to meet new flood design criteria established by the U.S. Bureau of Reclamation.

When the funding solution seemed far off, SRP implemented interim measures at Bartlett Dam to improve flood handling capabilities on the Verde River. Other interim steps are being considered for dams on the Salt River.

A similar regard for safety was evident among employees. SRP's employees achieved the lowest lost-time accident frequency in the history of SRP and earned the company third place in the American Public Power Association's safety contest.

Both SRP and members of IBEW Local Union 266 were pleased with the outcome of collective bargaining in the establishment of a new 23-month contract that expires in November 1984. The agreement assures hourly employees of an annual 5.6 percent wage increase and improved benefits. SRP gains through provisions that allow it to hold down production costs and to continue to manage effectively. Salaried employees received merit increases in February.

Employee development remained an important focus of SRP's efforts. Among new programs is one that offers qualified female employees the opportunity to train for management positions. Other programs aim to enhance the leadership skills of supervisory and management personnel.

The fiscal year ushered in a change of principal leadership. John Lassen took the oath of office as president on May 3. Lassen, who replaced Karl F. Abel, had served as vice president for a decade. Marcel Boulais, longtime chairman of the councils of SRP, was elected as vice president. The new officers' lengthy association with SRP and familiarity with its operations helped to make a smooth transition.

Finally, we applaud the efforts of each of our employees, to whom belongs credit for a successful year. Through wisdom, skill and eager acceptance of responsibility, they turned challenges into opportunities. As a result of their efforts, SRP easily leaped the year's economic hurdles and continued a tradition of providing water and power in a reliable and cost-efficient manner.

POWER: Keeping it affordable and efficient for customers

EMPLOYEES lay underground conduit.

In an ongoing effort to meet the energy needs of SRP customers in the most economical, efficient and reliable fashion, we looked east to New Mexico to expand our coal exploration program. We glanced north to Hoover Dam to study the feasibility of a proposed direct current transmission line. And we turned west to assist in the development of the Palo Verde Nuclear Project.

Nuclear power moved closer to becoming a way for SRP to generate electricity, as Palo Verde Nuclear Generating Station's first unit neared completion and scored high marks on two preoperational tests. A combination of nuclear and coal-fired generation will help ensure reasonable electric rates for customers in the future.

Another measure that will help keep down customers energy costs was the recent conversion of Santan Generating Station to burn natural gas. Modifications to the station in fiscal 1981-82 allowed SRP to virtually eliminate diesel oil as a generating fuel this past fiscal year.

Meanwhile, SRP continued an active construction schedule. During the year, several major transmission facilities went into service while other energy-related facilities moved through various stages of planning and development.

Nuclear power is near

The first of three 1,270,000 kilowatt (kw) units of the Palo Verde Nuclear Generating Station breezed through two preoperational tests in early 1983. Tests showed the unit's structural integrity and air tightness were

better than standards set by the Nuclear Regulatory Commission.

By the end of the fiscal year, Unit 1 was 99 percent complete. Fuel loading is scheduled for November 1983 and commercial operation expected in May 1984.

Overall, the generating station is 87 percent complete. The second and third units are scheduled for operation in 1985 and 1987.

During the year, major components of the Palo Verde transmission system were completed. As project manager for the system, SRP supervised the design and construction of the transmission facilities.

Among construction milestones was the completion of a $750,000 maintenance building in the Palo Verde switchyard. The facility will eliminate wasted travel time when switchyard repairs are necessary by giving crews on-site access to maintenance tools and equipment.

The 75-mile, 500 kilovolt (kv) Palo Verde to Kyrene transmission line and the 500/230 kv Kyrene substation were energized in November 1982.

The transmission system will be needed to serve SRP customers in the southeast section of the Valley when Unit 1 begins operation. In the meantime, the facilities have strengthened SRP's system of energy exchanges with West Coast utilities.

SRP completed the sale of 5.91 percent ownership of the generating station to the Southern California Public Power Authority in September 1982.

In the early 1970s when Palo Verde was planned, projections showed SRP would need 1.1 million kw from the generating station by the mid-1980s. But a slower than projected population growth rate, rising energy costs and energy conservation changed projections. SRP decided to sell 225,000 kw of capacity rather than burden customers with the costs of paying for generating facilities they won't need for a decade or so. The Project will own 17.5 percent of the station's capacity when the first unit begins commercial operation.

Coal use increases

SRP's commitment to coal as an economic and efficient generating fuel never was better illustrated than during the past fiscal year.

Coal-fired generators supplied a record 81.1 percent of the energy our customers used—a 1.7 percent increase from the previous fiscal year.

Increased dependence on relatively inexpensive coal was a factor in SRP's ability to refund about $8 million to customers in a fuel adjustment decrease between July 1982 and May 1983.

And abundant coal-fired electric generation enabled SRP to increase profitable surplus energy sales to other utilities by 24.7 percent.

Completion of a coal mixing system at Coronado Generating Station will enhance further the station's efficiency and improve environmental protection. The system mixes the several types of fuels used at the station into a uniform blend. A stable fuel blend eliminates the need to adjust pollution and operational equipment to compensate for the variances in fuel consistency.

Combustion conditions at Coronado were improved to reduce the amount of diesel oil used as ignitor fuel. The changes will allow more economical use of coal-fired units to regulate system load and reduce the need for expensive gas-fired generation.

Improvements also were made in Coronado's cathodic protection system to

UNIT I of the Palo Verde Nuclear Generating Station scored high marks on preoperational tests in early 1983. The unit is expected to begin producing power for SRP customers by summer 1984.

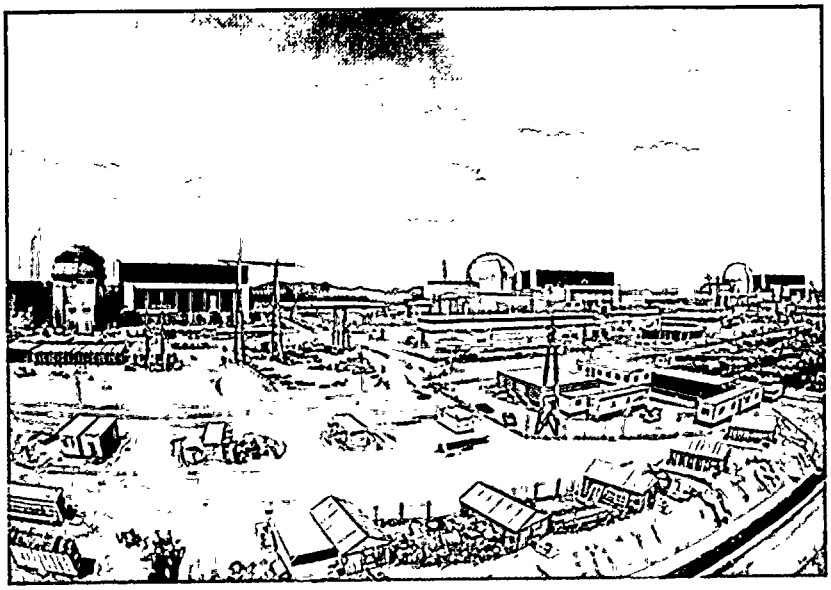
Project Energy Sources

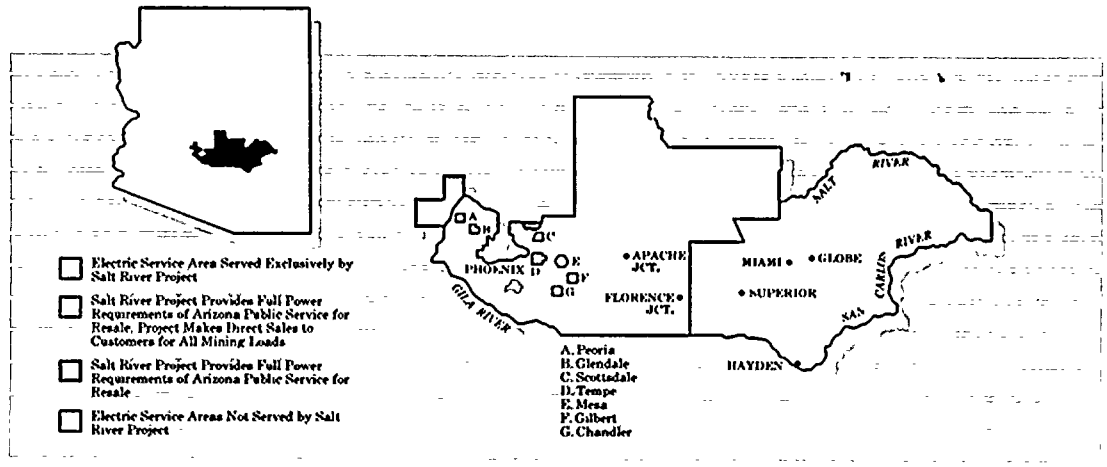
Year Ending April 30	Hydro [1]	Gas	Oil	Coal [2]	Nuclear	Misc. Purch.
1981	11.4	10.7	0.5	75.8	-	1.6
1982	8.3	10.8	-	79.4	-	1.5
1983	11.5	5.8	0	81.1	-	1.6
1984*	9.2	8.5	0	77.0	5.3	-
1988*	7.9	4.8	0.8	64.7	21.8	-

* *Projected*

1 Includes hydroelectric purchases

2 Includes USBR Navajo Entitlement purchase.





reduce corrosion to underground steel pipes that carry water and fuel to the generating station. Fifteen carbon anodes were placed underground to divert the destructive flow of naturally occurring electricity from the pipes. Carbon anodes are simpler and less expensive to replace than steel pipes.

SRP continued low-level construction of Coronado's Unit 3. One-half mile of underground piping leading from the turbine deck to the cooling towers was installed. And a concrete platform that will anchor the unit's turbine was constructed.

Current projections indicate SRP customers will need the unit's 350,000 kw capacity beginning in 1991. The construction schedule can be accelerated or delayed to accomodate changes in the projection.

Coal search continues

SRP intensified a search to develop its own coal reserves by purchasing coal exploration leases from the state of New Mexico on 3,500 acres of land in the western part of the state. The Project has exploration leases on another 16,278 acres of New Mexico land.

Exploratory drilling on the new parcels tentatively is planned to begin during the summer of 1984.

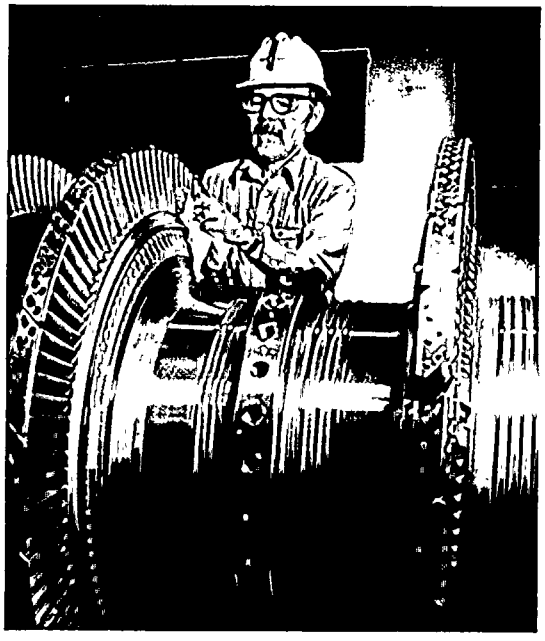
If a coal mine is developed on any of these parcels, the fuel would be transported for use at Coronado Generating Station, near the New Mexico border.

Meanwhile, SRP awaits final approval from the state of Colorado of the purchase of Trapper Coal Mine. The mine is adjacent to Craig Generating Station in Craig, Colorado.

SRP's board of directors authorized contract execution in May 1982 for a 29 percent ownership of the $45 million purchase.

Because the mine is situated on state and federal land, approval by the state of Colorado and the U.S. Department of the Interior is required before the transaction can be completed. The Interior Department has approved the sale.

Trapper Mine has the potential to produce about 70 million tons of surface-mined coal. Another 120 million tons could be available underground.



AN EMPLOYEE at Navajo Generating Station polishes a turbine rotor before it was installed on Unit 3 during a major overhaul.

Alexander system completed

SRP employees completed construction of the $14 million 230/69 kv Alexander Substation and 230 kv Agua Fria-Alexander transmission line in April 1983, slightly ahead of schedule.

The facilities are needed by summer 1983 to serve a rapidly developing area in northwest Phoenix.

The 9.5 mile transmission line links the new substation with the Agua Fria Generating Station in Glendale.

SRP studies DC line

Technical studies were begun in July 1982 to determine the feasibility of constructing a 500-kv direct current (DC) transmission line that would allow SRP to exchange as much as 200,000 kilowatts of electricity with West Coast utilities.

The 250-mile Mead-Phoenix transmission line would link the Project with California and Pacific Northwest utilities at Hoover Dam.

The line would benefit customers by enabling SRP to double its sales of surplus coal-fired and future nuclear-produced energy, while providing a way for SRP to purchase inexpensive hydroelectric power.

Environmental and technical consultants have completed some preliminary studies. Public meetings were scheduled in May 1983 to discuss environmental impact of the line. A draft environmental impact statement is expected to be completed in late June 1983.

The board authorized SRP's participation in the two-year feasibility study in December 1981. The following May, SRP was named development manager for the study by participating utilities.

Direct current is more efficient than alternating current (AC) in the transmission of electricity over long distances. DC allows better control over direction of the electrical flow and is less likely to short circuit than AC.

Growth picks up

Declining interest rates injected new vigor in waning home constructions, which, in turn, stimulated a sizable increase in new customers in SRP's electric service area during fiscal 1982-83.

Permits were issued for 16,796 new residential dwellings, a 43 percent increase over the 11,755 permits authorized during the previous fiscal period.

As a result, SRP added 18,149 new customers to its lines for a year-end total of 359,561.

Despite milder than normal summer temperatures, SRP met peak demand of 2,172,000-kw on Aug. 20, 1982. The year ranked second to 1981 when record-breaking temperatures pushed peak demand to 2,266,000-kw.

Planning and construction of new energy-related facilities during the year kept pace with projected growth calculations.

Construction of the Tempe Regional Center was 35 percent complete at fiscal year-end. The center is the first step in long-range plans to decentralize SRP maintenance facilities and place them nearer to the areas they will serve. When the center begins operating, probably in the fall of 1983, it will allow faster customer service response and reduce transportation costs.

Planning was completed of a new power operations headquarters. SRP began soliciting bids in January 1983 for construction of a 68,458-square-foot building that will house SRP's power dispatching system and a new computerized energy management system capable of remotely controlling SRP's electrical facilities. The building will be located on a 12.5 acre site in Scottsdale and is expected to be in service in 1986.

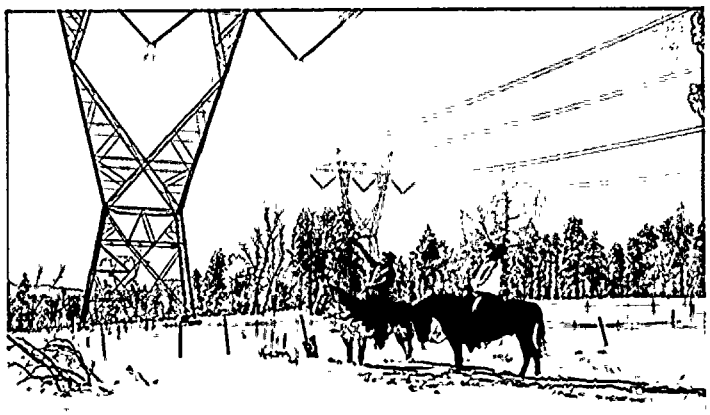
Five electrical distribution stations were added to the construction agenda for fiscal 1983-84. SRP has budgeted $7 million for the facilities, which are needed to serve residential customers in rapidly growing outlying areas.

During the year, SRP became the first electric utility in the nation to receive legal authorization to perform repairs and alterations to boilers, pressure vessels and pressure piping at its generating stations. Power Operations employees earned the distinction by successfully completing preparation of the American Society of Mechanical Engineers (ASME) Quality Control Program.

Drafting personnel developed a computer-aided program to improve small area load forecasting. With the use of a specialized analysis tool, the program can produce a load forecast for 40-acre sections in about 10 minutes. Higher quality graphics equipment is being reviewed to obtain the full graphic capabilities of the program.

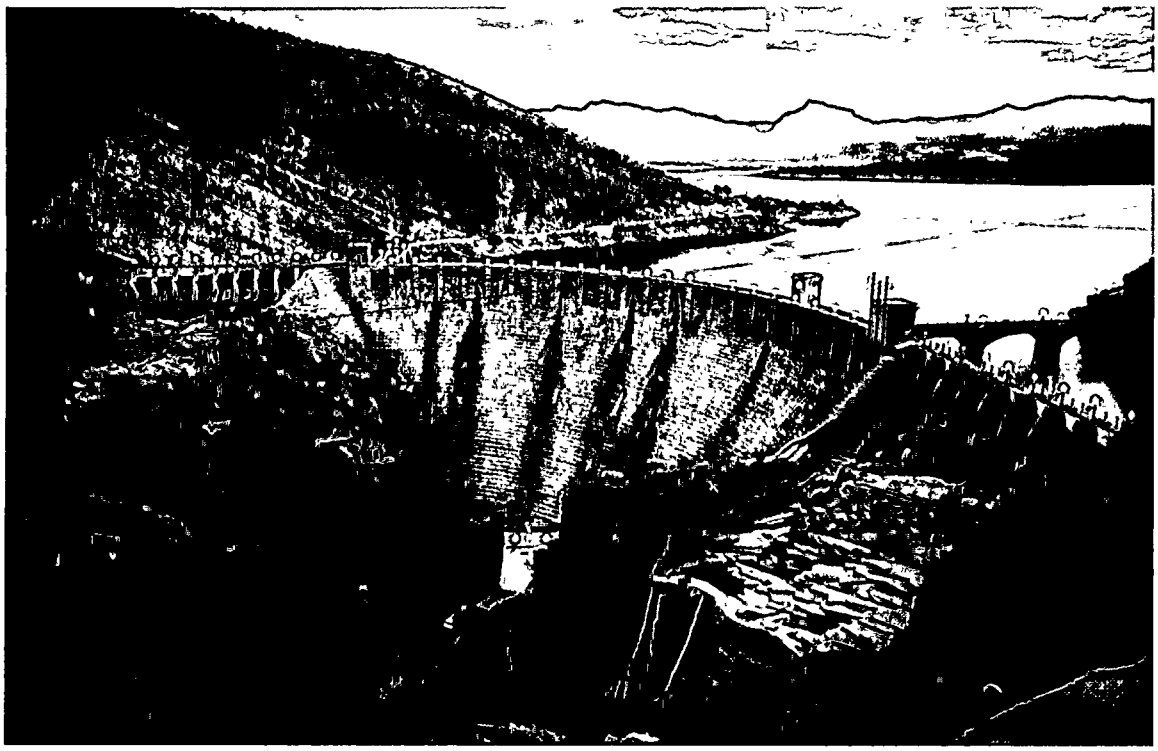
In September 1982, the board approved the $211,000 purchase of a Bell Jet Ranger helicopter SRP had been leasing for 2.5 years.

Ownership of the aircraft is expected to save SRP about $80,000 in operational costs in the five years following the purchase. SRP uses the helicopter to patrol power lines and to transport emergency crews to remote locations.



TROUBLESHOOTERS use horses to patrol transmission lines that are inaccessible by vehicle.

WATER: It was a year of plenty



ROOSEVELT DAM, which forms SRP's biggest lake, rises 280 feet and can store 1.38 million acre-feet of water.

Ample rain refreshes Valley, reduces pumping requirements

Whether the year's abundant rain fell as showers of compassion, or just demonstrated nature's playfulness, 1982 was a refreshing contrast to its dry predecessor.

Runoff in calendar 1982 more than tripled from the previous year, creating the 15th wettest year since 1913.

SRP's six reservoirs received a total of 1,671,582 acre-feet (af) of water, or 178 percent of average runoff. The previous year produced only 548,833 af of runoff.

The year owed its relatively high ranking to intense storms during March and December.

Runoff in March was 239 percent of normal and required the release of 81,000 af into the Salt River at Granite Reef Diversion Dam. December runoff totaled 708 percent of normal, necessitating the release of 97,000 af into the Salt River.

The ample water supply allowed SRP to reduce groundwater pumping. During the year, SRP pumped just 104,019 af, or 40 percent of normal. In 1981, SRP pumped 337,424 af from its system of 249 deep well pumps.

The reservoirs entered the year with 1,116,338 af in storage, or 55.3 percent of capacity. Peak storage occurred on May 15 when the reservoirs held 1,800,864 af, or 89.2 percent, of capacity.

Water deliveries decline by 10 percent

Mild summer weather, high runoff and conservation were key factors in a 10 percent reduction in overall water deliveries.

Total water deliveries declined from 994,294 af in 1981 to 897,267 af in 1982.

Agricultural use showed the sharpest decrease—14 percent. The decline primarily was due to excessive runoff. Surplus water was available to agricultural users at no charge against their allotments. Charged deliveries accounted for 379,903 af, compared to 440,047 af in 1981. Another factor in the reduction was the conversion of 3,559 acres of agricultural land to urban use. By the end of the year, 139,626 acres, or 59 percent, of the land within SRP boundaries was urbanized. The remaining 98,546 acres served by SRP still is in agricultural use.

Non-agricultural water orders, excluding decreed and non-member deliveries, for 1982 totaled 355,278 af compared with 381,457 af in 1981, a 7 percent reduction. Water deliveries to cities with domestic contracts decreased by nearly 7 percent, from 265,002 af in 1981 to 247,216 af in 1982. When land goes from agricultural to urban use, cities instead of individuals, often pay the SRP assessment. Acting as agents for landowners, the cities take the lands' share of water from SRP canals, treat the water and deliver it to municipal and industrial customers who are shareholders. This continued beneficial use of water allows the land to retain its water rights.

Other non-agricultural deliveries, which includes parks, churches, schools and residential irrigation, decreased from 116,455 af in 1981 to 108,062 af in 1982.

Indian reservations and other lands that are entitled to Salt and Verde river water by court decree, received 58,400 af, or 9 percent less than the 64,431 af delivered in 1981. Contract deliveries to lands outside SRP boundaries declined by 4 percent, from 108,358 af to 103,686 af.

Conservation spotlighted

Water conservation activities gained momentum during the year as SRP expanded its efforts to save water and urged others to do the same.

Project officials continued to meet with city of Phoenix administrators to map out plans to meet the city's future water needs. Both parties agreed conservation was vital to ensure a future water supply. A task force composed of personnel from SRP and the city of Phoenix was formed and has been working to combine the two agencies' efforts to improve water conservation programs.

SRP took steps to help the city meet short-term water needs. Some of those steps included allowing the city to pump water from its wells into SRP canals to build up water credits; the sale and exchange of wells between SRP and the city; drilling new wells; and work on a three-party agreement between SRP, Phoenix and the Roosevelt Irrigation District for some water exchanges.

The on-going canal lining program reduces water loss by seepage and has proved an effective means of conserving water. SRP lined another 4.15 miles of its 131-mile main canal system during the annual canal dryup in the fall. Crews lined 1.5 miles of the South Canal; 0.9 miles of the Tempe Canal; 0.5 miles of the Western Canal; and 1.25 miles of the south bank of the Arizona Canal. Total cost of the canal lining and maintenance work was $2.38 million, which will be recovered in reduced water losses. To date, SRP has lined 53 percent of its canal system.

Further reductions in water losses were achieved through increased accuracy of measurement of water flowing in the canals. The improvement was achieved through installation of broad-crested weirs, or devices that measure the rate of water flow in canals. A gauge was designed and built at the head of the South Canal and one on the Arizona Canal was modified.

Conservation also was the key emphasis of SRP's Agriculture Program. Through the program shareholders learned methods to reduce water loss and consumption while irrigating crops.

Participation in the ongoing program declined slightly. In 1982 15,000 acres—15.2 percent of the land farmed—used the program. In 1981 there were 18,000 acres or 17.6 percent of the land farmed which was in the program.

The decline was attributed to government acreage reduction and land diversion programs, coupled with the effects of the slack economy, which produced lower prices for agriculture commodities.

SRP water personnel worked with the Salt River Pima-Maricopa Indian Community to develop a plan that would save the community as much as 5,000 af of water annually. Suggestions outlined in the report included lining the community's main canal, pump testing and improvement of physical facilities.

The Community receives an average of 35,000 af annually from SRP.

Water rates rise slightly

The board of governors raised 1983 water assessment charges slightly to keep pace with inflation.

The charge per account rose 3.4 percent, from $14.50 to $15. It was the 10th consecutive increase since 1974, when the assessment was $4.75 per acre.

Payment of the assessment entitles landowners to use two acre-feet of water per acre per year. The assessment helps pay the costs of operating the water portion of SRP. All land within the 238,220-acre water service area of SRP pays the same per-acre assessment, whether the water is used for municipal, industrial or agricultural purposes.

Pumped water charges were raised 8 percent, from $25 to $27.

In addition, the board allocated a third acre-foot of stored and developed water for $7.50, an increase of 25 cents from 1982.

Delivery fees for irrigation customers were reduced by 5 percent, from $26.79 per account and 19 cents per acre in 1982 to $25.06 per account and 18 cents per acre. The decrease reflects the lower costs of processing water accounts using a new computer system. Domestic water and city contract charges increased from $1.90 per account to $2 per account.

LINING CANALS—Once a year, SRP empties its major canals to perform maintenance work. The dryups allow crews to continue a concrete canal lining program that helps reduce water seepage losses.

Water rights protected and defended

SRP increased its efforts in 1982 to protect the water rights of its shareholders' lands.

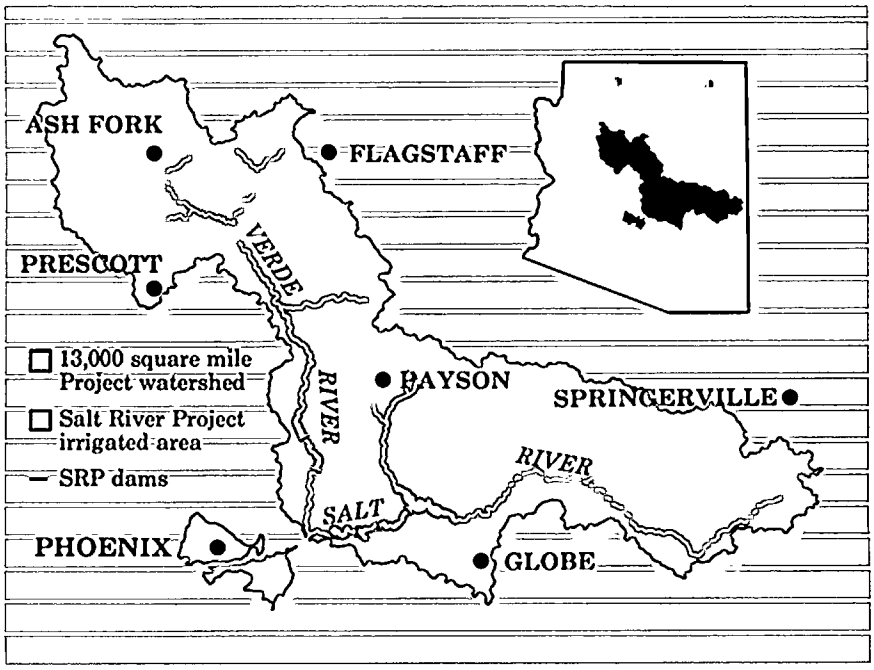
During the year, SRP reviewed 40 applications filed with the Arizona Department of Water Resources (ADWR). The Project protested nine applications because of possible infringements on the rights of downstream users. Several detailed reports of suspected illegal use of upstream water were prepared, and two cases were submitted to ADWR for action.

In other custodial action, SRP joined forces with the U.S. Forest Service, the University of Arizona, ADWR and Northern Arizona University to study the hydrologic impact of stock tanks on the rights of downstream users. The study results will provide a basis for future water exchanges with the Forest Service.

SRP compiled information to support its appropriation and use of water at the Navajo Generating Station and filed the data with the ADWR. The Project also filed claims for all surface waters located on SRP property at the Coronado Generating Station.

During the fiscal year, SRP completed a feasibility study with the U.S. Bureau of Reclamation which examined the potential for cloud seeding along the Mogollon Rim. A preliminary report outlined projected costs and benefits of such a program. Based on the findings, water personnel are planning the development of a pilot program to increase water yields on the Salt and Verde watersheds through weather modification.

A FORMER SRP Navajo scholarship recipient—now a civil engineer for SRP—works on designing a turnout structure for water delivery from an SRP canal.



Water quality ranks high among concerns

Groundwater Planning personnel completed the first phase of the SRP Water Quality Report, a study in which surface and groundwater quality was examined and 30 SRP wells were analyzed.

As part of SRP's water quality program, chemical lab employees analyzed 878 water samples from various surface and groundwater sources. Employees also performed aquifer tests on three Phoenix wells to check for water quality, and supervised the drilling of a new well. The new well will replace one closed due to the realignment of the Arizona Canal at 59th Avenue.

The CAP (Central Arizona Project)/SRP Water Quality Task Force, composed of personnel from SRP and major Valley cities, continued to study the impacts of commingling CAP and SRP water. The CAP, which will carry Arizona's allotment of Colorado River water to the state's interior, is expected to reach Phoenix in 1985.

As part of the study, SRP is developing a computerized water quality model that will measure potential water quality changes in SRP canals as a result of commingling CAP and SRP water. Data provided by the model, which is expected to be completed in July 1984, will be used to decide whether or not to mix CAP and SRP water.

SRP also continued groundwater and seepage monitoring at Navajo, Coronado and Agua Fria generating stations.

New technology eases operations

SRP's participation in the purchase of a ground-based satellite receiving station greatly reduced the time it takes to receive vital stream and river data.

SRP contributed $33,000 toward the purchase of the station located near the SRP Administration Building. The station can provide updates every 15 minutes on water depth and precipitation at 22 stream and river gauges on the Salt and Verde river watersheds during high runoff conditions. Other participants were the Arizona Department of Water Resources, the Maricopa County Flood Control District, the U.S. Army Corps of Engineers, and the U.S. Bureau of Reclamation. Prompt access to changes in reservoir inflows helped SRP make smooth, timely and appropriate water releases during March and December.

Advances in computer technology also added to the fluency of water operations. Engineers developed a new runoff model, called the Clemm Model, which helped Project managers plan reservoir operations during the winter's storms. Another model, the Tangborn HM07, was calibrated for the Salt and Verde river watersheds to aid managers in determining seasonal inflows into the reservoir system.

In addition, the water staff designed an improved Emergency Operations Center which further eased emergency operations. The new center offers more workspace and provides water personnel with access to three computer terminals to calculate inflows into the reservoirs. The staff also added a television to monitor closed-circuit films of storm patterns.

SRP, Egypt exchange water ideas

In April 1982, SRP employees warmly greeted the first pair of Egyptian engineers to visit the Project under a water information exchange agreement with Egypt. Their arrival officially kicked off the two-year Professional Employees Exchange Program.

During their six-week stay, the Egyptians toured SRP water facilities, reviewed operations and took back information that will be used to help their country improve its irrigation system. The program is sponsored by the U.S. Agency for International Development to facilitate an exchange of ideas and technical information concerning the operations and maintenance of large irrigation projects. SRP was selected to participate in the program because of its reputation as a world leader in the field of irrigation, and because it serves an area similar in climate and terrain to Egypt.

During the year, SRP sent four water staff members to Egypt and hosted six Egyptian visitors.

In 1983, eight Egyptians are scheduled to visit SRP and four SRP employees will travel to Egypt.

Project officials met with Egyptian political leaders in

1980 to draft the exchange program. Discussions between SRP and Egypt are underway to expand the two-year program. A second phase would allow for implementation of ideas exchanged during the meetings.

Congress debates funding for Plan 6

There is strong reason to believe Arizonans will be responsible for funding at least some of the construction and repair work called for in Plan 6.

Plan 6 is the alternative to Orme Dam chosen by participants in the Central Arizona Water Control Study. Major components are:

- A new or enlarged Roosevelt Dam to provide flood control and safely handle the worst possible flood on the Salt River.
- Larger spillways at Stewart Mountain Dam to handle the worst possible flood and modifications to protect the dam from the worst potential earthquake.
- A new dam to replace Horseshoe Dam and to handle the worst possible flood on the Verde River.
- A new, larger Waddell Dam on the Agua Fria River to provide regulatory storage for the CAP.

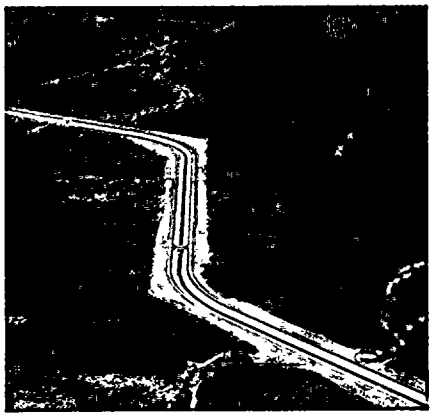
Congress declined to pass legislation in December 1982 that would have increased dam rehabilitation funds available under the 1978 Safety of Dams Act from $100 million to $550 million.

A subsequent bill to further increase Safety of Dam funds to $650 million (the current estimate to rehabilitate federal dams designated by the U.S. Bureau of Reclamation as needing repair) was being considered by Congress at the time of this report. If approved, some of the funds would be allocated for modifications to SRP-operated Roosevelt and Stewart Mountain dams on the Salt River.

While the funding debate persisted in Washington D.C., the Bureau completed one of two technical studies designed to compare the feasibility of constructing a new Roosevelt Dam with the practicality of enlarging the existing dam. The study revealed construction costs alone for building a new dam one-quarter mile downstream of the existing dam would be about $110 million.

Results of the Roosevelt modification study are expected to be available in July 1983.

Meanwhile, the Bureau agreed to join SRP in contracting an independent consultant to evaluate the feasibility studies. Costs will be shared for the three-month $240,000 consultant's study, which is scheduled to begin in September 1983. The Bureau is expected to announce which dam it prefers after reviewing the consultant's report, probably in early 1984.



THE CENTRAL ARIZONA PROJECT (CAP) aqueduct will begin transporting Colorado River water to Phoenix in 1985. SRP is studying the impacts of commingling CAP and SRP water.

The USBR also has completed the feasibility design for Cliff Dam on the Verde River. The study revealed construction costs alone to be approximately $246 million.

Even after these fundamental decisions are made, it will be years before the Bureau begins construction of any new dams. A Plan 6 environmental impact statement, prepared by the Bureau, is under review by SRP. Our response will be reviewed by the Bureau before the statement is submitted to the Secretary of the Interior.

In the meantime, SRP is investigating interim measures that will ensure the safety of the dams it operates until permanent solutions can be implemented.

In December 1982, SRP added flashboards to the top of Bartlett Dam to minimize the risk of dam failure due to overtopping by floodwaters. The flashboards were recommended by an engineering firm hired by SRP to determine the potential for dam failure on the Verde River.

The flashboards improve the ability of the dam to manage floods from 296,000 cfs to 301,000 cfs. In other terms, the dam can handle a flood that might occur once in 1,050 years. Before the flashboards were installed, the largest flood the dam could manage had an estimated recurrence interval of 830 years.

A similar study later was conducted for dams on the Salt River. Results are not yet available.

Domestic Water Deliveries

	1982	1981	change
Scottsdale	4,041	5,834	-30.73%
Glendale	18,345	18,618	-1.47%
Peoria	2,748	2,821	-2.58%
Gilbert	1,981	1,860	6.51%
Tempe	28,390	32,068	-11.47%
Mesa	30,335	22,985	31.98%
Chandler	5,419	5,165	4.92%
Phoenix	155,956	175,651	-11.21%
Total	247,215	265,002	-6.71%

All numbers are in acre-feet, except percents of change.

AS AGRICULTURAL LAND is converted to urban use, cities, rather than individuals, often pay the assessment. The cities treat the water and deliver it to shareholders. Some water is used to develop parks and other recreation areas.

COMMUNITY INVOLVEMENT: We are dedicated to service

BIGGER THAN LIFE—Nine-year-old Amy Larson's artwork was used on billboards throughout the Valley to promote electric safety.

People are our most prized asset

In a sense, our nearly 5200 employees are the force which enables SRP to meet the energy and water needs of its customers. Employees dedicated to excellence in service are the foundation of SRP's success.

The people of SRP once again proved their commitment to serving others during the fiscal year.

Employees brought hope to troubled lives through such programs as Valley of the Sun Big Sisters and Arizona Boys Ranch.

And employees volunteered their time and talents to guide the career interests of youths involved in Junior Achievement and Scouting programs.

SRP established an awards program to honor some of these dedicated individuals. Fifteen employees were selected from among 68 outstanding nominees to receive the first set of Karl F. Abel Volunteer Recognition Awards. Known for his volunteer spirit, Abel, for whom the awards were named, was a member of 25 state and community organizations when he retired as president of SRP in May 1982.

The examples set by these employees and the encouragement by management to catch the volunteer spirit motivated other employees to give their time in service to their communities. SRP provided the opportunity to do so by sponsoring a Volunteer Fair. Representatives from 31 local volunteer organizations set up booths in SRP's cafeteria and enlisted the support of employees during the day-long event.

Many elderly, jobless and handicapped people were able to pay their energy-related bills through nearly $142,000 contributed to Project S.H.A.R.E. (Service to Help Arizonans with Relief on Energy) by SRP, its employees and customers.

Customers were invited to participate in the program, which was initiated by SRP and Arizona Public Service Co. in April 1982, by adding a dollar to their monthly electric bill payments.

All funds donated to Project S.H.A.R.E. were turned over to the Salvation Army for disbursement to needy customers of the utilities.

News of the program's success spread rapidly across the country, as evidenced by a swarm of inquiries from utilities seeking advice about starting a similar program.

Employees demonstrated similar generosity in giving to other charitable organizations. They donated nearly $131,000 to local charities through payroll deductions.

As an organization, SRP gave $360,941 to various civic, social and welfare agencies.

SRP employees worked to save lives by donating blood. Arizona Blood Services gained 327 pints during SRP blood drives.

And employees made contributions to the community as members of 114 service clubs and organizations.

The Project also was represented in 238 trade, technical and professional organizations.

General Manager Jack Pfister concluded his first year as a member of the Arizona Board of Regents, and was elected to a one-year term as chairman of the Electric Power Research Institute. He also served as a member of the Governor's Plan 6 Development Task Force.

Other executives assumed leadership roles in major electric utility industry groups. They included C.M. Perkins, Assistant General Manager of Financial Services and SRP Treasurer, who served as treasurer of the American Public Power Association; and Stanley E. Hancock, Assistant General Manager of Communications and Public Affairs, who was appointed to the Electric Power Research Institute communications committee.

SRP President John Lassen committed much of his time to memberships on the Arizona Council of Economic Education, the

Arizona-Mexico Commission and the Arizona 4-H Youth Foundation.

SRP also was well represented in such organizations as the National Water Resource Association, U.S. Committee on Irrigation Drainage and Flood Control, Arizona Farm Bureau, Electric League of Arizona and the Better Business Bureau.

SRP supplied employees as loaned executives to raise funds for Gomper's Rehabilitation Institute and to four United Way organizations.

One SRP executive is on six-month loan to the State of Arizona to help reorganize the state's risk management operations.

SRP representatives voiced concerns on behalf of the Project and its customers at Congressional hearings in Washington D.C. on legislation concerning safety of dams and reclamation reform.

Education builds the future

Whether the subject was water safety, energy conservation or reclamation history, SRP sought new ways to share its expertise with others.

More than 33,000 schoolchildren in the Phoenix area learned water and power safety rules through SRP's continuing education programs. Many of these youngsters converted the lessons to artwork and competed in SRP poster contests. Winners saw their safety messages on SRP billboards throughout the Valley. Students from fourth grade through high school constructed science projects and entered them in the annual Energy Fair: Century of Change, co-sponsored by SRP and Arizona Public Service Co.

We provided 21 scholarships during the year to assist outstanding high school and college students with their educational pursuits. Ten Navajo Indians were among the scholarship recipients. In an effort to help the Navajo Tribe develop its human resources, SRP provides financial assistance to Navajo college students working toward professions that will benefit their communities.

Aspiring engineers and communicators were among the dozens of students who gained on-the-job training and earned academic credits through internships at SRP. Some were outstanding high school students who participated in SRP's Student Career Opportunities Program.

Phoenix-area youths benefitted from the knowledge of SRP personnel through other learning activities.

SRP joined the Theodore Roosevelt Council, Inc. as sponsor of an Explorer Scout post. The post offers a group of high school juniors and seniors the opportunity to explore the fields of computer science and engineering under the advisement of SRP employees.

Civic, social and special interest groups learned historical facts about SRP and the development of the Valley, along with information about other water and power-related issues, through more than 1,200 presentations made by members of SRP's Speakers' Bureau and Public Affairs staff. Also, nearly 57,000 people visited SRP's Silva House museum in Phoenix' Heritage Square and gained a deeper understanding of the development of water and power in the Valley of the Sun. The restored turn-of-the-century house features, among its displays, a lifesize talking representation of President Theodore Roosevelt, who was a major force in the establishment of SRP.

Public Affairs representatives coordinated tours for 7,300 visitors to SRP dams and generating facilities. Another 8,700 people toured the Project's History Center. The center's recently added computer program proved to be a fascinating method of teaching schoolchildren the fundamentals of water history and operations.

SRP IS participating in solar experiments at Arizona State University in Tempe.

Conservation is taught

Recognizing the increasing necessity to conserve the resources that helped create a booming metropolis out of a barren desert, we developed new ways to teach customers how to reduce their use of power and water.

In April 1983, we opened the nation's first Power Saver Store, in a busy Scottsdale shopping mall. The store offered free brochures, video demonstrations and conservation tips on everything from landscaping to window shading. Video programs showed customers how to apply such items as water heater blankets, caulking and weather stripping materials.

A special computer was available to provide SRP customers with personal home energy usage information. Based on lifestyle

input, the computer broke down a customer's kilowatt-hour consumption by major appliance for months with the highest summer and winter usage. The resultant printout also showed usage for the previous 12 months.

We also spread the conservation message via weekend Power Saver Workshops. Trained power saver advisers visited hardware, lumber and department stores in the Phoenix area to give customers hands-on experience in applying conservation materials, such as reflective window film.

SHARING CONSERVATION TIPS—An SRP Power Saver Adviser shows customers how to apply solar reflecting material to a window at one of SRP's week-end Power Saver Workshops. Following the demonstration, customers are invited to try their hand at applying the material.

Our energy management specialists visited more than 1,500 homes during the year and conducted computerized energy audits. The information provided by the audits showed customers how much they could expect to save in energy costs by acting on the conservation recommendations.

We promoted water conservation through brochures, bill stuffers, newspaper advertisements, speeches and committee action.

In support of the 1980 Groundwater Management Act, which seeks to reduce pumping in overdrawn areas, we assisted well owners in registering their wells with the Arizona Department of Water Resources.

Plans for the future

Planning for the future energy requirements of our customers is as crucial as meeting their immediate needs.

During the fiscal year, SRP continued to be actively engaged in research and development programs related to new energy sources, improved technologies for power generation, load management and solar energy experiments.

Many of these programs were carried out in cooperation with other utilities through electric industry groups and academic institutions.

In the fall of 1982, we agreed to provide $100,000 annually for five years to Arizona State University to help support research in the areas of energy production, transmission, distribution and utilization. SRP engineers will work directly with the university's engineering faculty to select and give advice on research projects that are of particular pertinence to SRP.

Solar experiments have been an important facet of SRP research in recent years. Tests concluded during the year on a 50-ton Rankine cycle, solar-powered air conditioning system showed projected net annual energy savings of 40,000 kilowatt-hours (kwh). This savings was less than expected because the amount of solar radiation during the test period was below normal. Under normal weather conditions, savings are expected to be about 25 percent greater.

Solar water heaters are the subject of another study conducted by ASU, in which SRP is a participant. Seven domestic solar water heating systems are being studied to compare their performance with conventional gas and electric water heaters.

In a related project, SRP, in cooperation with Arizona Public Service Co. and Tucson Electric Power Co., is managing a network of seven solar monitoring stations in Arizona. The stations measure insolation—the amount of sunshine that reaches the earth.

The three Arizona utilities agreed to continue operating the network after Western Energy Supply and Transmission (WEST) Associates discontinued its financial support in December 1981. The monitoring stations are part of a 10-utility, 51-station solar monitoring network. Information provided by the system will be used, in part, to help estimate future energy use. The Arizona Solar Energy Commission is considering a proposal to begin funding the Arizona network in 1984.

Ice storage air conditioner tests concluded during the year showed promising results, when the units are used in conjunction with time-of-day rates. Ice storage air conditioners make ice at night to cool air during the day and thereby reduce electric use during times of peak electrical demand. One residence showed an average savings of $26.27 a month.

Mechanical heat pump water heaters occupied other SRP research efforts during the year. Test results showed the equipment achieved water heating savings of 40 percent compared to standard gas and electric heating systems.

SRP is testing a new control system for simple cycle combustion turbines and combined cycle units in an Electric Power Research Institute (EPRI) project. A General

Electric Mark IV control system was installed on Santan Generating Station unit four in late fall. Whether the system is more reliable than other control systems will be answered when tests conclude in late 1983.

An eager supporter of electric industry research, SRP contributed $1.51 million to EPRI during the fiscal year to help fund research and development projects beyond the scope of its own resources.

Sharing the costs of large-scale research with other utilities allows SRP to pass along to its customers the benefits of such research without the financial burden that otherwise would be incurred.

We design for efficiency

Efficiency is as important as attitude when it comes to serving our customers.

SRP's strong emphasis on prompt customer service resulted in the development of a computerized order-entry system that gives service representatives immediate access to customer account records and reduces dramatically the time it takes to process customer service orders.

For customers, the system means faster answers to service-related inquiries, and faster field response time.

Immediate access to customer account information has reduced the time required to process some service orders from 3.5 minutes to 30 seconds.

The $1.2 million Customer Information System, designed by employees, could save SRP $400,000 or more annually in reduced staffing requirements by elimininating filing positions and other paperwork jobs previously required.

Human resources are developed

We have found that providing developmental programs for our employees yields high returns in terms of improved work performance and increased productivity. In our continued striving for excellence in these areas, we introduced two new management development programs during the fiscal year.

The Executive Management Institute offered training to top managers in the areas of decision-making, leadership, communication and planning.

Also, the Rotational Management Training Program began preparing high-potential female employees for management positions at SRP. As a result, one of SRP's affirmative action objectives became reality. Eight women were selected for the two-year program and began training in September 1982. During the course of the program, they will rotate among four SRP work areas. Successful graduates will be eligible to fill management and supervisory openings at SRP.

CUSTOMER RATE HEARINGS—SRP board members listen to General Manager A. J. Pfister explain a management-proposed rate increase during one of six customer rate hearings in early 1983. Earlier, customers had spoken to board members about the proposed increase. Comments by customers influenced the board's decision to reduce the size of the rate increase.

We listen to customers

Listening to customers continued to be an important part of SRP philosophy.

Before the SRP board acted on a management-proposed electric rate increase in February 1983, we invited customers to discuss the proposal face-to-face with management and board members. To encourage participation, we conducted six neighborhood meetings in various parts of the Valley.

Customers' comments were considered and partially were responsible for the board's decision to reduce the requested increase from 6.5 percent to an average 5.5 percent.

We also conducted community meetings in Scottsdale and Tempe to discuss with customers a proposed 230-kilovolt power line planned for the eastern portion of the Valley.

Customers who were unable to resolve their billing disputes with the company were given the opportunity to present their position to SRP's consumer ombudsman. SRP is one of only a handful of electric utilities in the nation to have such a program.

We sponsored clean-up drives

Throughout recent years, SRP actively has campaigned against cluttering the environment with litter through our "Litter Lugger Program." The program was awarded the Distinguished Service Citation for 1982 by Keep America Beautiful, Inc.

Since inception of the program in 1963, SRP has distributed, free-of-charge, about three million plastic litter bags in recreation areas throughout the state. We also sponsored clean-up activities in many communities.

FINANCES: Revenue performance was strong

Despite a troubled economy, Salt River Project prospered in fiscal year 1982-83, ending the year with an especially sound balance sheet.

During the year, we achieved a record level of net revenues, the second best debt service coverage ratio in more than a decade and raised future construction capital of $116 million through sales of revenue bonds and minibonds. We also substantially reduced excess fuel inventories and recorded a $9.5 million gain from the $266 million sale of a portion of the Palo Verde Nuclear Generating Station.

Despite a decline in gross energy sales, SRP posted a record in net revenues of nearly $160.0 million. This was about 1.0 percent greater than in the previous fiscal year. Unlike investor-owned utilities, SRP is a not-for-profit organization. SRP does not issue stock and pay dividends. Net revenues are reinvested in the Project to replace equipment and to finance construction of new facilities.

SRP's debt service coverage ratio at the end of the fiscal period was a healthy 1.92, compared to an unusually good 2.02 the previous year. Despite the decline, this year's ratio is the second best since 1972.

The debt service coverage ratio measures the number of times debt service (payment of principal and interest obligations) is covered by revenues available after payment of operating expenses.

Solid revenue performance and a decrease in capital expenditures from last year were responsible for an improvement in the debt-to-total-capitalization ratio. The ratio has been improving for several years and now stands at 76 percent.

In November, SRP hosted investors, analysts and other members of the financial community to a bond information tour. The tour provided first-hand knowledge of SRP and its management.

During the year, leading credit agencies continued to assign outstanding ratings to SRP bonds.

Revenue bonds received an AA rating from Standard & Poor's Corp. and an Aa rating from Moody's Investor Services, Inc. SRP general obligation bonds were rated AAA by Standard & Poor's Corp., and Aa1 by Moody's. General obligation bonds were issued prior to 1973. Revenue bonds have been used since then.

The favorable bond ratings influenced a successful $100 million revenue bond sale in February. Negotiations resulted in an effective interest rate of 9.75 percent, the lowest rate paid by SRP on revenue bonds since 1980. During January, $16 million in $500 SRP minibonds were sold, primarily to Arizona residents. These minibonds pay 8.25 percent on maturity dates of 1990, and 9.25 percent on minibonds that mature in 1994. The issue was SRP's largest minibond sale to date.

In August 1982, we enhanced our ability to finance construction work in progress and fuel reserves by expanding our commercial paper program. The SRP board authorized an increase in the maximum combined amount of tax-exempt commercial paper and credit line borrowings from $225 million to $250 million.

Fuel inventories were reduced by $16.0 million in the 12-month period ending April 30, 1983. At fiscal year-end, we had $62.2 million in fuel stock. This compares favorably to the October 1980 peak of more than $107 million in fuel stocks.

An extensive study of future loads and resources showed SRP would not need all of its ownership in the Palo Verde Nuclear Generating Station for several years. On Sept. 10, 1982, we completed the sale of 5.91 percent of the station to the Southern California Public Power Authority. The transaction deferred the need for additional bond sales for several months, until bond interest rates dropped significantly. Part of the proceeds from the sale were used to advance refund $165 million in one-year bond anticipation notes issued in March 1982.

In December 1982, the Project retired $52 million in 1981 Series B revenue bonds, which carried an interest rate of 14.0 percent, the highest rate ever paid by SRP for revenue bonds.

Losses from the defeasance amounted to $7.5 million, which will be more than offset by an annual reduction of about $7.3 million in debt service requirements over the 38-year intended life of the bonds. The bonds would have matured in the year 2021.

During the 1984-85 fiscal year, SRP will complete the sale of an additional 5.7 percent of the Palo Verde Nuclear Power Project to the Los Angeles Department of Water and Power in return for the Department's 30 percent ownership of Coronado Generating Station. Following the sale, SRP will own 17.5 percent of Palo Verde.

Electric, water rates rise

Through stringent cost-cutting measures we were able to lessen the amount of an electric rate increase needed to offset the effects of inflation and to meet our goal of keeping stable the real, or inflation-adjusted, cost of electricity.

Effective April 1983, electric rates were raised by an average of 5.5 percent. The increase was the first since April 1981, when rates were raised by an average of 12.8 percent. Inflation during the two-year period between rate increases was 16.9 percent, as measured by the rise in the Consumer-Price Index.

During some of that two-year period, customers obtained some relief on bills through the fuel cost adjustment factor. A factor of 1.827 mills per kilowatt-hour was reduced to a negative .000693 per kwh on July 1, 1982. The fuel cost adjustment factor is used to reflect changes in fuel costs as they vary from the base amount included in electric rates.

Likewise to keep up with inflation, the SRP board of governors increased 1983 water rates by an average of 5.7 percent effective Jan. 1, 1983.

Operating revenues decline; net revenues increase

Total operating revenues of $652.1 million declined $12.4 million or 1.9 percent from the previous year's total of $664.5 million.

Electric operating revenues, which represented 99 percent of total revenues, were $645.2 million for the fiscal year. This amount was $10.5 million, or 1.6 percent less than the previous year's total of $655.7 million. The decrease primarily was due to unusually mild summer temperatures and unfavorable economic conditions which affected energy sales to our industrial customers, especially the copper mines.

Energy sales of 13.1 billion kilowatt-hours were .4 billion kilowatt-hours, or 3.0 percent less than in fiscal year 1981-82.

The number of electric customers increased 18,149 over the previous year to a total of 359,561. Residential customers totaled 332,790. Average electric use per residential customer decreased from 12,798 kwh in 1981-82 to 12,277 kwh for the current fiscal year. The average cost of electricity for residential customers was 6.47 cents per kwh for 1982-83 compared with 6.55 cents per kwh the previous year.

Sales for resale revenues were $144.1 million, an increase of $14.1 million or 10.8 percent over the $130.0 million in 1981-82.

The high volume of such sales helped moderate the need for rate increases in recent years.

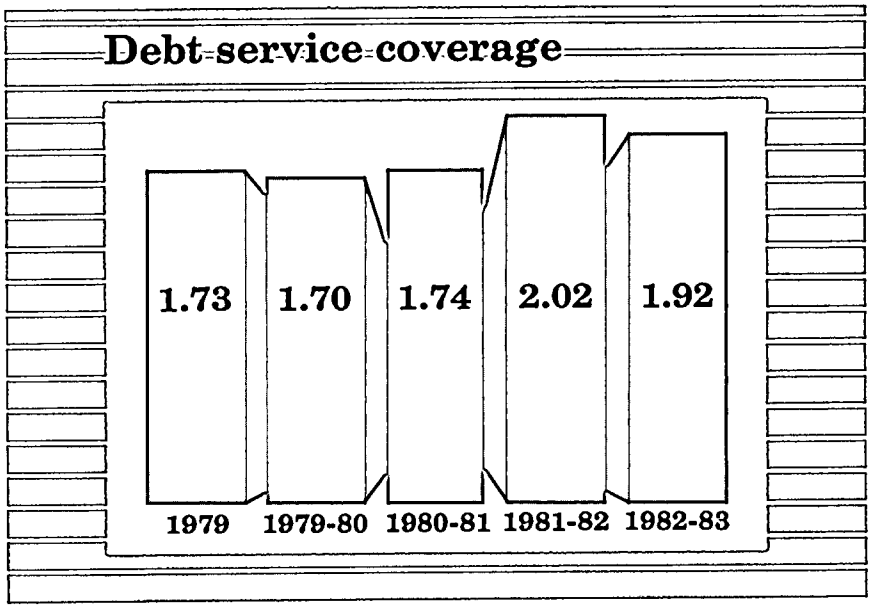
Revenues from water deliveries decreased from $8.8 million in 1981-82 to $7.0 million in 1982-83. Supplemental water revenues were sharply curtailed due to above-normal runoff which in turn allowed excess water releases into the system.

Total operating expenses of $457.9 million were slightly less than the $460.9 million in the previous year. Fuel and purchased power costs increased $1.2 million, from a 1981-82 total of $183.5 million to $184.7 million for 1982-83.

Other operating expenses of $93.3 million declined 6 percent compared to the 1981-82 total of $98.8 million. Maintenance costs reached $54.2 million in the current period, an increase of $4.7 million or 9.5 percent more than the previous year. A greater amount of major maintenance was performed in 1982-83 than in 1981-82. Depreciation expense increased $.7 million to $65.3 million while taxes and tax equivalents decreased $4.2 million to $60.4 million.

Net financing costs increased to $131.8 million from $127.3 million in the prior year—or by slightly more than 3.5 percent. The sum total of these results for fiscal 1982-83 led to a $1.6 million increase in net revenues over the prior year to $160 million.

Salt River Project maintained a high level of liquidity throughout fiscal 1982-83 and ended the year in a strong current position.



Salt River Project Agricultural Improvement and Power District
and its agent, Salt River Valley Water Users' Association

Combined Balance Sheets

As of April 30, 1983 and 1982

Assets

	($000) 1983	1982
UTILITY PLANT, at original cost *(Notes 1, 2, 3 and 4)*:		
Plant in service		
Electric	$1,925,943	$1,842,713
Irrigation	77,810	74,072
General	78,983	74,500
Total plant in service	$2,082,736	$1,991,285
Less - Accumulated depreciation on plant in service	483,253	416,046
	$1,599,483	$1,575,239
Construction work in progress	1,304,247	1,274,578
	$2,903,730	$2,849,817
SEGREGATED FUNDS, consisting of cash and U.S. Government obligations set aside in accordance with resolutions of bond issues:		
Debt service funds, excluding $49,621,000 in 1983 and $49,724,000 in 1982 for payment of accrued interest *(Note 5)*	$ 160,665	$ 156,656
CURRENT ASSETS:		
Cash	$ 1,707	$ 8,773
Temporary investments, at cost, held primarily for construction	115,472	168,849
Deposit in debt service fund for payment of accrued interest on bonds	49,621	49,724
Trade and other accounts receivable, less reserves of $1,928,000 in 1983 and $1,754,000 in 1982 for doubtful accounts	42,132	39,205
Fuel stocks, at average cost	62,254	78,293
Materials and supplies, at average cost	34,417	34,918
Prepayments, interest receivable and other	8,076	10,822
	$ 313,679	$ 390,584
DEFERRED CHARGES AND OTHER ASSETS *(Note 1)*	$ 57,800	$ 58,310
	$3,435,874	$3,455,367

The accompanying notes are an integral part of these combined balance sheets.

Capitalization and Liabilities

	($000) 1983	1982
LONG-TERM DEBT *(Note 5)*:		
Electric system revenue bonds	$2,051,324	$1,996,822
General obligation bonds and other	444,590	433,866
	$2,495,914	$2,430,688
ACCUMULATED NET REVENUES, invested principally in utility plant:		
Balance, beginning of year	$ 629,780	$ 471,438
Net revenues for the year	159,955	158,342
Balance, end of year	$ 789,735	$ 629,780
Total capitalization	$3,285,649	$3,060,468
CURRENT LIABILITIES, excluding $25,689,000 in 1983 and $23,938,000 in 1982, representing current portion of long-term debt which is to be paid from segregated funds:		
Bond anticipation notes	$ —	$ 165,000
Notes payable to banks	—	35,000
Accounts payable	44,400	76,323
Accrued taxes and tax equivalents	20,004	38,360
Accrued interest	50,519	52,574
Customers' deposits	11,510	9,334
Other current and accrued liabilities	14,980	12,863
	$ 141,413	$ 389,454
DEFERRED CREDITS AND RESERVES	$ 8,812	$ 5,445
COMMITMENTS AND CONTINGENCIES *(Notes 3 and 6)*		
	$3,435,874	$3,455,367

Salt River Project Agricultural Improvement and Power District
and its agent, Salt River Valley Water Users' Association

Combined Statements of Net Revenues

For the Years Ended April 30, 1983 and 1982

	($000) 1983	1982
OPERATING REVENUES:		
Electric	$645,171	$655,682
Water and irrigation	6,968	8,781
Total operating revenues	$652,139	$664,463
OPERATING EXPENSES:		
Power purchased	$ 22,572	$ 18,223
Fuel used in electric generation	162,134	165,288
Other operation expenses	93,300	98,797
Maintenance	54,222	49,508
Depreciation and amortization *(Note 1)*	65,251	64,502
Taxes and tax equivalents	60,426	64,589
Total operating expenses	$457,905	$460,907
NET OPERATING REVENUES	$194,234	$203,556
FINANCING COSTS:		
Interest on bonds at coupon rates	$148,113	$145,452
Amortization of bond discount, issue and refinancing expenses	2,912	2,940
Interest on other obligations	19,306	22,885
Interest earned on investments and deposits	(38,541)	(43,940)
Net financing costs	$131,790	$127,337
Less - Allowance for funds used during construction *(Note 1)*	(96,721)	(81,955)
Financing costs less allowance for funds used during construction	$ 35,069	$ 45,382
OTHER INCOME (DEDUCTIONS), NET	$ (1,231)	$ 168
GAIN ON SALE OF ELECTRIC GENERATING FACILITY *(Note 3)*	9,527	—
Total other	$ 8,296	$ 168
NET REVENUES BEFORE EXTRAORDINARY ITEM	$167,461	$158,342
EXTRAORDINARY ITEM - LOSS ON DEFEASANCE OF REVENUE BONDS *(Note 5)*	7,506	—
NET REVENUES	$159,955	$158,342

The accompanying notes are an integral part of these combined statements.

Salt River Project Agricultural Improvement and Power District
and its agent, Salt River Valley Water Users' Association

Combined Statements of Sources of Funds for Additions to Utility Plant

For the Years Ended April 30, 1983 and 1982

	($000) 1983	1982
GROSS ADDITIONS TO UTILITY PLANT, excluding allowance for funds used during construction	$299,502	$395,270
FUNDS GENERATED FROM OPERATIONS:		
Net revenues before extraordinary item	$167,461	$158,342
Add - Depreciation (including charges to clearing accounts) and other charges not requiring current funds	73,655	72,573
Deduct - Allowance for funds used during construction not providing current funds	(96,721)	(81,955)
- Gain on sale of electric generating facility	(9,527)	—
Total funds generated from operations before retirement of debt	$134,868	$148,960
Less - Repayment of electric system revenue bonds, general obligation bonds and U.S. Government debt	(24,528)	(25,798)
- General funds used to defease electric system revenue bonds	(57,602)	—
Net funds generated from operations	$ 52,738	$123,162
FUNDS OBTAINED FROM FINANCING:		
Proceeds of bond issues	$113,797	$ 61,809
Contributions in aid of construction	14,949	12,446
Other long-term borrowings, net of repayments	24,717	9,686
Short-term borrowings	(200,000)	200,000
Total funds obtained from financing	$(46,537)	$283,941
Other -		
Proceeds from sale of utility plant	266,205	32,241
Increase in segregated funds set aside for debt service	(4,009)	(9,736)
Decrease in segregated funds set aside for construction	—	70
Decrease (increase) in temporary investments held primarily for construction	53,377	(59,720)
Net funds obtained from financing	$269,036	$246,796
CHANGES IN OTHER ITEMS AFFECTING FUNDS:		
Increase (decrease) in accounts payable	$(31,923)	$ 9,497
Decrease (increase) in accounts receivable	(2,927)	6,327
Decrease in fuel stocks and materials and supplies	16,540	8,928
Decrease (increase) in deposits for payment of accrued interest on bonds	103	(3,833)
Increase (decrease) in accrued interest	(2,055)	6,192
Change in other assets and liabilities, net	(2,010)	(1,799)
Net change in other items	$(22,272)	$ 25,312
FUNDS USED FOR ADDITIONS TO UTILITY PLANT	$299,502	$395,270

The accompanying notes are an integral part of these combined statements.

Notes to Combined Financial Statements

For the Years Ended April 30, 1983 and 1982

(1) Summary of significant accounting policies:

(a) Principles of Combination

The combined financial statements include the accounts of the Salt River Project Agricultural Improvement and Power District ("the District") and the accounts of its agent, the Salt River Valley Water Users' Association, together referred to as the Salt River Project ("the Project"), and a wholly-owned subsidiary, Salt River Generating Company. All significant intercompany transactions have been eliminated.

(b) The District's Board of Directors serves as its regulatory agent.

(c) Utility Plant, Depreciation and Maintenance

The accounting records of the Project are maintained substantially in accordance with the Uniform System of Accounts prescribed for electric utilities by the Federal Energy Regulatory Commission. Utility plant is stated at the historical cost of construction. Construction costs include labor, materials, services purchased under contract, and allocations of indirect charges for engineering, supervision, transportation, and administrative expenses.

An allowance for funds used to finance construction work in progress is capitalized as a part of the electric and general plant. This allowance is deducted from net financing costs in the combined statements of net revenues and added to utility plant. Capitalization rates of 9.62% were used for the years ended April 30, 1983 and April 30, 1982.

Depreciation expense is computed on the straight-line basis over estimated useful lives of the various classes of plant. Rates in effect resulted in provisions approximating 3.44% for 1983 and 1982, on the average cost of depreciable electric plant and 1.99% for 1983 and 1982 for depreciable irrigation plant. When property representing a retirement unit is replaced, removed, or abandoned, the cost of such property is credited to the appropriate utility plant account, and such cost together with removal costs less salvage is charged to accumulated depreciation.

The Project charges to maintenance expense the cost of labor, materials, and other expenses incurred in the repair, restoration of condition and replacement of minor items of property.

(d) Bond Expense

Bond discount, premium, bond issue and refinancing expenses are being amortized over the terms of the related bond issues.

(e) Employees' Retirement Plan

The Project has a retirement plan covering substantially all employees. The Plan is funded entirely from employers' contributions and the earnings of the invested assets.

Contributions to this plan and the related expense totaled $11,350,707 for fiscal year 1982-1983 and $9,857,810 for fiscal year 1981-1982, and include amortization of past service costs over the period ending in 2012. A comparison of accumulated plan benefits and plan net assets for the Plan is presented below:

	January 1, 1983	January 1, 1982
Actuarial present value of accumulated plan benefits:		
Vested	$68,150,333	$58,991,962
Nonvested	13,085,312	10,481,622
	$81,235,645	$69,473,584
Net assets available for benefits	$102,333,751	$77,973,977

The average assumed rate of return used in determining the actuarial present value of accumulated plan benefits was 8% and 7-1/2% for the plan years ended December 31, 1982 and 1981, respectively.

(f) Revenues

Meters for residential, commercial and small industrial customers are read cyclically and sales recorded only when billed. This sytem of billing results in earned but unbilled revenues which amounted to $13,500,000 at April 30, 1983 and $12,500,000 at April 30, 1982. For large industrial customers, meters are read near month-end and billings recorded on the accrual basis. Electric revenue billings are adjusted periodically for changes in costs of fuel and purchased power. Revenues from water and irrigation operations are recorded when earned.

(g) Electric Rates

Under Arizona law, the District Board of Directors has the exclusive authority to establish electric rates. The District is required to follow certain procedures, including certain public notice requirements and holding a special Board meeting, before implementing any changes in the standard electric rate schedules. A general rate increase of 5.5% approved by the District's Board on February 28, 1983 became effective April 1, 1983.

(2) Possession and use of utility plant:

The United States of America retains a paramount right or claim in the Project which arises from the original construction and operation of the Project's facilities as a Federal Reclamation Project. The Project's right to the possession and use of, and to all revenues produced by, these facilities is evidenced by contractual arrangements with the United States.

(3) Construction program:

(a) Balances shown for construction work in progress represent expenditures for new facilities required to service anticipated customer needs, and consist of:

	($000) April 30	
	1983	1982
Electric generating facilities	$1,236,761	$1,211,420
Transmission and distribution	41,334	51,736
Irrigation plant	6,788	6,057
Other construction	19,364	5,365
Total	$1,304,247	$1,274,578

Construction expenditures planned for fiscal years 1984 through 1988 approximate:

	(In Millions) Construction	Allowance for Funds Used During Construction	Total
1984	$362.0	$139.0	$501.0
1985	207.7	57.3	265.0
1986	211.4	41.5	252.9
1987	209.9	35.9	245.8
1988	304.0	30.9	334.9

These expenditures will be financed in part from the sale of certain of the District's properties, from funds currently on hand and from future net revenues. The balance of required funds will be provided by the sale of revenue bonds.

At April 30, 1983, necessary commitments had been entered into for delivery of materials and services on construction projects. In addition, various firm commitments exist under coal and fuel oil supply contracts.

(b) The District has a 23.19% interest in Palo Verde Nuclear Generating Station (PVNGS), after the sale of a 5.91% interest to Southern California Public Power Authority (SCPPA). Additionally, the District has entered into an arrangement with the Department of Water and Power of the City of Los Angeles which provides for the transfer of a 5.70% interest in PVNGS when Unit 1 goes into commercial operation.

The estimated in-service date for Unit 1 is May 1, 1984.

Pursuant to a decision by its licensing board, the Nuclear Regulatory Commission (NRC) issued construction permits for all three PVNGS units in May 1976. An application for operating licenses has been docketed by the NRC and the NRC staff has issued a satisfactory safety evaluation report, subject to resolution of certain uncontested matters and inclusion in the licenses of certain conditions, and a favorable final environmental statement on such applications. Hearings on an intervenor's petition have been concluded and the licensing board has issued a favorable initial decision which, rejecting the intervenor's contentions, concluded that there was an adequate supply of cooling water for the operation of all three PVNGS units. By a decision issued in February 1982, the appeal board affirmed the licensing board's initial decision. The NRC declined any review of the appeal board's decision, which became final agency action on April 27, 1983. After hearings on the intervenor's contentions had been concluded, an entity representing parties who farm in the vicinity of PVNGS petitioned the licensing board to reopen the hearings to consider an environmental issue related to salt emissions associated with the plant's cooling system. By an order issued in December 1982, the licensing board denied the petition as to Unit 1, but granted the petition as to Units 2 and 3. As a consequence, the licensing board's action will not impact the licensing of Unit 1; the impact of the licensing board's order on licensing proceedings as to Units 2 and 3 cannot currently be predicted. Issuance of an operating license for Unit 1 is dependent on the completion of construction and resolution of the remaining uncontested matters noted above in connection with the NRC staff's safety evaluation report. Arizona Public Service (APS), project manager and operating agent for PVNGS, believes such matters will be resolved by the time Unit 1 is otherwise ready for operation.

On June 6, 1983, the U.S. Supreme Court upheld the current approach of the NRC to the consideration of the environmental implications of the disposition or long-term storage of nuclear waste relative to pending licensing applications. By such decision, the Supreme Court reversed an April 1982 lower court decision finding the NRC's approach to be inadequate.

Projected construction expenditures include a contingency allowance to reflect the possibility of a one-year delay in the completion of Unit 3, and other potential cost increases.

APS believes that any equipment modifications or changes in operating procedures the NRC may impose as a consequence of the 1979 incident at the Three Mile Island nuclear plant in Pennsylvania (or which the participants, themselves, may impose) will be accommodated by the time the units are otherwise ready for operation.

On September 10, 1982, the District sold a 5.91% interest in PVNGS to SCPPA for $266,205,281, reducing the District's interest in PVNGS to 23.19%. The District recognized a gain on the sale of $9,526,847.

(4) Interests in jointly owned electric utility plants:

The District has entered into various agreements with other electric utilities for the joint ownership of electric generating and transmission facilities. Each participating owner in these facilities must provide for and furnish the financing for its ownership share. The following schedule reflects the District's ownership interest (at cost) in jointly owned electric utility plants at April 30, 1983:

Plant Name	Ownership Share Percent	In Millions: Plant in Service	Accumulated Depreciation	Construction Work in Progress
Four Corners (New Mexico)	10.0	$39.7	$9.2	$20.8
Mohave (Nevada)	10.0	36.2	11.4	.7
Navajo (Arizona)	21.7	207.5	49.6	3.5
Hayden (Colorado)	50.0	65.0	15.2	1.1
Coronado (Arizona)	70.0	662.8	66.0	15.9
Craig (Colorado)	29.0	223.1	21.3	1.1
Palo Verde (Arizona) *(Note 3)*	23.19	18.5	.4	1,091.9
		$1,252.8	$173.1	$1,135.0

The District acts as the operating agent for the participants in the Navajo and Coronado Projects, and, as operating agent, pays the costs of operations for each project and bills each participant including itself for its share of such costs.

The District's share of direct expenses of the jointly owned plants is included in the corresponding operating expenses in the attached combined statements of net revenues.

(5) Long-term debt:

Series Electric System Revenue Bonds (a):	Interest Rate	($000) 1983	($000) 1982	Future Maturities
1973 A & B	5 to 6-1/2	$135,935	$138,130	1984-2011
1974 A & B	5.7 to 7.6	138,850	140,000	1984-2012
1976 A,B,C & D	4.7 to 7.2	400,680	401,970	1984-2016
1977 A, B Refunding & C	4.3 to 6-1/8	388,365	390,415	1984-2017
1978 A,B & C	4.7 to 7	313,155	314,855	1984-2018
1979 A,B & C	4-3/4 to 7-1/4	279,002	280,755	1984-2019
1980 A,B & C	6-1/4 to 9-1/4	227,059	227,132	1985-2020
1981 A	9 to 14	75,000	75,000	1987-2021
1981 B (b)	10-1/4 to 14	3,000	55,000	1987-2021
1981 C	10 to 10-3/4	8,427	8,518	1986-1988
1983 A	8-1/4 to 9-1/4	16,004	-	1990-1994
1983 B	6 to 9-5/8	100,000	-	1989-2023
		2,085,477	2,031,775	
Unamortized bond discount		(34,153)	(34,953)	
Total electric system revenue bonds outstanding		2,051,324	1,996,822	
General Obligation Bonds and United States Government debt, net of discount, 0% to 6% (c)		194,245	208,237	1984-2005
Commercial paper classified as long-term debt, 4.0% to 5.125% *(Note 7)*		249,907	224,553	1983
Other, 9.75% to 10.50%		438	1,076	1983-1986
Total long-term debt		$2,495,914	$2,430,688	

(a) Electric system revenue bonds are secured by a pledge of, and a lien on, the revenues of the electric system after deducting "operating expenses," as defined in the bond resolutions, subject to prior liens of general obligation bonds of $184,745,000 and amounts due the United States of $11,082,232. In all years to date electric revenues, after deducting "operating expenses" as defined in the bond resolutions, have been more than sufficient to meet all debt service requirements.

(b) $52,000,000 of 1981 Series B Revenue Bonds maturing January 1, 2021, bearing interest of 14%, were defeased on December 8, 1982 by using General Funds of the District. A loss of $7,506,354 was recognized on the defeasance of the bonds.

(c) General obligation bonds are a lien upon the real property included in the District and are additionally secured by a pledge of revenues from the operation of the electric system. If the net electric revenues, as defined in the bond resolutions, are not sufficient to meet the principal and interest payments, the bonds and interest are payable from a levy of taxes on the real property.

The annual maturities of bonds and other long-term debt outstanding (excluding commercial paper) as of April 30, 1983 due in each of the fiscal years ending April 30, 1984 through 1988 are $25,689,000; $27,401,000; $32,215,000; $30,444,000 and $36,462,000, respectively.

Interest and amortization of discount on the various issues outstanding during the year resulted in an effective rate of 6.82% for 1983 and 6.76% for 1982. This rate approximates 7.22% over the remaining terms of the bonds.

The debt service portion of segregated funds includes $42,899,601 at April 30, 1983 and $38,026,000 at April 30, 1982, restricted for operating reserve requirements under bond resolutions.

Electric system revenue bonds totaling $149,102,000 principal amount are authorized, but unissued. Electric system refunding revenue bonds not to exceed $390,000,000 principal amount are also authorized, but unissued.

(6) Litigation:

Environmental:

Various pending litigation or administrative proceedings involving environmental matters could affect interests of the Project in present and proposed generating facilities. In general, these lawsuits seek to impose higher air quality standards for generating plants. If ultimately decided adversely to the interest of the Project, the outcome of the lawsuits could result in increased construction costs, increased future operating costs, and a possible loss in the operational reliability of certain generating plants. All of these effects would increase the costs to be passed on to customers through increased electric rates.

Navajo Tax:

In 1977 and 1978, the Navajo Tribe promulgated three tax resolutions affecting electric generating stations, in which the District has an interest, located on the Navajo Reservation. The District and other participants in the affected generating stations filed lawsuits challenging the resolutions in Federal District Courts for Arizona and New Mexico. As a result of action by the Tribe to honor its covenants not to tax the participants in the electric generating stations on the reservation, the Arizona lawsuit was dismissed as moot, as will be related claims in the New Mexico suit.

No taxes are currently being imposed on the District. The District continues to challenge in the New Mexico lawsuit the potential pass-through of taxes by on-reservation fuel suppliers to the District's off-reservation plant, Coronado Generating Station.

Hopi Tax:

The Hopi Tribal Council has proposed a Coal Severance License Ordinance. The intent of this ordinance is to tax the mining activities of the coal supplier for generating stations in which the District owns an interest.

While the contracts with the coal supplier may permit such taxes to be passed through in whole or in part to the owners of the generating stations, the ultimate effect of such taxes cannot be determined at this time. All such taxes, if passed on to the District, would then be passed on to customers as increased fuel costs.

Flood Damage:

Principally as a result of certain water flooding in March and December 1978, and February 1980, various lawsuits have been filed against the Project alleging that the Project has a responsibility in regard to flood control and a liability in regard to flood damage.

The ultimate liability, if any, is not determinable, but management expects that a significant portion of any liabilities which might result from flood damage claims will be covered by insurance.

Other:

In the normal course of business, the Project is a defendant in various matters involving litigation. In management's opinion, the ultimate resolution will not have a significant adverse effect on the Project's financial position or results of operations.

(7) Revolving credit agreement/ commercial paper program:

The District has a revolving credit agreement (the "Agreement") with a group of twenty-two banks led by

First Interstate Bank of Arizona, N.A. Under the terms of the Agreement, the District may borrow up to $250,000,000, until August 15, 1984. If the Agreement is not renewed prior to August 15, 1983, the District may continue to borrow but must reduce its outstanding borrowings to not more than $175,000,000 by August 14, 1984 and to $100,000,000 by August 14, 1985. Following August 14, 1985, the District may not make additional borrowings and must repay all outstanding borrowings by August 15, 1986. Borrowings under the Agreement initially bear interest at a rate equal to 60% of the lead bank's prime rate as established and announced from time to time. No compensating balances are required under the Agreement. A commitment fee of 3/8 of 1% per annum is payable on the $250,000,000 principal amount of the Agreement.

The District's Board has authorized the issuance of up to $250,000,000 in short-term promissory notes (the "Notes"). The Notes are being sold in the tax-exempt commercial paper market. The Notes will mature in no more than 270 days from the date of issuance and in no event after August 15, 1986. The Notes are issued in minimum denominations of $50,000 in bearer or registered form without coupons, and bear interest from their date at an annual interest rate not to be in excess of 15%.

The indebtedness of the District evidenced either by the Notes or borrowings under the Agreement is an unsecured obligation of the District payable from the general funds of the District lawfully available therefor, subject in all respects to the prior lien of General Obligation Bonds, Revenue Bonds and other indebtedness of the District secured by revenues or assets of the District. No specific revenues or assets of the District are pledged to the payment of the Notes or borrowings under the Agreement and the Notes and such borrowings are not payable from taxes.

Proceeds from the sale of the Notes are used for construction expenditures and to finance the District's fuel inventories. As of April 30, 1983, the District had no borrowings outstanding under the Agreement. As of April 30, 1983, the District had $249,907,000 of the Notes outstanding at an average interest rate of 4.79%. Borrowings under both the Agreement and Notes are being accounted for by the District as long-term debt.

The District's Board has limited the total amount of promissory notes which may be outstanding at any one time under the Agreement and in the tax-exempt commercial paper market to an aggregate of $250,000,000.

(8) Irrigation and water operations:

Irrigation and water operations expenses, including depreciation, exceeded the assessments, delivery fees, and other revenues therefrom by approximately $8,337,000 for 1983 and $13,676,000 for 1982. These amounts do not include expenditures for additions and improvements to irrigation plant and for repayment of long-term debt.

Auditors' report

To the Board of Directors,
Salt River Project Agricultural Improvement and Power District, and
Board of Governors,
Salt River Valley Water Users' Association:

We have examined the combined balance sheets of SALT RIVER PROJECT AGRICULTURAL IMPROVEMENT AND POWER DISTRICT (a political subdivision of the State of Arizona) and its agent, SALT RIVER VALLEY WATER USERS' ASSOCIATION, together referred to as the SALT RIVER PROJECT, as of April 30, 1983 and 1982, and the related combined statements of net revenues and sources of funds for additions to utility plant for the years then ended. 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 opinion, the financial statements referred to above present fairly the financial position of the Salt River Project as of April 30, 1983 and 1982, and the results of its operations and sources of funds for additions to utility plant for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

ARTHUR ANDERSEN & CO.

Phoenix, Arizona,
June 15, 1983

Statistical Review

Project General

($000)

	12 Months Ended April 30		12 Months Ended December 31	
	1983	1982	1977	1972
Operating revenues	$ 652,139	$ 664,463	$ 311,087	$ 104,699
Electric	$ 645,171	$ 655,682	$ 305,621	$ 102,628
Water and irrigation	$ 6,968	$ 8,781	$ 5,466	$ 2,071
Operating expenses	$ 457,905	$ 460,907	$ 220,384	$ 84,251
Net financing costs less capitalized interest	$ 35,069	$ 45,382	$ 37,451	$ 7,527
Other deductions (revenues), net	$ (790)	$ (168)	$ 43	$ 160
Net revenues	$ 159,955	$ 158,342	$ 53,209	$ 12,761
Construction expenditures	$ 297,507	$ 380,146	$ 312,538	$ 89,788
Electric and irrigation plant, gross	$3,386,983	$3,265,863	$1,473,520	$ 519,919
Contributions of power revenues to support water operations	$ 8,337	$ 13,676	$ 9,462	$ 10,600
Taxes and tax equivalents	$ 60,426	$ 64,589	$ 34,257	$ 11,208
Employees at year-end	5,179	4,776	3,652	2,654

Water*

	1982	1981	1977	1972
Total storage and pumping capacity (acre-feet)	2,827,428	2,879,177	2,810,645	2,856,538
Storage capacity (six reservoirs)	2,019,102	2,063,948	2,072,050	2,072,050
Installed pumping capacity	808,326	815,229	738,595	784,488
Water in storage January 1 (acre-feet)	1,116,338	1,480,332	976,725	1,014,578
Project storage only	895,118	1,227,055	711,353	723,247
Runoff (acre-feet)	1,667,257**	566,243	367,122**	1,279,103**
Water in storage December 31 (acre-feet)	1,631,411	1,116,338	511,093	1,434,947
Project storage only	1,345,252	895,118	325,087	1,051,824
Sources of water for deliveries (acre-feet)	1,054,163	1,222,376	1,209,197	1,190,453
Gravity supply	936,680**	870,262	809,373**	782,629
Groundwater supply (pumping by SRP)	104,019	337,424	391,627	403,106
Groundwater supply (pumping by others)	13,464	14,690	8,197	4,718
Use of water (acre-feet)	955,389	892,639	1,209,197	1,190,477
Agricultural	379,903	440,047	441,103	455,567
Urban	355,278	381,457	316,325	236,631
City domestic	247,216	265,002	205,921	142,559
Subdivision irrigation	61,460	62,908	57,952	50,248
Other nonagricultural irrigation (schools, parks, churches, etc.)	46,603	53,547	52,452	43,555
Decreed deliveries	58,400	64,431	66,158	55,548
Contract deliveries	103,686	108,358	86,920	105,771
Seepage and evapotranspiration	156,896	228,082	298,691	363,371
Canals, total (miles)	131	131	131	131
Lined	71	70	61	53
Laterals, total (miles)	886	884	878	877
Lined or piped	764	758	726	622
Drainage and waste ditches (miles)	243	243	250	272
Lined or piped	68	63	55	47
Assessed area (acres)	238,172	238,221	238,220	238,263.90
Number of assessed accounts	179,532	178,796	168,736	152,120
Number of times water delivered to water users	491,242	456,129	493,043	517,784

*Statistics on water are computed on a calendar year basis.

**Based on U.S.G.S. provisional records and subject to adjustment.

Power

	12 Months Ended April 30		12 Months Ended December 31	
	1983	1982	1977	1972
Energy sources (kwh)				
Net steam generation*	11,399,943,000	12,429,457,000	7,499,002,000*	4,219,158,000*
Net combustion turbine generation	16,206,000	24,298,000	59,167,000	125,819,000
Net combined cycle generation	287,629,000	4,188,000	477,808,000	0
Net run of river generation	613,694,000	255,762,000	319,851,000**	97,870,280
Pumped storage generation	199,069,000	155,560,000	22,694,000	74,082,000
Total net generation*	12,516,541,000	12,869,265,000	8,378,522,000**	4,516,929,280*
Purchased	1,735,645,332	1,691,696,160	1,730,201,348	1,559,501,675
Interchange received	87,348,000	109,169,000	178,417,000	560,248,063
Wheeling received	8,154,668	7,788,840	7,402,652	41,976,362
Total energy sources*	14,347,689,000	14,677,919,000	10,294,543,000	6,678,655,380
Energy disposition (kwh)				
Residential	3,982,669,563	3,996,561,567	3,169,000,667	2,260,767,468
Commercial & industrial	4,386,224,953	5,076,034,947	3,728,299,603	2,631,193,186
Irrigation pumping	192,420,700	249,286,026	283,926,606	257,292,624
Street & highway lighting	46,948,183	46,963,317	38,198,033	31,959,968
Public authorities	338,755,364	374,397,640	321,266,390	209,570,851
Interdepartmental	61,423,824	179,577,422	214,648,125	216,442,682
Sales for resale	4,079,623,799	3,564,619,094	1,859,308,829	428,622,958
Total sales	13,088,066,386	13,487,440,013	9,614,648,253	6,035,849,737
Interchange delivered	74,340,000	63,328,000	185,980,000	132,683,800
Wheeling delivered	7,433,303	7,148,429	6,854,855	38,954,064
Energy losses	895,845,311	895,393,558	453,313,892	471,167,779
Energy for pumped storage operation	282,004,000	224,609,000	33,746,000	21,651,000
Total disposition of energy	14,347,689,000	14,677,919,000	10,294,543,000	6,678,655,380
Peak overall power system (kw)	2,619,000	2,729,000	2,149,000	1,523,000
Date and time (MST)	August 2, 6 p.m.	July 30, 6 p.m.	June 29, 5 p.m.	August 1, 5 p.m.
Peak Project customers (kw)	2,172,000	2,266,000	1,731,000	1,360,000
Date and time (MST)	August 20, 5 p.m.	August 26, 6 p.m.	Sept. 7, 6 p.m.	July 31, 6 p.m.
Generating capability (kw)**				
Steam*	2,283,250	2,285,250	1,548,250*	855,712*
Combustion turbines	393,000	393,000	378,000	106,250
Combined cycle	288,000	288,000	288,000	0
Hydroelectric conventional	95,000	95,000	94,000	56,755
Hydroelectric pumped storage	137,000	137,000	140,000	148,523
Total operating capability*	3,196,250	3,198,250	2,448,250	1,687,832*
Contract purchase at time of peak	329,547	329,547	461,813	520,592*
Total resources*	3,525,797	3,527,797	2,910,063*	1,687,832*
Electric customers - year end				
Residential	332,790	315,948	248,877	191,357
Commercial & industrial	25,092	23,840	18,526	14,076
Other	1,679	1,624	1,488	1,012
Total	359,561	341,412	268,891	206,445
Average annual kwh use -				
Residential	12,277	12,798	13,108	12,442
Average annual kwh revenue -				
Residential (cents/kwh)	6.47	6.55	4.25	2.14

*Includes SRP participation in jointly owned projects.

**Unit capabilities during summer peak.

Officers

Elected Officers

John R. Lassen
President

Marcel J. Boulais
Vice President

Principal Officers and Other Executives

A. J. Pfister
General Manager

Robert F. Amos
Deputy General Manager

Paul G. Ahler
Director, Human Resources

John D. Jacobs
Director, Information Systems

James L. Swartz
Director, Operations Services

John R. McNamara
Associate General Manager, Power

Trent O. Meacham
Assistant General Manager,
Power Construction & Maintenance

John O. Rich
Assistant General Manager,
Power Operations

Stephen M. Chalmers
Director, Engineering Services

John M. Evans
Manager, Electric System

R. D. Johnson
Manager, Generation

Reid W. Teeples
Associate General Manager, Water

Don L. Weesner
Assistant General Manager, Water

R. W. Mason
Director, Water Group Management Staff

Stanley E. Hancock
Assistant General Manager,
Communications & Public Affairs

Leroy Michael Jr.
Assistant General Manager,
Planning & Resources

William G. Beyer
Director, Project Planning

Don G. Parlett
Assistant General Manager,
Customer Services

Carroll M. Perkins
Assistant General Manager,
Financial Services and
Treasurer

D. Michael Rappoport
Director, Government Affairs

Richard H. Silverman
Director, Law & Land

Paul D. Rice
Corporate Secretary

Consultants

Legal Advisers
Jennings, Strouss & Salmon

Auditors
Arthur Andersen & Co.

Bond Counsel
Mudge Rose Guthrie & Alexander

Financial Consultant
Lazard Fréres & Co.

Board Members

The 10 members of the Board of Governors of the Salt River Valley Water Users' Association are elected every two years by the shareholders (property owners) of the Association.

The Board of Directors of the Salt River Project Agricultural Improvement and Power District consists of 14 members. One District board member is elected from each of the 10 SRP geographical areas, and four members are elected at-large. District board members serve four-year terms.

Board members establish the policies for the management and conduct of Salt River Project's business affairs.

District 1
Rudolph Johnson

District 2
Alex M. Conovaloff

District 3
Bruce B. Brooks

District 4
Gilbert R. Rogers

District 5
John M. Williams Jr.

District 6
Thomas P. Hurley

District 7
William P. Schrader

District 8
Joe Bob Neely

District 9
W. Larkin Fitch

District 10
Otto B. Neely

At-large
Dr. Stanford F. Hartman
William W. Arnett
Fred J. Ash
John L. Burton Jr.

Council Members

Three council members are elected by SRP shareholders to two-year terms in each of the 10 districts of the Salt River Valley Water Users' Association. Three council members are elected to staggered four-year terms in each of the 10 divisions of the Salt River Project Agricultural Improvement and Power District.

The councils enact and amend bylaws relating to the management and conduct of SRP's business affairs.

District 1
Robert L. Cook
Howard W. Lydic
Emil M. Rovey

District 2
Tim A. Conovaloff
Wayne A. Hart
C. C. Pendergast Jr.

District 3
M. B. Brooks Jr.
John E. Anderson
Elvin E. Fleming

District 4
Wiley R. Baker
Levi H. Reed
Ivy Wilson Jr.

District 5
Roy W. Cheatham
Edmund Navarro
Carl E. Weiler

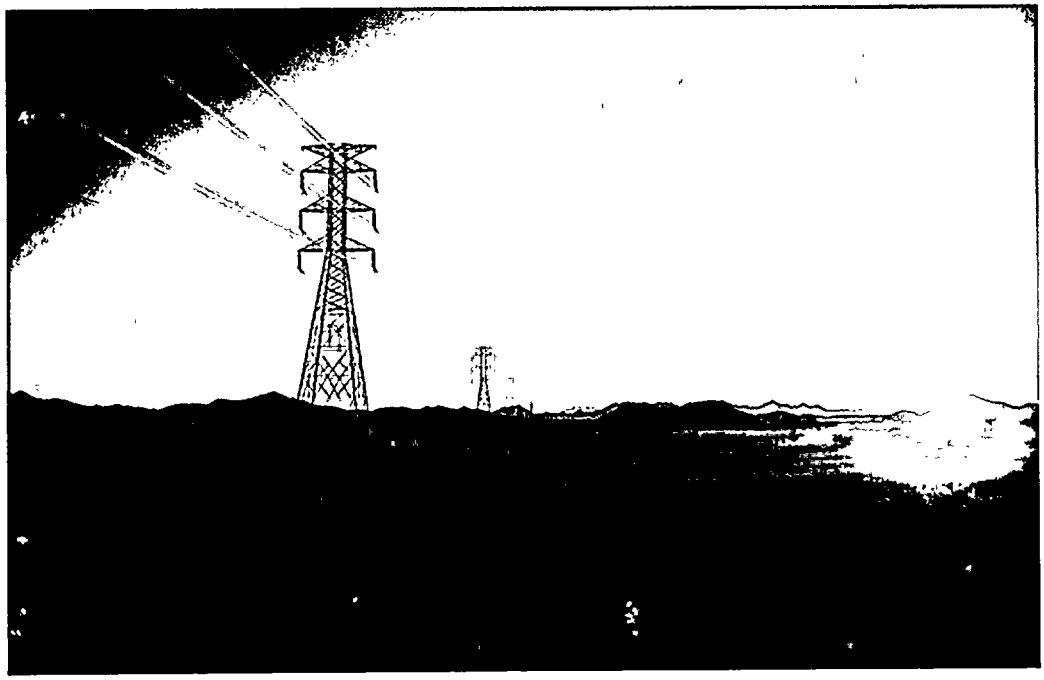
District 6
James L. Diller
James R. Marshall
Dean W. Lewis

District 7
Lester Mowry
Wayne A. Marietta
George B. Willmoth

District 8
Dwayne E. Dobson
Thomas M. Owens Jr.
Martin Kempton

District 9
Robert W. Birchett
W. Curtis Dana
Olen Sharp

District 10
Orland R. Hatch
L. Max Pace
C. Dale Willis



SALT RIVER PROJECT
P.O. Box 1980, Phoenix, AZ 85001
Return requested

If you wish to receive a copy of next year's SRP Annual Report and you are not already on our mailing list, or if there is an error on our current mailing label, please write to:

Annual Report
c/o Salt River Project
Communications & Public Affairs
P.O. Box 1980
Phoenix, AZ 85001

84-9010/7-83/7M