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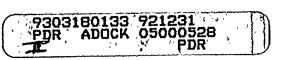
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David O. Onstad Administrator



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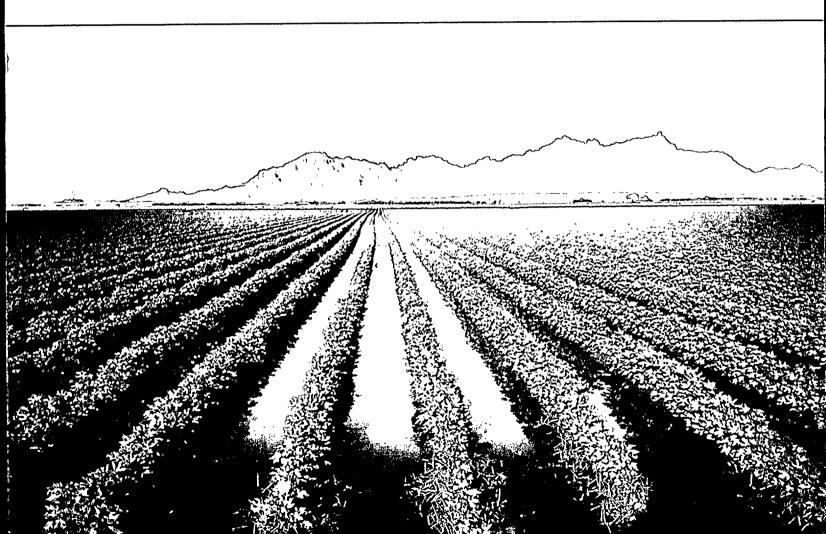
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ARIZONA POWER AUTHORITY
34TH ANNUAL REPORT

Docket # 50 - 528
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### **ARIZONA POWER AUTHORITY STAFF**

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James Bartlett Authority Attorney

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Rosemary Anhalt Fiscal Services Specialist

Donna Robins Administrative Secretary

Donald Esgar Customer Services and Contracts Manager

Evelyn Magnusson Public Utilities Specialist ·

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### REPORT OF THE COMMISSION

An overriding concern of the Commission this year was holding the lid on rates charged our customers for power from the Hoover powerplant. It is expected that the aging Hoover powerplant and related facilities in operation for nearly 60 years must be modernized and expanded to meet today's demands.

Historically, rates for federal hydroelectric power have been relatively stable. Rate adjustments to cover annual fluctuations in power generation (due to variations in snow melt and scheduled outages) and operations and maintenance costs have stayed

well below 20 percent.

A combination of factors changed the scenario during the past year. First, snow melt into Lake Powell was lighter than usual. Less water through Hoover generators meant less energy for sale, and rates had to be adjusted to continue to meet commitments on previous capital improvements.

Second, because federal statutes require the Arizona Power Authority (Authority) and other Hoover powerplant customers to pay their portion of replacement costs incurred



at Hoover Dam and on related transmission facilities, power customers in Arizona, Nevada and Southern California are paying for a new visitors center at the Dam. They are also paying for expansion of transmission facilities at the Parker-Davis and the Pacific Northwest-Pacific Southwest Intertie.

It is unfortunate that rate increases to pay for these costs are occurring in a year when cotton prices are down and a white fly infestation has reduced cotton production by 30 percent.

To help counter the impact of these

increased costs, the Authority is working closely with its customers on programs to improve energy efficiency and water conservation. The Authority also aggressively represents its customers at rate negotiations and continues to play an active role in the Hoover **Engineering and Oversight** Committee, which was organized several years ago to monitor Bureau of Reclamation O&M expenditures at Hoover Dam.

The Commission is disappointed that the proposed Hoover Modification Project to increase peak power capacity at the dam by 500 megawatts is

stymied by lack of immediate customers. We see it as one of the last opportunities to develop low-cost

hydroelectric capacity.

One of the most satisfying achievements of my tenure on the Commission has been the Hoover Uprating Program, which has increased power output by 30 percent. Generator uprating will be completed in 1993.

As chairman of the Commission, it is my mission to maintain what we have achieved and aggressively fight for rates

acceptable to our customers.



## Arizona Power Authority

P.O. BOX 6708, PHOENIX, AZ 85005 • (602) 542-4263 • FAX 253-7970 • 1810 W. ADAMS ST., PHOENIX, AZ 85007-2697

December 29, 1992

The Honorable Fife Symington Governor of Arizona State Capitol Ninth Floor, West Wing Phoenix, AZ 85007

**Dear Governor Symington:** 

Improyed communication describes a major Arizona Power Authority achievement during the fiscal year ended June 30, 1992. Under the leadership of Authority Administrator David Onstad, customers are better informed about impending changes that will affect them and given the opportunity to participate in the outcome.

The 34th Annual Report of the Authority highlights several activities that have enhanced interaction and understanding among the Authority, its customers, and the government agencies that operate and maintain power generation and transmission facilities. These activities include:

• A customer survey to guide future conservation efforts

 Increased communication with customers, including cities, towns and rural electric cooperatives

• Meetings with the Western Area Power Administration to explore new ways to hold down rates

• Expansion of the role of the Hoover Engineering and Oversight Committee

Exploration of new types of contracts with power wheeling entities

 Active participation on behalf of our customers in the Colorado River Energy Distributors' Association

The professional staff and commissioners of the Arizona Power Authority attempt to look at the big picture to find solutions appropriate to today's world.

We believe effective, two-way communication with many diverse entities is essential to the Authority's continuing commitment to provide dependable, low-cost power to its customers in the state of Arizona.

Robert P. Casillas

Chairman

STAFF

### **WEMBERS OF THE COMMISSION**

The Authority Commission meets the third Tuesday of each month to review Authority activities and provide guidance on issues affecting customers.\*



#### Robert P. Casillas Chairman

Bob Casillas will serve as chairman through January 1994. First appointed to the Commission in 1985, he was reappointed in

1990 for a second term. A native of Miami, Arizona, Chairman Casillas, along with his brother, founded C.C. Foods, Inc., a tortilla manufacturing and distributing firm in Phoenix, Arizona. He is a former director of the Globe Lions Club and is a member of the Globe-Miami Economic Development Committee.



### Jewell M. Lewis Vice-Chairperson

Dr. Lewis was appointed to the Commission in 1986. Formerly a teacher for 20 years in the Arizona school system, she is chairperson of

the board of Media America Corp., which owns KTVK Channel 3, Phoenix Magazine, KESZ Radio, and Desert Production Center. Dr. Lewis is a member of the Arizona Perinatal Board of Trustees, the University of Arizona Alumni Board, and co-chair of the Orpheum Theatre Renovation Foundation.



#### Richard S. Walden

Dick Walden is the immediate past chairman. Appointed to the Commission in 1984, Walden is serving his second consecutive sixyear term. Mr.

Walden heads the Farmers Investment Co., a family-owned pecan and cotton production and processing firm headquartered in Sahuarita, Arizona. He is a director of the First Interstate Bank, and the National Pecan Shellers Association.



### J. S. Francis, Jr.

Jack Francis was appointed to the Commission in 1984 and served as its chairman from 1988-90. He is also serving a second six-year term. Mr. Francis

is chairman of the board of Valley Industries, a family-owned cotton ginning company in Glendale, Arizona. He is president of the Cotton Council International, vice-president of the National Cotton Council and serves on the boards of the Arizona Cotton Growers Association and the Supima Association of America.



### James K. Henness

Jim Henness has served on the Commission for 12 years and was chairman from 1984-86. His second term ends in 1994. A cotton farmer from Casa Grande, Arizona,

Mr. Henness is active in many agribusiness, environmental and community organizations including the National Association of Conservation Districts and the Arizona Cotton Growers Association.

\*The Governor appoints individuals to serve on the Authority's five-member Commission, subject to confirmation by the state Senate. To provide continuity in the administration and operation of the Authority, members are appointed to staggered terms of six years each. The Commission elects from its membership a chairman and a vice-chairman who hold office for two years, beginning and ending on the first Monday in January.

### Intergrated Resource Planning Is the Heart OF REVISED CONSERVATION PROGRAM

For the past six years, the Arizona Power Authority (Authority) has successfully complied with the Western Area Power Administration's (Western) Conservation and Renewable Energy (C&RE) program, required of all power customers benefiting from federal firm power contracts. The goal of the program is the efficient use of federal power. A revised program proposed by Western would more directly link hydroelectric resource allocations and

the efficient use of energy.
"The Authority's C&RE effort has been exceptional," said Randy Manion, area conservation officer for Western's

Phoenix Area Office.

Highlights of the Authority's C&RE

program include:

• Customer education and information dissemination through site visits, promotion of Westernsponsored C&RE workshops, and presentation of Authoritysponsored workshops.

 Technical assistance to improve irrigation pump efficiency through demonstrations and pump testing. (Economic analyses demonstrated the cost effectiveness of repairing/replacing pumps that tested less than 50 percent efficient.)

• Two infrared cameras, on loan from Western, that customers have used to detect "hot spots" in electrical equipment, resulting in timely repairs and thousands of dollars in

savings.

 Power factor studies and implementation of corrective measures reducing transformer power loss to a minimum on customer distribution systems.

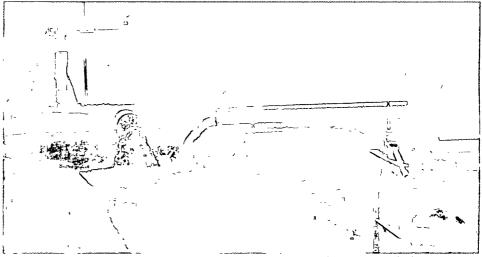
 An energy conservation retrofit program at Authority headquarters consisting of improved insulation, a setback thermostat, and higher efficiency lighting, cooling, and heating systems.

Western requires the Authority to update its C&RE program every two vears. "The Authority's most current C&RE program, submitted to us in May 1992, looks even more enthusiastic, Manion said. It includes the following activities:

- Agricultural efficiency technical assistance and information dissemination
- Irrigation pump testing
- Infrared testing and technical assistance
- Circuit rider program
- Bulk contracting

establishes a link between Western's marketing of power and long-term planning by Western customers. Integrated Resource Planning (IRP) is the cornerstone of the new program.

The revised program, which is based on two years of public input, will be documented in a draft environmental impact statement and the Federal Register, possibly in December 1992. Western will implement the program throughout its five areas.



"We're excited about the new circuit rider program," said the Authority's Don Esgar, who promotes the C&RE program among Authority customers. The circuit rider program, which is being jointly funded by Western and the Arizona Energy Office, calls upon the services of a technician from the Energy Office.

"The circuit rider will provide site visits to help our customers with energy conservation programs such as load management and integrated resource planning," explained Esgar.

**New Program** 

Western has proposed an Energy Planning and Management Program (EPAMP) to replace the Guidelines and Acceptance Criteria that shape the C&RE program. The revised program

As currently envisioned, the new program will require Authority customers either to perform integrated resource planning or participate with others in cooperative IRP planning.

The Authority's 38 customers range from entities requiring as little as 10 megawatt-hours a year to large utilities using 17,000 megawatt-hours a year. To accommodate this diversity, EPAMP provides enough flexibility to embrace the needs of even the smallest utility.

According to Western's Manion, "Integrated resource planning is a beneficial tool for any size customer." He explained, however, that factors such as the size, type and end-use of a customer's load will impact the level of benefit. "It is only through the IRP process," said Manion, "that a utility can truly identify the level of achievable benefits."

**Power Marketing Initiative** 

A significant EPAMP component is the Power Marketing Initiative giving existing customers 25-year extensions of 98 percent of the resource available when their existing contracts expire. Authority customers are not immediately affected by this initiative because their current contracts are good through 2008 and 2017.

The objective is to encourage customers' efficient usage through long-term resource planning. Western reserves the right to make adjustments on five years' notice in response to changes in hydrology and river

operations. The remaining two percent of the nonextended resources will be available for allocation to new customers.

**Integrated Resource Planning** 

The IRP process requires all longterm firm power customers to develop and implement an integrated resource plan, submit an updated plan every five years, and submit a progress report annually. Western envisions that the plans will result in enhanced energy services, cost savings, measurable energy and capacity benefits, and environmental benefits. The plans must include:

- 1. Load forecasts
- 2. Supply-side resource assessment
- 3. Demand-side resource assessment
- 4. Environmental effects
- 5. Resource evaluation
- 6. Short-term action plan
- 7. Long-term action plan
- 8. Consumer and governing board involvement

"Part of our mission," said Western's Manion, "is to encourage customers to choose the best resource for their given operation." Western believes IRP is the tool that will help them make that choice.

### **CUSTOMER SURVEY**

The Authority queried its customers this summer through a written survey to help determine the best time to hold the first annual customer meeting and for opinions about ongoing and new energy conservation activities.

To comply with the wishes of most customers, the Authority is scheduling the annual meeting this winter to discuss the Authority's role in the C&RE program.

Other questions dealt with the perceived usefulness of a newsletter, infrared cameras, pump testing, bulk contracting, irrigation water management, and a new circuit rider program.

In the circuit rider program, a technician from the Arizona Energy Office would "ride the circuit" among Authority customers and their end-



O.L. "Van" Tenney

users to help plan and implement energy efficiency.

The Authority asked several customers to elaborate on their responses to the survey for the benefit of annual

report readers.

"I think a newsletter has merit," offered O.L. "Van" Tenney, general manager of Electrical District No. 3 (ED-3). "We need a process to make sure information flow from Western to the Authority also goes to the customers, and this could be the conduit."

Tenney praised the Authority for its letters to customers and special customer meetings during the past year, and especially for its efforts to allow customer input.



DeWayne Justice

He feels the circuit rider program will allow small districts to have expertise not otherwise affordable. "Like anything else," he said, "the success would depend largely on who you

hire."

Although DeWayne Justice, manager of the Electrical District No. 7 (ED-7), has some reservations about the circuit rider program, he believes "the pump testing program, over a period of time,

gives you a good look at trends. When we have the time to set a norm;" he said, "pump testing will make a difference." He said, however, that "the infrared program doesn't provide a tremendous opportunity for us where our pumps are connected to transformers."

On the other hand, William Petty, assistant general manager of the Roosevelt Water Conservation District (RWCD), said his district saved enough energy using the Authority's infrared camera to buy one. In one instance, RWCD used the camera to identify a hot



Elizabeth Story

wire in time to save a \$5,000 starter.

Elizabeth Story, administrator of the Tonopah Irrigation District (TID), said she liked the idea of a newsletter, "assuming it would deal specifically with Arizona

irrigation issues." Although her district has not used the infrared camera, Story said "pump testing is the economic thing to do" and her customers routinely perform pump tests.

"Sharing information is always



Stan Ashby

useful," said Stan Ashby, superintendent of the Roosevelt Irrigation District (RID). "If the Authority does a newsletter, it should focus on problems germane to Arizona," he said.

Ashby's district performs pump tests twice a year. "It's very effective because we're able to rebuild pumps before they break down," he said. "If the Authority had a person to assist us, we'd probably be interested if it was cost effective."

The revised energy conservation program proposed by the Western Area Power Administration includes a

process called "integrated resource planning." To learn how best to tailor integrated resource planning for small entities, Western sponsored a demonstration with ED-3 and ED-7.

"Integrated resource planning works for customers like the SRP and APS who have the staff to compile analyses," observed ED-3's Tenney. "For us, the process has to be clean, swift and simple."

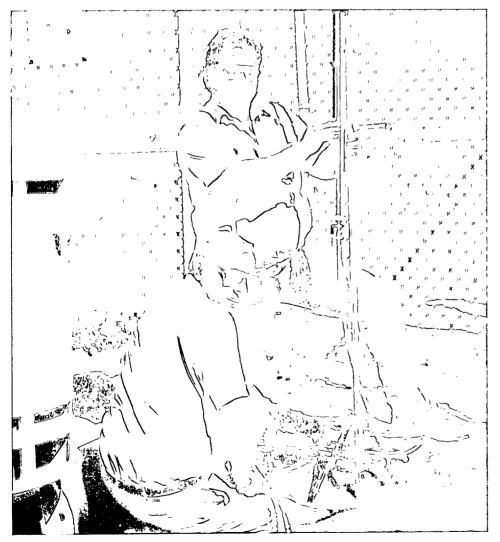
He believes the program will be helpful in demonstrating to the public that a federal resource is being used efficiently and effectively. "It will be a good tool for us," said Tenney, "if the requirements developed are workable for a small district."

"We could spend 40-50 percent of our O&M on this activity, which is beyond

question," said Justice of ED-7.
"Western recognized our difficulties,"
he said. "We tried to identify some
useful items for small customers."

"The analysis proposed implies you have a lot of choices," observed Story. "The process is too complicated for a small entity like Tonopah with no generation and little control over end use. We are currently limited by contract to the Authority and APS as suppliers."

The final wording of Western's revised energy conservation program will be official early next year.



Don Esgar (foreground) and Buckeye Irrigation District Water Master Ken Craig perform a test using a flow meter to evaluate pump efficiency. Authority staff, Esgar and Evelyn Magnusson, make field trips and conduct workshops in support of the C&RE program.

### TECHNOLOGY FOR THE 21ST CENTURY

Arizona farmers do not expect any revolutionary changes in the way they irrigate their crops between now and the end of the century. Most will continue to use some type of flood irrigation, but will incorporate moisture measurement devices and other technology to avoid costly overwatering.

Authority customers are participating in numerous programs to both conserve water and develop alternative energy

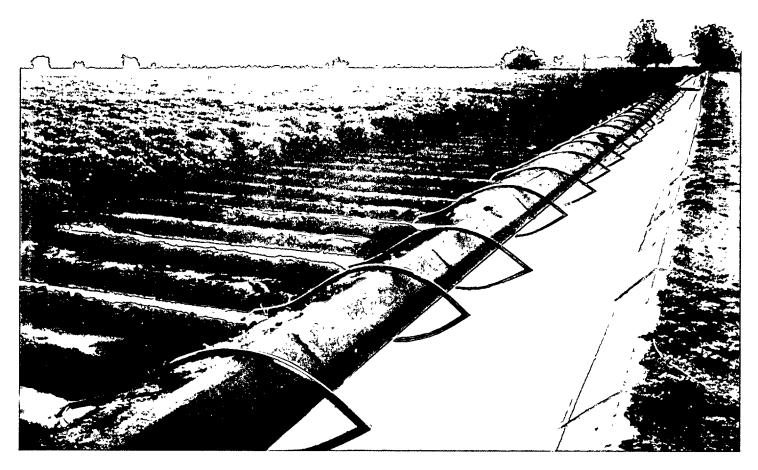
sources to pump irrigation water.

Cotton growers already practice conservation out of necessity. Reduced water usage is one of the few ways to significantly cut costs in an increasingly tough market. One irrigation management expert put it this way: "Those farmers who aren't irrigating efficiently won't be in business very long."

"Irrigation efficiency" is the ratio of

the amount of water a crop actually uses to the amount of water applied to a field. Irrigation efficiency in central Arizona averaged about 60 percent in 1985 when most farmers used the sloped-furrow irrigation method. The state goal is 85 percent efficiency by the year 2000, a 25 percent efficiency gain based primarily on application of level-basin technology.

Used in Arizona for more than a decade, level-basin irrigation is achieved



Irrigation of a level basin is similar to any flood irrigation: water is applied at a rapid rate through a ditch at one end of the field. It flows across the field in furrows. Fast delivery rates and level furrows result in a more even distribution of the water. Level-basin technology saves up to two acre-feet of water per acre per year compared with sloped furrow irrigation. At an

average cost of \$50 an acre-foot for water, that is a savings of \$100 an acre.

Drawbacks to leveling a field are soil compaction and the costly earthmoving procedure, which may remove top soil on the high end of a field and thereby reduce crop yield there for several years.

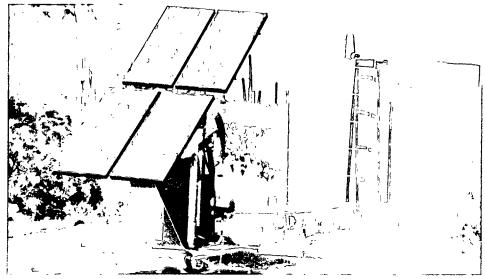
with laser-guided earthmoving equipment to remove contours and leave a field virtually flat. By eliminating the slope, irrigation water flows more uniformly across the field.

Maximum efficiencies of current irrigation technologies are: 60-70 percent for slope, 75 percent for modified slope, 85 percent for level basin, 85 percent for sprinkler, and 85 percent for drip.

Because of high capital and O&M

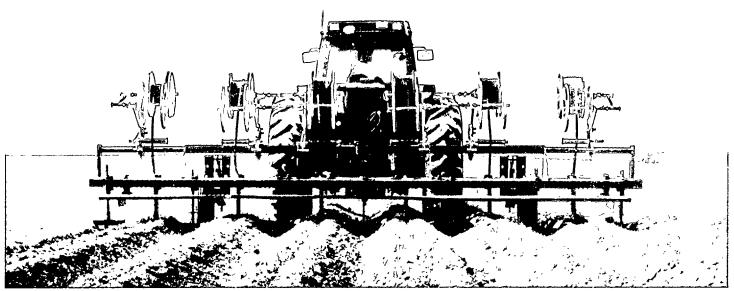
Because of high capital and O&M costs associated with sprinkler and drip irrigation, most experts expect variations of level-basin irrigation technology to prevail in Arizona into the next century.

A continuing trend will be the integration of sophisticated tools to improve decision making. Weather and soil moisture measurement instrumentation tied into automated water management systems will help determine how much and when to apply water for greatest crop yields and water savings.



A solar-powered pump installed in the desert east of Tucson is helping to determine the feasibility of irrigation pumping using photovoltaic equipment. Such facilities could be used in remote areas where the cost of power line construction is prohibitive.

Trico Electric Cooperative and Arizona Electric Power Cooperative (AEPCO) are participating in the demonstration projects which pumps 85 gallons of well water per day from a depth of 560 feet. Stored in a 3,000-gallon tank, the water feeds into a trough where it sustains wildlife. (A standard irrigation pump pumps 800 gallons per minute.)



Sundance Farms in Coolidge, Arizona, began experimenting with subsurface drip line irrigation in 1980. Sundance had already achieved higher crop yields using a surface drip system and half the water required in traditional flood irrigation. What they needed next was a system that would allow them to till, plant, and cultivate with high-speed, tractor-mounted implements. This led to experimentation with buried drip lines

and development of farm equipment to automate the procedures.

Shown here is a Sundance Irrigation Tape Injector which implants up to six irrigation tubes simultaneously in depths up to 14 inches. The farm currently cultivates half its 4,000 acres using this subsurface drip system to grow rotating crops of cotton, watermelon, peppers, corn, and milo.

### **BUREAU OF RECLAMATION**

The federal agency providing water resource development and management in the arid West

The U.S. Bureau of Reclamation (Reclamation) was created by Congress in 1902 as a division of the Department of Interior. Its mission was to reclaim the arid lands of the West through irrigation and to stimulate the settlement and economic development of the region.

Reclamation is probably best known for its dams and powerplants, including Hoover Dam on the Colorado River. Altogether, Reclamation's 52 hydroelectric powerplants supply nearly 14,000 megawatt-hours/year. The sale of that power returns \$675 million annually to the federal treasury.

Today, Reclamation stands at the crossroads. The major rivers have been harnessed and facilities are in place or being completed to meet the most pressing water demands. No major new project has been authorized by Congress since 1968. Environmental and budgetary constraints have made major agricultural water and power projects increasingly difficult to justify.

The key to Reclamation's future lies in its ability to make an orderly transition from a major construction agency to one of resource management.

Operation and maintenance of existing facilities assumes new stature. Priorities at federal power plants include installation of computer systems that enhance power generation and decrease costs, the uprating of generators to provide more output, and preventive maintenance.

One of Reclamation's last big construction projects is the new visitor center under way at Hoover Dam. These facilities will accommodate the nearly one million annual visitors to the dam. They will include a five-story parking structure, an interpretive center, theater, and two 50-passenger elevators that descend 506 feet into the rock, deep into the dam.



**Meet Robert J. Towles** 

A 48-year veteran of the Bureau of Reclamation, Bob Towles has served as Lower Colorado regional director since mid-1991. Until his appointment, he was project manager for five years of the Arizona Projects Office, where he had primary responsibility for completion of the Central Arizona Project (CAP) canal.

Towles is a graduate of the University of Arizona where he earned a degree in civil engineering. His career with Reclamation has taken him to California, Texas, Colorado, Arizona, and most recently to Boulder City, Nevada, where the Lower Colorado Region is headquartered.

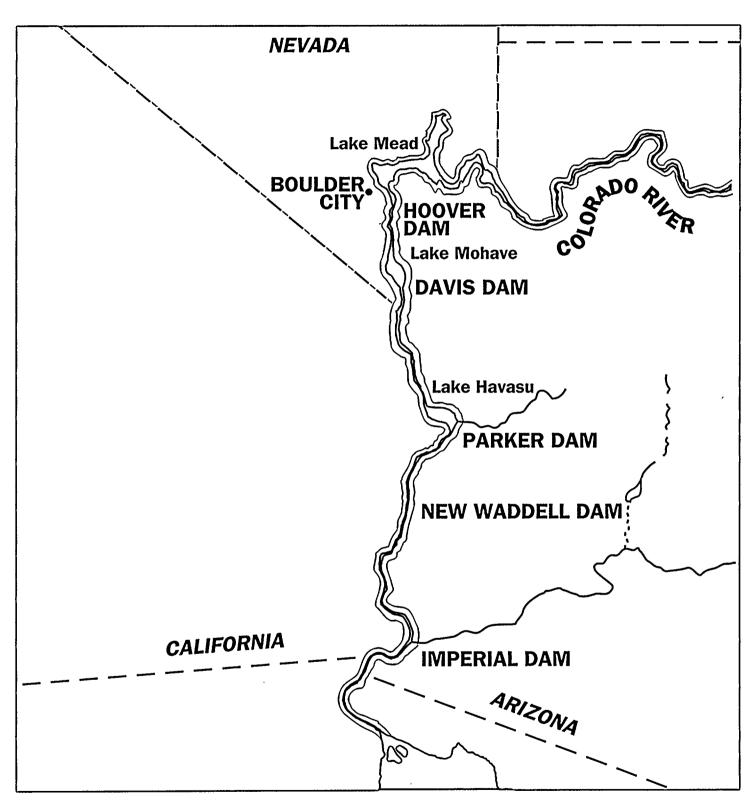
"The Authority is the liaison between its customers and Reclamation in the review of power rates," explained Towles. "One of the key changes since 1987 is the Authority's close involvement in operation and maintenance of the Hoover powerplant. There's openness and a willingness to

share in order to reduce costs and improve efficiency at the plant," he said.

Through their rates, Authority customers are asked to pay upfront their portion of any maintenance parts. An engineering and oversight committee was organized several years ago to monitor Reclamation's O&M activities at Hoover.

"The main improvements today are in the transformation of electricity and uprating generators to make them more efficient," said Towles. "The Authority is a partner in the decision making process on when and what to schedule."

The Hoover powerplant employs 200 people, mostly maintenance staff, on three shifts, 365 days a year.



The Lower Colorado Region of the U.S. Bureau of Reclamation. Future Reclamation priorities are operation and maintenance, water quality and environmental enhancement, total system optimization, dam safety programs, and groundwater management.

### **WESTERN AREA POWER ADMINISTRATION**

The federal agency that markets and transmits federally produced power

Established in 1977 as part of the U.S. Department of Energy, the Western Area Power Administration operates and maintains 16,664 miles of transmission lines, 265 substations, and other associated power facilities. The agency is headquartered in Golden, Colorado, and operates five area offices, one of which is in Phoenix.

Western transmits power to nearly 800 wholesale power customers in 15 central and western states. The Authority is one of those customers. In addition to providing efficient and reliable electrical service to its customers, Western is responsible for protecting the environment, promoting energy conservation, and developing and marketing renewable energy

resources.

Western sets the rates for the power sold to the Authority, who, in turn, passes costs along to its customers. Rate adjustments reflect the Bureau of Reclamation's costs of operating and maintaining the Hoover powerplant and Western's transmission system O&M costs at the Parker-Davis and the Pacific Northwest-Pacific Southwest Intertie projects.

Western also administers the Conservation and Renewable Energy

(C&RE) program.

With the Hoover PowerPlant Act of 1984, C&RE became mandatory. Every Western customer who benefits from a long-term allocation of federal power must have a C&RE program. The program provides a basis for evaluating an individual customer's energy conservation efforts.



Meet Thomas A. Hine

Tom Hine has been area manager for the Phoenix Area Office since 1983. He is responsible for the operation and maintenance of Western's power transmission system and for marketing the power produced by federal facilities in the Lower Colorado River Basin states and a small amount of power from the Salt Lake City Integrated Projects.

Hine began his federal career with the Department of Interior as a solicitor program attorney. He moved to the Department of Energy in 1978 to become general counsel at Western's headquarters in Golden. Hine received his law degree from the University of Denver, where he specialized in natural resources law.

Holding rates down is one of Hine's main objectives. "It's a fairly hectic process to assure that a rate is adequate

to pay the bills but not more than adequate," explained Hine, referring to recent adjustments needed to cover construction projects at Hoover Dam and on the transmission system.

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"We understand that when we raise a rate by a significant amount it affects the customers," Hine said. "We try to

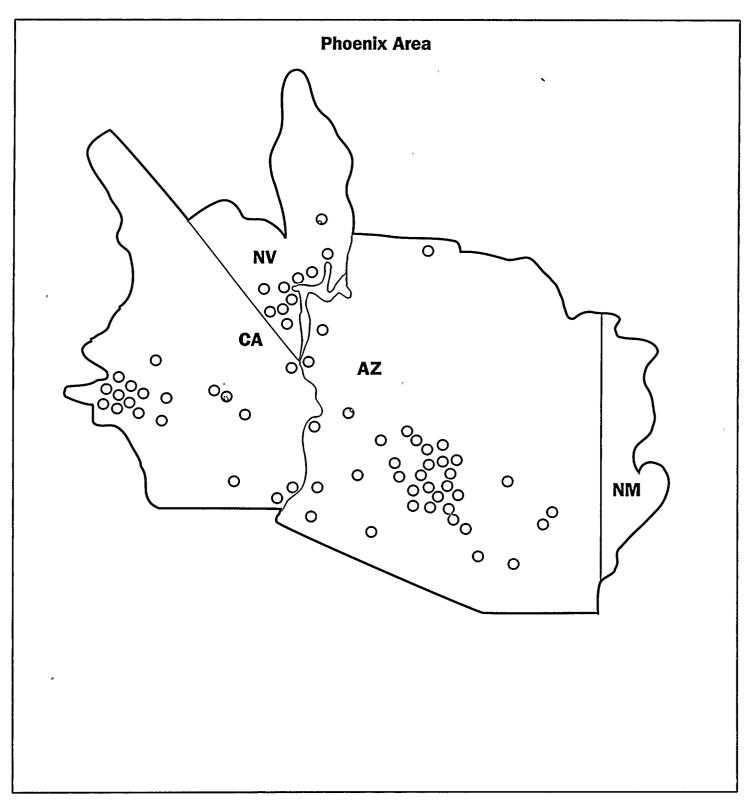
mitigate the impact."

Hine pointed out that because Hoover Dam improvements are financed on a revolving fund basis, the rate adjustments to cover them must be made in a single increase.

Rate hikes to pay for projects at Parker-Davis and the Intertie can be

introduced in steps.

Hine said his law background is helpful in handling the numerous contractual aspects of his position and in interpreting the many statutes.



The Phoenix Area Office of the Western Area Power Administration is responsible for 79 customers consisting of 28 irrigation districts, 17 municipalities, 15 federal agencies, 6 industrial customers, 5 investor-owned utilities, 5 rural electric cooperatives/associations, and 3 state agencies.

#### BRIEFS

**New Rules And Regulations** 

The Authority's Rules and Regulations, first adopted in 1952, have undergone various amendments over the years. After many meetings with customers over the past two years, the Commission presented a complete revision of the rules to the Governor's Regulatory Review Council during 1992 and offered them for formal public comment and adoption.

In its new Rules, the Authority has attempted to modernize and clarify the manner in which entities may apply for and obtain a supply of electric power from the Authority. The new Rules also update the Rules of Practice and Procedure governing administrative and quasi-judicial hearings before the

**Authority Commission.** 



**Scheduling Entity Agreement** 

Since 1988, the Salt River Project (SRP) has scheduled Hoover power to Arizona customers through an interim agreement with the Authority. Prior to that, the Western Area Power Administration served as the scheduling agent.

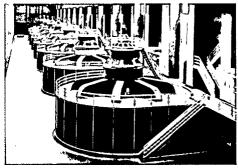
The Authority and SRP are in the process of negotiating a contractual scheduling agreement providing Authority customers with the flexibility to use Hoover power when they need it.

For example, SRP absorbs Authority customers' unused Hoover power during the winter months and saves it in a deviation account for Authority customers to tap when they require additional energy. Authority customers

must, however, consume their full Hoover allotment by the end of the year.

**Hoover Uprating Program** 

The uprating program got under way in 1981. It involves rewinding the original generators at the Hoover powerplant and will be completed in 1993. The Authority Commission regards this program as one of its major accomplishments in the past decade. The uprating—rewinding using modern technology—of 17 generators adds 528 megawatts of generating capacity.



**Hoover Modification Project** 

Lack of immediate interest by qualified customers has caused the Authority to rethink its plans for construction of Arizona's share of the Hoover Modification Project. The project, which would increase peak capacity at Hoover Dam by 500 megawatts, entails the addition of two large generators in a new powerhouse installed downstream from the base of the dam.

The Authority and Nevada's Colorado River Commission continue to seek potential users for the additional capacity. At present, Arizona's potential large users have adequate power available through 2007 and are not willing to make the commitment for the Modification Project as planned.

Arizona's share would be 250 megawatts, and Nevada's would be 250

megawatts.



**CREDA Activites** 

The Colorado River Energy Distributors' Association (CREDA), on behalf of its members, participates in studies of the environmental impact of fluctuating Glen Canyon Dam releases on downstream recreation, beaches, wildlife, and power produced at Glen Canyon powerplant.

The Authority is a member of CREDA, whose members are primarily power customers of Western's Colorado

River Storage Project (CRSP).

The proposed modified flow patterns from Glen Canyon Dam would impact CRSP customers by dramatically increasing power rates and diminishing the usefulness of the electric resource. Many Authority customers purchase CRSP power to supplement the energy they receive from the Authority.

Other CREDA activities during the past year included: 1) monitoring national energy legislation, 2) working with Reclamation and Western on issues affecting the availability and price of wholesale electric power, 3) monitoring operation, maintenance and replacement costs at Reclamation and Western power facilities to control costs, and 4) representing members' interests in efforts to preserve the integrity of the Grand Canvon.

Power Operations
On June 30, 1992, the water stored in Lake Mead was 19,497,000 acre-feet at a lake elevation of 1,175 feet. During the 1991-92 fiscal year, 8,269,000 acre-feet of water released through Hoover turbines produced 3,773,000 megawatt-hours of energy. During that period, the Authority's share of the energy was 707,690 megawatt-hours.

The Authority purchased 33,941

megawatt-hours of thermal-generated energy under wholesale power purchase contracts with the Arizona Electric Power Cooperative, Arizona Public Service Company and the Salt River Project. The Authority sold this power wholesale to its customers.



IN MEMORIAM

Johnny Gregovich, chairman of the Arizona Power Authority from 1982-84, died last year at the age of 72. Gregovich's leadership was characterized by his grasp of Authority business and tempered by his personal style, candor and humor. He was appointed to the Authority in 1977 and reappointed in 1978 to serve a six-year term.

A native of Claypool, Arizona, Gregovich was retired from Inspiration Copper Co. and served for 40 years as fire chief of the Tri-City Fire Department. He served in the U.S. Army during WW II and had been a senator in the state legislature.

Gregovich was active in state and community affairs, receiving the Golden Service Award in 1976. He served on

the Gas and Oil Commission, the State Community College Board, and the Criminal Code Commission. He was past president of the Miami School Board.

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## SCHEDULE OF POWER AND ENERGY SALES

	YEAR ENDING JUNE 30, 1992			
For Period Of	Average Billing Demand kW	Delivered kWh	Amount	Mills Per kWh
July 1, 1991 Through June 30, 1992				
Sale of Hydro Power				
Aguila Irrigation District	3,954	10,115,000	\$ 214,836	21.24
Avra Valley Irrigation & Drainage District	972	2,137,000	49,604	23.21
Buckeye Water Conservation District	2,511	5,485,000	125,733	22.92
Chandler Heights Citrus Irrigation District	779	3,133,000	56,972	18.18
Cortaro-Marana Irrigation District	5,394	12,877,000	290,305	22.54
Electrical District No. 1, Pinal	0	0	0	0.00
Electrical District No. 2, Pinal	20,684	71,143,000	1,359,370	19.11
Electrical District No. 3, Pinal	24,458	67,720,000	1,380,166	20.38
Electrical District No. 4, Pinal	16,377	55,566,000	1,047,576	18.85
Electrical District No. 5, Pinal	12,065	44,431,000	820,724	18.47
Electrical District No. 5, Maricopa	294	1,086,000	20,406	18.79
Electrical District No. 6, Pinal	10,410	36,609,000	684,332	18.69
Electrical District No. 7, Maricopa	10,084	24,025,000	526,983	21.93
Electrical District No. 8, Maricopa	16,136	49,153,000	972,890	19.79
Harquahala Valley Power District	2,838	2,655,000	97,276	36.64
Maricopa County Municipal Water District #1	9,281	19,440,000	452,483	23.28
McMullen Valley Water Conservation & Drainage District	5,410	14,690,000	301,185	20.50
Ocotillo Water Conservation District	2,001	6,643,000	129,807	19.54
Queen Creek Irrigation District	2,752	8,517,000	166,384	19.54
Roosevelt Irrigation District	5,149	14,229,000	292,181	20.53
Roosevelt Water Conservation District	8,536	22,973,000	471,551	20.53
Salt River Project	43,723	155,454,000	2,989,603	19.23
San Tan Irrigation District	3,755	2,879,000	58,968	20.48
Silverbell Irrigation & Drainage District	436	1,402,000	29,127	20.78
Tonopah Irrigation District	2,069	6,326,000	122,397	19.35
Welton-Mohawk Irrigation & Drainage District	4,894	14,017,000	283,784	20.25
City of Mesa	2,260	4,848,000	109,005	22.48
City of Page	477	1,290,000	26,162	20.28
City of Safford	954	2,240,000	48,259	21.54
Town of Thatcher	474	964,000	22,254	23.09
Town of Wickenburg	1,039	2,408,000	52,434	21.77
Ak-Chin Indian Community	487	883,000	21,436	24.28
Arizona Electric Power Cooperative Arizona Public Service Co.	1,510	3,372,000	74,361	22.05
	10,942	22,249,000	512,389	23.03
Citizens Utilities Co.	1,336	2,888,000	64,844	22.45
Tohono O'odham Utility Authority	1,125	2,146,000	51,162	23.84
San Carlos Irrigation Project	1,130	2,423,000	54,400	22.45
Tucson Electric Power Co. Total	4,229	8,106,000 706,522,000	191,727	<u>23.65</u>
Total	240,925	706,522,000	\$14,173,076	20.06
Sale of Thermal Power	00.000	00 770 000	0.400.000	
Total Thermal Power Sales	<u>30,868</u>	33,752,000	2,469,088	
Other Electric Revenues			<u>26,991</u>	
Total Operating Revenues			\$16,669,155	

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## APA GENERAL FUND, HOOVER UPRATING FUND AND COMBINED BALANCE SHEETS JUNE 30, 1992 AND 1991

ASSETS	<u>APA (</u> 1992	General Fund 1991	<u>Hoover</u> 1992	Uprating Fund 1991	1992	Combined 1991
				P		
Property, Plant and Equipment - Net (Note 3)	\$ 535,135	\$ 605,464			\$ <u>535,135</u>	\$ 605,464
Preliminary Survey and Investigation Costs (Note 4)	,	892,697				892,697
Advances For Hoover Uprating Project (Notes 2 and 6)			\$ <u>44,853,871</u>	\$ 33,190,613	44,853,871	33,190,613
Investments (Note 7)				2,999,800		2,999,800
Current Assets: Cash (Note 5) Accounts receivable -	4,593,036	4,381,340	6,256,404	6,509,225	10,849,440	10,890,565
customers' power purchases	319,622	252,961	1,535,275	1,547,361	1,854,897	1,800,322
Due (to) from other fund Interest receivable	78,076	33,163 35,596	214 853,451	(33,163) 1,006,204	214 931,527	1,041,800
Prepaid purchased power				98,182		98,182
Total current assets	4,990,734	4,703,060	<u>8,645,344</u> .	9,127,809	<u>13,636,078</u>	13,830,869
Total	\$5,525,869	\$6,201,221	\$53,499,215	\$45,318,222	\$59,025,084	\$51,519,443

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## APA GENERAL FUND, HOOVER UPRATING FUND AND COMBINED BALANCE SHEETS JUNE 30, 1992 AND 1991

•		General Fund	Hoove	Uprating Fund	0 1992	Combined 1991
FUND EQUITY AND LIABILITIES	1992	1991	1992	1991	1992	1991
Fund Equity: Contributed capital Retained earnings (Notes 2 and 9): Allocated:	\$ 9,000	\$ 9,000			\$ 9,000	\$ 9,000
Investment in property, plant and equipment Property replacement	535,135	605,464			535,135	605,464
reserve	570,931	495,827			570,931	495,827
Preliminary survey and investigation costs General reserves Unallocated	4,000,000 103,540	892,697 4,000,000 (52,600)	<u>\$ (571,145)</u>	<u>\$ (815,391</u> )	4,000,000 (467,605)	892,697 4,000,000 (867,991)
Total fund equity	5,218,606	5,950,388	(571,145)	(815,391)	4,647,461	5,134,997
Bonds Payable (Note 8)			89,820,000	89,820,000	89,820,000	89,820,000
Less Investments Held By Trustee - Including unamortized premium on investment of \$132,871 and \$22,570 in 1992 and 1991, respectively (Note 7)	s		(38,514,917)	(46,488,003)	(38,514,917)	(46,488,003)
Bonds payable - net			51,305,083	43,331,997	51,305,083	43,331,997
Current Liabilities: Accounts payable Power contracts payable Accrued interest payable (Note 8) Total current liabilities	307,263	4,071 246,762 	1,178,307 1,586,970 2,765,277	21,162 1,193,484 1,586,970 2,801,616	1,485,570 1,586,970 3,072,540	25,233 1,440,246 1,586,970 3,052,449
Total	\$ 5,525,869	\$ 6,201,221	\$ 53,499,215	\$ 45,318,222	\$ 59,025,084	<u>\$ 51,519,443</u>

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## APA GENERAL FUND, HOOVER UPRATING FUND AND COMBINED STATEMENTS OF OPERATIONS YEARS ENDED JUNE 30, 1992 AND 1991

	APA G 1992	eneral Fund 1991	Hoover 1992	Uprating Fund 1991	1992	ombined 1991
Operating Revenues	\$ 2,496,079	\$ 2,070,278	<u>\$ 14,173,076</u>	<u>\$ 13,387,078</u>	<u>\$ 16,669,155</u>	<u>\$ 15,457,356</u>
Operating Expenses: Purchased power Transmission Distribution Administrative	2,411,416 22,512 11,367	1,973,464 16,708 11,158	11,396,238 2,829,341	9,622,953 2,792,022	13,807,654 2,851,853 11,367	11,596,417 2,808,730 11,158
and general Depreciation Allocation of	49,905 75,103	13,582 54,408	789,345	740,374	839,250 75,103	753,956 54,408
depreciation	(62,553)	(42,183)	62,553	42,183		
Total operating expenses	2,507,750	2,027,137	15,077,477	13,197,532	17,585,227	15,224,669
Operating (Loss) Income	(11,671)	43,141	(904,401)	189,546	(916,072)	232,687
Other Income (Deductions):    Interest expense         (Note 6)    Interest income    Gain on sale of    investments    Preliminary survey	248,584 244	259,631	(3,335,072) 3,585,885 893,403	(4,322,923) 4,226,923	(3,335,072) 3,834,469 893,647	(4,322,923) 4,486,554
and investigation costs Bad debt expense Other - net Total other income (deductions)	(917,602) (51,337) (720,111)	(73,105) (88,852) 97,674	4,431 1,148,647	<u>(51,773)</u> <u>(147,773</u> )	(917,602) (46,906) 428,536	(73,105) (140,625) (50,099)
Net (Loss) Income	\$ (731,782)	\$ 140,815	\$ 244,246	\$41,773	\$ (487,536)	\$ 182,588

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## APA GENERAL FUND, HOOVER UPRATING FUND AND COMBINED STATEMENTS OF CHANGES IN FUND EQUITY YEARS ENDED JUNE 30, 1992 AND 1991

	APA G	eneral Fund		<b>Uprating Fund</b>		ombined
	1992	1991	1992	1991	1992	1991
Unallocated Retained Earnings:						
Balance, beginning of year Net (loss) income Net transfers from	\$ (52,600) (731,782)	\$ (46,535) 140,815	\$ (815,391) 244,246	\$ (857,164) 41,773	\$ (867,991) (487,536)	\$ (903,699) 182,588
(to) allocated retained earnings Balance, end of year	887,922 103,540	(146,880) (52,600)	(571,145)	(815,391)	887,922 (467,605)	(146,880) (867,991)
Allocated Retained Earnings:						,
Balance, beginning of year Net transfers (to)	5,993,988	5,847,108			5,993,988	5,847,108
from unallocated retained earnings	(887,922)	146,880			(887,922)	146,880
. Balance, end of year	<u>5,106,066</u>	5,993,988	`		<u>5,106,066</u>	5,993,988
Contributed Capital	9,000	9,000	,		9,000	9,000
Total Fund Equity	<u>\$ 5,218,606</u>	<u>\$ 5,950,388</u>	<u>\$ (571,145)</u>	\$ (815,391)	\$ 4,647,461	<u>\$ 5,134,997</u>

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## APA GENERAL FUND, HOOVER UPRATING FUND AND COMBINED STATEMENTS OF CASH FLOWS YEARS ENDED JUNE 30, 1992 AND 1991

	APA G 1992	eneral Fund 1991	<u>Hoover</u> 1992	Uprating Fund 1991	1992	combined 1991
Operating Activities: Net (loss) income Adjustments to reconcile net (loss) income to net cash provided by	\$ (731,782)	\$ 140,815	\$ 244,246	\$ 41,773	\$ (487,536)	\$ 182,588
(used in) operating activities: Depreciation Amortization of premiums and discounts on	75,103	54,408			75,103	54,408
investments Write-off of preliminary survey and investigation	n		(155,442)	121,861	(155,442)	121,861
costs Changes in assets and liabilities: Preliminary survey and	917,602				917,602	
investigation costs Accounts receivable Due to/from other fund Interest receivable	(24,904) (66,661) ls 33,163 (42,480)	3,671 181,585 (60,862) 77,980	12,086 (33,375) 152,753	(107,751) 60,862 615,178	(24,904) (54,575) (212) 110,273	3,671 73,834 693,158
Prepaid purchased pow Accounts payable Power contracts payabl Hoover credit Net cash provided by	(4,070)	(27,603) (178,529) (4,560,352)	98,182 (21,163) (15,177)	519,491 19,188 322,220	98,182 (25,233) 45,323	519,491 (8,415) 143,691 (4,560,352)
(used in) operating activities:	216,471	(4,368,887)	282,110	1,592,822	498,581	(2,776,065)
Investing Activities: Cash from trustee funds Proceeds from maturing certificates of deposit		1,500,000	8,128,527	5,963,493	8,128,527	5,963,493 1,500,000
Acquisition of property, plant and equipment Sale of investments Net cash (used in)	(4,775)	(209,031)	_2,999,800		(4,775) _2,999,800	(209,031)
provided by investing activities:	(4,775)	1,290,969	11,128,327	5,963,493	11,123,552	7,254,462
Financing Activities: Increase in advances for Hoover Uprating Project			(11,663,258)	(6,444,875)	(11,663,258)	(6,444,875)
Net Increase (Decrease) In Cash	211,696	(3,077,918)	(252,821)	1,111,440	(41,125)	(1,966,478)
Cash, Beginning of Year	_4,381,340	<u>7.459.258</u>	6,509,225	<u>5,397,785</u>	10,890,565	12,857,043
Cash, End of Year	<u>\$4,593,036</u>	<u>\$ 4,381,340</u>	<u>\$ 6,256,404</u>	<u>\$ 6,509,225</u>	<u>\$ 10,849,440</u>	<u>\$ 10,890,565</u>
Cash Paid For Interest	\$-0-	<u>\$-0-</u>	<u>\$ 6,347,880</u>	<u>\$ 6,347,880</u>	<u>\$ 6,347,880</u>	<u>\$ 6,347,880</u>

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### NOTES TO FINANCIAL STATEMENTS YEARS ENDED JUNE 30, 1992 AND 1991

## 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

System of Accounting - The accounting records of the Arizona Power Authority ("APA") are maintained in accordance with applicable provisions of the Uniform System of Accounts prescribed by the Federal Energy Regulatory Commission ("FERC").

<u>Property and Depreciation</u> - Property is state at original cost. The costs of property additions and replacements are capitalized. Replacements of minor items of property are charged to expense as incurred. Costs of property retired are eliminated from plant accounts, and such costs plus removal expenses less salvage are charged to accumulated depreciation.

Depreciation is provided on the straight-line composite method based on the estimated useful lives of the property items.

<u>Preliminary Survey and Investigation Costs</u> - Certain preliminary costs relating to proposed major capital projects are deferred as long as completion of such projects is considered reasonably expected and capitalized as a cost of such projects when completed.

Advances for Hoover Uprating Project - Proceeds from bonds payable are advanced by APA for uprating the Hoover Power Plant and are recorded as advances. Such advances, including debt issue costs, plus net interest expense incurred by APA are reimbursed in the form of credits on the monthly power bills rendered to APA by the Western Area Power Administration of the Department of Energy ("WAPA"). The credits are issued over the 30 year life of the bonds. Substantially all net interest expense on the bonds is charged to the uprating project as amounts to be recovered from future credits.

<u>Reclassifications</u> - Certain amounts in the 1991 financial statements have been reclassified to conform to the current year presentation.

#### 2. FUND ACCOUNTING

Hoover Uprating Fund - The Hoover Power Plant Act of 1984 ("Hoover Act") authorized the United States Government to increase the capacity of, i.e., "uprate", existing generating equipment at the Hoover Dam Power Plant ("Uprating Project"). Instead of appropriating further federal funds for the Uprating Project, Congress implemented an advancement of funds procedure whereby prospective non-federal purchasers of the uprated Hoover capacity and associated energy contribute to the financing of the Uprating Project. APA financed a portion of the total Uprating Project by issuing bonds (Note 8).

The Hoover Uprating Fund accounts for advances by

3. PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment of the APA General

APA in connection with the Uprating Project. Effective June 1, 1987, APA executed new power contracts with WAPA and APA customers which expire in 2017. The revenues and expenditures applicable to the sale and transmission of power and energy received by APA from WAPA under these contracts are accounted for in the Hoover Uprating Fund.

APA General Fund - APA operations other than those applicable to the Hoover Uprating Fund are accounted for in the APA General Fund. The purchase of steam power and the sale and transmission of such power to APA's customers comprise the majority of this fund.

Fund at June 30, 1992 and 1991 are as follows:

	<u>1992</u>	<u> 1991</u>
Transmission and distribution plant General plant Total Less accumulated depreciation	\$ 439,391 666,675 1,106,066 570,931	\$ 439,391 661,900 1,101,291 495,827
Property, plant and equipment - net	\$ 535,135	\$ 605,464

The transmission and distribution plant is comprised of a substation and related equipment.

Purchased power is delivered over transmission facilities owned by WAPA.

## 4. PRELIMINARY SURVEY AND INVESTIGATION COSTS

APA had signed a participation agreement with the Colorado River Commission of Nevada, Bureau of Reclamation ("Bureau") and WAPA for the planning of the Hoover Modification Project. If constructed, the project would have increased the power generating capacity of the Hoover Power Plant by installing a new power plant. In June 1992 it was determined that the project would not be pursued any further due to lack of customers willing to sign contracts for capacity generated by the project. Therefore, APA expensed all deferred costs, totaling \$917,602, associated with this project in June 1992. The retained earnings allocated for the project were transferred to unallocated retained earnings, substantially offsetting the current year loss recorded in unallocated retained earnings.

### 5. CASH

In 1990, APA transferred their cash balances to the State of Arizona Treasurer for pooled investment purposes. Statutes require the State Treasurer to invest these pooled funds in obligations of the United States Government. All investments are carried at cost.

### 6. ADVANCES FOR HOOVER UPRATING PROJECT

Advances for the Hoover Uprating Project were scheduled to be reimbursed by WAPA through credits on APA's power bills in the amounts of \$5.421.165 and \$4,926,013 for the years ended June 30, 1992 and 1991, respectively. Of those amounts, only \$1,286,378 and \$4.512,534 of the credits were actually granted for those respective years due to cash flow problems at WAPA. APA expects to receive the remaining credits within the next 5 years as WAPA resolves its cash flow problems through increased rates. During the years ended June 30, 1992 and 1991, interest expense on the bonds issued to finance the Uprating Project exceeded interest revenue and net accumulated gain on sale of investments by approximately \$2,900,000 and \$2,025,000, respectively. These amounts, including, in 1992, certain previously incurred debt issue costs were charged to the Project advances as amounts to be substantially recovered from future credits.

### 7. INVESTMENTS

Investments are carried at cost, which approximates market value at June 30. Investments as of June 30 are

as follows:

	1992	` <u>1991</u>
United States government securities Repurchase agreements Money market	\$ 12,726,631 24,244,798 1,543,890	\$ 17,196,771 32,252,484 38,548
Total investments	\$ 38,515,319	\$49,487,803

On December 18, 1990, APA entered into a master repurchase agreement with Prudential-Bache Securities Inc. ("PBS"), wherein APA agreed to effect a series of repurchase transactions with PBS in permitted investments. Permitted investments are defined as United States Treasury Securities, Government National Mortgage Association Securities, Federal Home Loan Mortgage Corporation Securities, Federal Housing Authority Securities and Student Loan

Marketing Association Securities. The securities are held by the Valley National Bank of Arizona, as Trustee, for APA. If at any time the aggregate market value of all purchased securities is less that APA's aggregate margin amount (calculated using a percentage of 102%), then APA may require PBS to transfer to APA cash or additional securities, at PBS' option, so that the cash and aggregate purchased securities will equal or exceed APA's aggregate margin amount.

#### 8. BONDS PAYABLE

APA issued \$98,425,000 in variable rate short-term revenue bonds on December 19, 1985 to obtain funding for the Hoover Uprating Project. On April 1, 1987, \$89,820,000 of these bonds were remarketed and the

remainder retired. The new bonds bear interest ranging from 5.4% to 7.2% and are due serially from 1993 through 2017 as follows:

1993	\$ 800,000		
1994	880,000		
1995	975,000		
Thereafter  Total	<u>87,165,000</u> <u>\$ 89,820,000</u>		

### 9. RETAINED EARNINGS

Allocations of retained earnings for specified purposes are authorized by the Arizona Power Authority Commission ("Commission"), APA's governing board, under provisions of the Arizona Power Authority Act of

1944, as amended. The general reserves shown on the accompanying balance sheets are comprised of the following at June 30:

APA General Fund	<u> 1992</u>	<u>1991</u>
Resource Development - Hoover Modification Project	\$ 3,500,000	\$ 3,500,000
Operations fund	200,000	200,000
Power contracts	100,000	100,000
System improvement and repairs	200,000	200,000
Total	\$ 4,000,000	\$ 4,000,000

### 10. RETIREMENT AND PENSION PLANS

All APA full-time employees are required to participate in the Arizona State Retirement Plan (the "Plan"), a multiple-employer, cost-sharing pension plan administered by the Arizona State Retirement System (the "ASRS"). The payroll for employees covered by the Plan for the year ended June 30, 1992 and 1991 was \$374,200 and \$380,537, respectively; APA's total payroll was \$378,524 and \$383,140, respectively.

ASRS provides for retirement, disability, death and survivor benefits. Retirement benefits are calculated on the basis of age, final average salary and service credit. Members are eligible for retirement benefits on the first day of the calendar month following: 1) the attainment of age 65; 2) the attainment of age 62 and ten years of credited service; or 3) the date when age plus total credited service equals 80. The benefit is based on 2% of final average salary multiplied by the years of service credit. Final average salary is defined as the period of 36 consecutive months during which a participant receives the highest compensation within the last 120 months of service during which the employee made retirement contributions as required by law. The compensation does not include vacation or

annual leave, sick leave, compensatory time or any other form of termination pay. Persons who have reached age 50 with at least five years of total credited service may take an early retirement which entitles them to a reduced retirement benefit. Retirement benefits vest after five years of service.

Effective July 1, 1988, members of ASRS became eligible for a disability benefit in the event they become unable to perform their work. A participant continues to earn credit of up to a total of 25 years of service during the period of disability.

Upon termination of employment, a member may withdraw contributions made to ASRS. The acceptance of a refund cancels the individual's rights and benefits in ASRS. Employers' contributions to the System are not refunded.

Covered employees were required by State statute to contribute 3.6% of their salary to the Plan during fiscal year 1991-1992 and 3.82% of their salary during fiscal year 1990-1991. APA is required to match their contribution. Total contributions made by APA and its covered employees were \$13,470 for each in 1992 and \$14,455 for each in 1991.

### 10. RETIREMENT AND PENSION PLANS (Continued)

The pension benefit obligation is a standardized disclosure measure of the present value of pension benefits, adjusted for the effects of projected salary increases estimated to be payable in the future as a result of employee service to date. The measure, which is the actuarial present value of credited projected benefits, is intended to help users assess the public employees retirement system's funding status on a going-concern basis, assess progress made in accumulating sufficient assets to pay benefits when due, and make comparisons among such systems. The Plan does not make separate measurements of assets and the pension benefit obligation for individual employers. The pension benefit obligations at June 30, 1991 for the Plan as a

whole, determined through an actuarial valuation performed as of that date, was \$7,100,000,000. The Plan's net assets available for benefits on that date (valued at market) were \$8,400,000,000. APA's 1991 contribution represented less than 1% of total contributions required of all participating entities, which were \$133,364,246 each for employers and employees in 1991. (1992 information not available.)

Ten-year historical trend information showing the Plan's progress in accumulating sufficient assets to pay benefits when due is presented in ASRS' June 30, 1991, comprehensive annual financial report.

### 11. ADDITIONAL BENEFITS

In addition to the pension benefits described, ASRS offers health care benefits to retired and disabled members that are no longer eligible for health care benefits through their former member employer's group health plan. This program is administered in

accordance with ARS 38-781.03. Retired is defined as actively receiving an annuity benefit and disabled is defined as receiving a Long-Term disability (LTD) benefit through the LTD program administered by ASRS. The ASRS provides the following monthly premium benefits:

		Member Only Not Medicare Eligible	With Dependent(s)		Member	With Dependent(s)	
Years of Credited Service	Percent of Premium Benefit		Not Medicare Eligible	Medicare Eligible	Only Medicare Eligible	Not Medicare Eligible	Medicare Eligible
5.0 - 5.9	50%	\$ 47.50	\$ 87.50	\$ 72.00	\$ 32.50	\$ 72.50	\$ 57.50
6.0 - 6.9	60%	\$ 57.00	\$ 105.00	\$ 87.00	\$ 39.00	\$ 87.00	\$ 69.00
7.0 - 7.9	70%	Ś 66.50	\$ 122.50	\$ 102.00	\$ 45.50	\$ 101.50	\$ 80.50
8.0 - 8.9	80%	Š 76.00	\$ 140.00	\$ 116.00	\$ 52.00	\$ 116.00	\$ 92.00
9.0 - 9.9	90%	\$ 85.50	\$ 157.50	\$ 130.00	\$ 58.50	\$ 130.50	\$ 103.50
10.0+	100%	\$ 95.00	\$ 175.00	\$ 145.00	\$ 65.00	\$ 145.00	\$ 115.00

The Arizona State Retirement System reimbursed approximately \$18,500,000 towards the cost of group

health insurance coverage for the year. This figure represents an increase of 5.09% over the previous year.

(An Agency of the State of Arizona)

# SUPPLEMENTAL SCHEDULE - STATEMENT OF OPERATIONS OF THE HOOVER UPRATING FUND - INDIVIDUAL FUNDS AND ACCOUNTS YEAR ENDED JUNE 30, 1992

	Revenue Fund	Operating Account	Monthly Payment Reserve Account	Construction Fund
Operating Revenues	\$ 14,173,076			
Operating Expenses: Purchase power Transmission Administrative and general Allocation of depreciation		\$ 11,396,238 2,829,341 789,345 62,553	,	
Total		15,077,477		
Operating Gain (Loss)	14,173,076	(15,077,477)		
Other Income (Deductions): Interest income Interest expense Gain on sale of investment		183,258	\$ 258,926	\$ 2,216,571
Other - net		4,431		
Total		187,689	258,926	2,216,571
Net Income (Loss) Adjustments To Income (Loss) Under The Power Resource Revenue Bond Resolution: Add:	14,173,076	(14,889,788)	258,926	2,216,571
Accrued interest income FY 1991 Accrued interest expense FY 1992		39,386	62,549	614,088
Accrued interest expense F1 1992 Allocation of depreciation Accrued revenue FY 1991	1 547 261	62,553		•
Accrued revenue F1 1991 Accrued purchased power FY 1992 Prepaid purchased power FY 1991 Deduct:	1,547,361	1,178,307 98,182		
Accrued interest income FY 1992		48,092	42,267	478,906
Accrued interest expense FY 1991 Accrued revenue FY 1992 Accrued purchased power FY 1991 Deferred asset adjustment	1,535,275	1,193,484		
Income (Loss) As Defined				
Under The Power Resource Revenue Bond Resolution	\$ 14,185,162	\$ (14,752,936)	\$ 279,208	\$ 2,351,753
June 30, 1992 Cash And Investment Balance	\$-0-	\$ 2,791,261	\$ 3,025,853	\$ 26,908,569

Note: The above supplemental schedule includes all funds and accounts as defined by the APA Power Resource Revenue Bond Resolution.

Debt Service	Debt Service Reserve	Power Resource Development	General Reserves	,
Account	Account	Fund	<u>Fund</u>	<u>Total</u>
				\$ 14,173,076
			ı	11,396,238 2,829,341 789,345 62,553
				15,077,477
				(904,401)
\$ 126,698 (3,335,072)	\$ 779,482 893,403	\$ 16,032	\$4,918	3,585,885 (3,335,072) 893,403 4,431
(3,208,374)	1,672,885	16,032	4,918	1,148,647
	1,072,000	10,000	4,510	1,140,041
(3,208,374)	1,672,885	16,032	4,918	244,246
43,537 1,586,970	237,583	2,288	6,773	1,006,204 1,586,970 62,553 1,547,361 1,178,307 98,182
17,001 1,586,970	261,154	5,030	1,001	853,451 1,586,970 . 1,535,275
2,761,995				1,193,484 2,761,995
\$ (5,943,833)	\$ 1,649,314	\$ 13,290	\$ 10,690	\$ (2,207,352)
\$ 1,766,444	\$ 10,058,965	\$ 294,481	\$ 58,619	\$ 44,904,192

### INDEPENDENT AUDITORS' REPORT

To the Arizona Power Authority Commission:

We have audited the accompanying combined financial statements of Arizona Power Authority ("APA") and the separate financial statements of the APA General Fund and the Hoover Uprating Fund of APA as of June 30, 1992 and 1991 and for the years then ended, listed in the Table of Contents. These financial statements are the responsibility of APA's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such financial statements present fairly, in all material respects, the combined financial position of APA and the financial positions of the APA General Fund and the Hoover Uprating Fund of APA at June 30, 1992 and 1991 and the results of their operations and their cash flows for the years then ended in conformity with generally accepted accounting principles.

Our audits were conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental schedule listed in the Table of Contents is presented for the purpose of additional analysis and is not a required part of the basic financial statements. This supplemental schedule is the responsibility of APA's management. Such supplemental schedule has been subjected to the auditing procedures applied in our audit of the basic financial statements and, in our opinion, is fairly stated in all material respects when considered in relation to the basic financial statements taken as a whole.

July 31, 1992

Phoenix, Arizona

eloite & Touch

### **CREDITS**

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