



Department of Energy
Western Area Power Administration
Desert Southwest Customer Service Region
P.O. Box 6457
Phoenix, AZ 85005-6457

Via E-mail: jmt@krsaline.com

FEB 24 2012

Ms. Jennifer Torpey
K. R. Saline & Associates, PLC
160 North Pasadena, Suite 101
Mesa, AZ 85201-6764

Re: Electrical District Number Seven of Maricopa County and the State of Arizona
5-year Integrated Resource Plan

Dear Ms. Torpey:

Thank you for submitting this plan to Western Area Power Administration (Western). The report, dated October 31, 2011, covers the reporting period of 2012 through 2016. This is your formal notice that this report has been reviewed and approved.

Data from all customers will be included in our annual report which is provided to Congress and others.

For annual updates, please use our automated on-line reporting system at <http://www.wapa.gov/FormsAuth/Login.aspx?ReturnUrl=/irpsubmit/irpsubmit.aspx>.

Western has a wide range of information on our Energy Services web site, www.wapa.gov/es, which may help you implement your plan. You may also call our PowerLine at (800) 769-3756 for personal assistance. If you do not have access to the web site, have questions on the guidelines, or need assistance in implementing your report action plan, please contact me at (602) 605-2659 or colletti@wapa.gov.

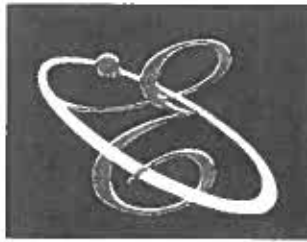
Please do not hesitate to call if I may be of further assistance in this or any other Energy Services related matter.

Sincerely,

A handwritten signature in black ink that reads "Audrey Lynn Colletti".

Audrey Lynn Colletti
Public Utilities Specialist

cc: Darrick Moe
Joe Mulholland
Sheryl Sweeney



ENERGY OUTFITTERS, LLC

Via E-mail & USPS

December 28, 2011

Mr. Darrick Moe
Regional Manager
Western Area Power Administration
Desert Southwest Region
P. O. Box 6457
Phoenix, AZ 85005-6457

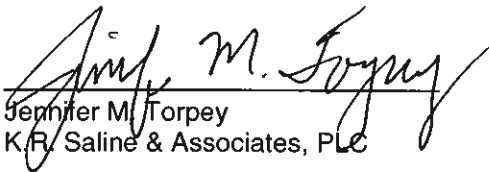
Re: Electrical District Number Seven Integrated Resource Plan

Dear Mr. Moe,

As you know, Western Area Power Administration's ("Western") Integrated Resource Planning Approval Criteria require Western's customers to submit updated Integrated Resource (or Small Customer) Plans to the appropriate Regional Manager every five years after Western's approval of the initial Plan. Enclosed on behalf of Electrical District Number Seven ("ED7"), pursuant to 10 C.F.R. § 905.13(b), is the third five-year update to ED7's Integrated Resource Plan. This update was approved by ED7's Board of Directors at a public meeting held on October 31, 2011.

If you have any questions regarding this Integrated Resource Plan, please do not hesitate to contact me.

Sincerely,


Jennifer M. Torpey
K.R. Saline & Associates, PLC

Enclosure

cc: Audrey Colletti (w/encl.)
Joe Mulholland (w/encl.)
Sheryl Sweeney (w/encl.)

INTEGRATED RESOURCE PLAN

THIRD FIVE-YEAR UPDATE

**ELECTRICAL DISTRICT NUMBER SEVEN
OF MARICOPA COUNTY
AND THE STATE OF ARIZONA**

October 31, 2011

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Profile Data

Electrical District Number Seven of the County of Maricopa and the State of Arizona (“ED7” or “the District”) is a political subdivision of the State of Arizona. ED7 is an electrical district formed pursuant to Arizona Revised Statutes §§ 48-1701 through 48-1822. The District was formed in 1950 for the purpose of providing power for use primarily for pumping water for irrigation. ED7 has been providing electrical service to its service area since 1960.

ED7 is located in western Maricopa County, Arizona, just west of the Phoenix metropolitan area. The District has a service area of approximately 29,060 acres, including approximately 16,000 irrigable acres. ED7 serves predominantly irrigation pumping loads and other agriculturally related loads, as well as certain water treatment and municipal loads. The irrigation pumps served by the District are owned and operated by the District’s customers as are the other agriculturally related facilities. A map of ED7’s service territory is provided in **Appendix A**.

ED7 is governed by a seven-member Board of Directors elected annually by freeholders of property within ED7’s boundaries. Its current staff consists of one part time Manager and one part time Office Manager. The District’s current Board of Directors and relevant contact persons are detailed below.

- **Board of Directors**

R. D. Justice—Chairman	Michael Francis
Lomand Beals—Vice Chairman	David S. Justice
Ronald Gass—Secretary/Treasurer	Leyton Woolf, Jr.

- **Contact Persons**

R. D. Justice – Chairman/Manager
 14629 W. Peoria Avenue
 Waddell, AZ 85355
 Ph: (623) 935-6253
 Fax: (623) 935-4360

Sheryl A. Sweeney – Legal Counsel One North Central Avenue Suite 1200 Phoenix, AZ 85004-4417 Ph: (602) 440-4824 Fax: (602) 257-6924	Kenneth R. Saline – Engineering Consultant K. R. Saline & Associates, PLC 160 N. Pasadena, Ste. 101 Mesa, AZ 85201-6764 Ph: (480) 610-8741 Fax: (480) 610-8796
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ED7 currently purchases Hoover power from the Arizona Power Authority (“the Authority”), SLCA/IP Power from Western Area Power Administration (“Western”), and power from Arizona Public Service Company (“APS”). In addition, ED7 is a party to an Integrated Resource Scheduling Agreement and participant in the Hoover Resource Exchange Procedures. These arrangements permit ED7 and other similarly situated utilities to integrate and exchange SLCA/IP and Hoover power resources. The power and energy from APS, the Authority and Western are transmitted over the Parker-Davis transmission system, the Pacific Northwest – Pacific Southwest Intertie transmission system, the CRSP transmission system and the transmission system of APS. Under a wheeling contract with APS, the power and energy are delivered from the transmission system delivery points over APS’s facilities to the customers of ED7. ED7 does not own any portion of the electrical transmission or distribution system. Certain distribution transformers located at ED7 customer locations are owned by the ED7 customers.

ED7 currently levies an ad valorem property tax to cover a small portion of its operating expenses, the remainder being met out of power revenues. The policies for service and rates for power provided by ED7 to its customers are determined and set by its Board of Directors. Copies of ED7’s current rate schedules are attached as **Appendix B**.

In addition to crop prices and operating costs, the overall financial feasibility of the farming operations is significantly impacted by water costs from irrigation pumping which is supplied with ED7 electrical power. ED7 purchases the majority of its power resources from the Authority and Western.

The current projection of the District loads for the upcoming two-year period does not indicate that additional resources are needed. To the contrary, the District’s agricultural loads are expected to decline somewhat. The District will endeavor to add a limited number of new loads in order to better preserve an affordable rate for irrigation pumping, and to fully utilize the District’s take or pay resources. The resource scheduling and utilization of the District’s resources have been managed through the Authority’s Hoover Resource Exchange Procedures and through the District’s participation in an Integrated Resource Scheduling program for Hoover and SLCA/IP resources, respectively. These resource management programs have provided the necessary flexibility for the District to re-pattern its resources monthly to meet its changing loads and exchange the resources with other preference entities who can temporarily utilize the power during the same periods. With the continuation of these programs, and current loads and resources, there is not any short-term need for additional resources for the District. Therefore, the District will use its current entitlements of Hoover and SLCA/IP resources with intermittent purchases of APS supplemental power to meet its projected loads through the two-year planning period. For the five-year planning period, a need for additional resources was identified. For this timeframe, the District anticipates using its Hoover resource entitlement, its SLCA/IP entitlement, the Integrated Resource Scheduling program, Resource Exchange Procedures, and APS and Southwest Public Power Resources Group (“SPPR Group”) resources to meet its projected loads.

District Goals and Objectives

- Provide Reliable Electric Power at Lowest Practicable Cost, Consistent With Sound Business Principles
- Enhance Customer Financial Stability by Providing Services which Enhance Property Values and Provide Long-Term Stability in Electric Power Rates
- Promote Energy Efficiency and the Effective Management of Water and Power Resources

Competitive Situation

- **District Contract Information**

Arizona Power Authority (Hoover Power Contract)
 Western Area Power Administration (SLCA/IP Contract)
 Power Supply and Services Agreement (APS) [Approved by FERC]
 Southwest Public Power Resources Group/Sempra Generation (Power Purchase Agreement)

- **Regulations Applicable to District**

Energy Planning and Management Program (EPACT '00)

- **Regulations Applicable to District Customers**

Arizona Department of Water Resources – Groundwater Management Act

- **Competition With District Service**

APS provides retail service in direct competition to District service and has several retail rates that are openly available to the customers of ED7. In many instances, APS and ED7 serve power to different loads of the same customer.

There is competition for leasing the farm ground within ED7. Many of the landowners in ED7 and other districts lease ground to tenant farmers who lease property based upon lease cost and water costs (i.e., pumping costs). Therefore, to the extent that the costs in ED7 become significantly higher than other areas, the competition for farm ground may significantly impact the irrigated acres and electric load of the District.

Load and Resource Information

- **Historical and Five-Year Load Forecast:**

Oct-Sep	Winter Demand CP @ Sub (kW)	Summer Demand CP @Sub (kW)	Peak Annual Growth	Energy @Substation (kWh)	Energy @Meters (kWh)	Load Factor
2002	9,714	9,667		34,319,271	32,431,711	40%
2003	8,787	8,962	-8%	24,552,140	23,201,773	31%
2004	8,746	7,992	-2%	24,095,248	22,770,010	31%
2005	6,626	8,092	-7%	19,130,978	18,078,775	27%
2006	7,381	7,428	-8%	22,434,115	21,200,239	34%
2007	6,940	7,075	-5%	23,521,969	22,228,261	38%
2008	6,549	6,844	-3%	21,158,929	19,995,188	35%
2009	5,914	7,986	17%	25,171,117	23,786,706	36%
2010	11,521	13,130	64%	44,512,178	42,064,008	39%
2011	12,579	13,515	3%	52,518,834	49,630,298	44%
<i>Current Forecast</i>						
2012	12,579	13,515	0%	52,518,834	49,630,298	44%
2013	12,579	13,515	0%	52,518,834	49,630,298	44%
2014	12,579	13,515	0%	52,518,834	49,630,298	44%
2015	12,579	13,515	0%	52,518,834	49,630,298	44%
2016	12,579	13,515	0%	52,518,834	49,630,298	44%

See **Appendix C** for a summary of the historical monthly load information as well as a graphical illustration of how the District schedules its resources to cover its loads in a typical year.

- **Customer Profile Information**

Agriculture Load—58%

- Irrigation Pumping Plants—35%
- Agribusiness—13%
- Residential Agribusiness—10%

Other Load—42%

- Water and Wastewater Treatment—10%
- Municipal and Industrial Water Pumping Service—32%

See **Appendix C** for a graphical illustration.

- **Supply Side Resources**

The District anticipates that current federal resources under contract and continuation of the Integrated Resource Scheduling Procedures and Resource Exchange Program will be sufficient for the District to meet its monthly power and energy requirements through the short-term planning period. Some APS supplemental power will continue to be purchased from time-to-time to cover any short-term power deviations. For the long-term planning period, the District has determined to secure an additional long-term resource to diversify its portfolio of suppliers and provide additional options for firming through the Resource Exchange Program and Integrated Resource Scheduling Procedures. Due to economic and other considerations, it was determined that the most practicable option to achieve this goal was to enter in a long-term power purchase agreement in conjunction with other similarly situated entities. Beginning January 1, 2015, the District will begin operating, as a member of the SPPR Group, under its new Power Purchase Agreement with Sempra Generation. Detailed below are the District's current contractual commitments:

Arizona Power Authority (Hoover Power) at Buckeye Substation

- Hoover A & B Capacity & Energy
 - 10,100 kW (Maximum with Hoover Firming Capacity)
 - 34,521,000 kWh (Contract Entitlement)
- Expires September 30, 2017

SLCA/IP Capacity at Buckeye Substation

- Summer Season: 4,337 kW CROD
- Winter Season: 658 kW CROD
- Energy entitlements by fiscal year:

<i>Fiscal Year</i>	<i>Winter Season Energy (kWh)</i>	<i>Summer Season Energy (kWh)</i>
FY 2012 - FY 2024	1,243,906	8,136,385

- Expires September 30, 2024

Power Supply and Services Agreement (APS)

- Capacity & Energy as needed
- Wheeling from Buckeye Substation to meters
- Meter Reading and Customer Billing Services
- Losses from Substation to Meters
 - Capacity loss factor: 7.9 %
 - Energy loss factor: 5.5 %
- Expires December 31, 2020

Power Purchase Agreement (Sempra Generation—through SPPR Group)

- Firm Capacity and Energy

- 3,000 kW
- Energy as needed
- Effective January 1, 2015; expires December 31, 2039

- **Demand Side Resources**

Much of the District's electric power is utilized to pump groundwater for agricultural purposes. The following is a list of some of the on-going water conservation practices which are implemented by the District's customers to efficiently utilize groundwater and therefore electricity.

Alternate Furrow Irrigation	Graded Furrow or Border	Use of Gated Pipe
Cut-Back Irrigation	Portable Sprinklers	Micro spray Systems
Angled Rows	Uniform Slopes	Tail Water Recovery
Shortened Field Lengths	Deficit Irrigation	Irrigation Scheduling
Land Leveling	Soil & Water Amendments	Concrete Ditch Lining
Precision Tillage	Cropping Pattern-Winter vs. Summer	Tiered Water Rates

Identification and Comparison of Resource Options

The identification of options for additional resources within this IRP is coordinated through an examination of the costs and benefits for each resource. Because the majority of the District's customers already implement numerous irrigation and agricultural efficiency practices in their operations and because the use of groundwater is heavily regulated by the Arizona Groundwater Management Act, opportunities for additional energy savings through DSM are very limited. However, the District will continue to look for other opportunities for energy savings from evolving technological advances in agricultural practices. To the extent practicable, the District will also endeavor to promote customer awareness of pumping workshops and other similar forums for further education on advancements in water conservation practices and technology. For your information we have attached a comprehensive explanation of the Groundwater Management Act as **Appendix D**.

Designation of Options

If additional resources are needed, the least cost option is identified from a cost benefit analysis. This information is considered by the Board of Directors in public meetings and combined with other information to select an Action Plan for the District which conforms with the regulations and guidelines of the Energy Planning and Management

Program. The selection of the District's Action Plan also includes consideration for reliability of service, economics, rate impacts and price elasticity, environmental effects, regulatory impacts and risks, legal considerations and risks, competitive impacts, social acceptance and public considerations and any other factors which may be identified from time-to-time which may be pertinent in selecting or implementing an Action Plan.

Action Plan

- **Resource Action Plan**

The time period covered by the District's Action Plan is the five-year period from 2012 through 2016.

The District has determined that to provide reliable electric power at the lowest practicable cost, consistent with sound business principles, the District will continue using its entitlements of Hoover and SLCA/IP power to supply much of its projected power requirements over the five-year planning period. The current federal resources and continuation of the Authority Hoover Resource Exchange Program and Integrated Resource Scheduling Procedures will be sufficient for the District to meet its monthly power and energy requirements through the short-term planning period. Additional purchases of APS supplemental power will continue to be made from time-to-time to cover any short-term power deviations.

For the long-term planning period, the District has identified a need for additional resources, with the objective of increasing its options for firming resources purchased through the Resource Exchange Program and Integrated Resource Scheduling Procedures, and to serve as a successor for long-term contracts which will terminate in coming years. Therefore, ED7 has entered into a long-term power purchase agreement as a member of a group of public power entities. Together with the District's existing contractual arrangements, this is anticipated to be sufficient to meet all of the District's requirements over the five-year planning period. No further resources will be required. The District continuously reevaluates the possible need for new resources, the availability of less costly resources and the potential for additional DSM activities. The District's Resource Action Plan enhances customer financial stability by providing services that will enhance property values and provide long-term stability in electric power rates.

Since no new resources beyond those already secured are needed, there are no milestones to evaluate accomplishment of the Plan activities. Nevertheless, the District will monitor any adjustments to the Plan for the long-term resource needs and will annually review its electric loads and resources for any significant changes. In the event the loads of the District are projected to materially increase above those levels represented in the Load and Resource information,

other than normal deviations due to cropping changes or weather impacts, the District will review its forecast and evaluate the need for modifying its IRP and notify Western accordingly. In any event, the District will evaluate its load forecast and resource information in detail every five years and refresh its Plan, in accordance with Western's regulations.

- **Conservation Action Plan**

The District has decided to continue certain conservation activities to promote and maintain energy efficiency and customer awareness for conserving electric, water, and land resources.

Period: Calendar Year 2012 through 2016

Activity: Information Exchange Program

Goal: Test 20% of customer pumping plants every year for 5 years.
The District attempts to test all pumps twice each year.

Activity Description: Irrigation Pump Efficiency Testing

- **Validation and Evaluation**

The District's farmers own and operate their own pumps and each farmer is required to annually supply groundwater withdrawal information to the State of Arizona under the Groundwater Management Act. This information is usually determined using electrical usage information and pump efficiency tests. The District's program of testing customer pumping plants will continue to help the customers prepare their groundwater reporting information and will also allow District customers to evaluate each pumping plant and identify pumping plants which may be experiencing a decrease in overall pumping efficiency. Historically, the District has achieved great success with this program, as most pumps have been tested annually, with some being tested twice in a year. Under this program, the District will attempt to test each pumping plant operated within the District periodically in cooperation with the District's customers. With the pump test information, and previous test information, an efficiency trend pattern can be prepared. From the test information, the associated cost savings which may result if the tested pump were operating at a theoretical 100% efficiency level can be provided to the customer based upon the current District rates. The efficiency information may assist the growers in scheduling planned maintenance of the pumping plants and identify the financial benefit from performing the efficiency improvements on a more frequent basis. Overall, on a District wide basis, the ongoing pump testing and monitoring activity should encourage more frequent pump maintenance which will result in an overall efficiency improvement and energy savings. The Conservation Action Plan will be evaluated annually to determine whether 20% of the pumping plants have been tested in that year.

Environmental Effects

The District is required, to the extent practical, to minimize adverse environmental effects of new resource acquisitions. As noted above, the District has secured an additional long-term resource which will become effective January 1, 2015. In procuring this resource, the District worked collaboratively with a group of other similarly situated entities, known collectively as the SPPR Group. Options for meeting anticipated future needs were carefully considered, including the consideration of renewable resources. The SPPR Group also utilized an Independent Market Monitor bidding process overseen by the Arizona Corporation Commission to ensure the request for proposals process resulted in the best alternative, and provided an unbiased evaluation platform. However, no appropriate renewable resource was identified. The resource ultimately selected is output from a natural gas supplied plant. Selection of a gas fired generation source will help the District avoid future purchases from coal-fired generation, or market purchases from a blended fuel mix which may include nuclear or coal. For ED7, the SPPR resource is intended to ultimately replace current supplemental power supply arrangements which utilize thermal resources. In addition, the acquisition of this resource will allow the District the flexibility to incorporate additional renewable resources which require firming, such as wind or hydro generation. Ultimately, the District intends to utilize hydro resources and its firming capabilities through the Hoover Resource Exchange Program and Integrated Resource Scheduling Procedures to meet the majority of its electric loads. To the extent the District utilizes the Integrated Resource Scheduling Procedures and the Resource Exchange Program and their firming capabilities to exchange and better utilize the hydro resources of the District and other similarly situated utilities, such efforts should be environmentally beneficial since such increased utilization would offset thermal generation purchases.

In addition to maximizing the hydroelectric resources, the District's customers are involved in substantial water conservation programs in their farming practices. The investment made by the District's customers in installed water conservation technology is extensive and far-reaching. Their ongoing conservation practices and ongoing maintenance of conservation investments continue to conserve significant amounts of groundwater, and thereby electricity, annually. To the extent the District sponsors conservation activities and information activities with its customers, the conservation of groundwater is the fundamental achievement, which is environmentally beneficial and economically sound. In addition, the overall irrigation efficiency of each farmer is heavily regulated by the State of Arizona through the Groundwater Management Act. A comprehensive discussion of the Groundwater Management Act is provided in **Appendix D**.

Public Participation

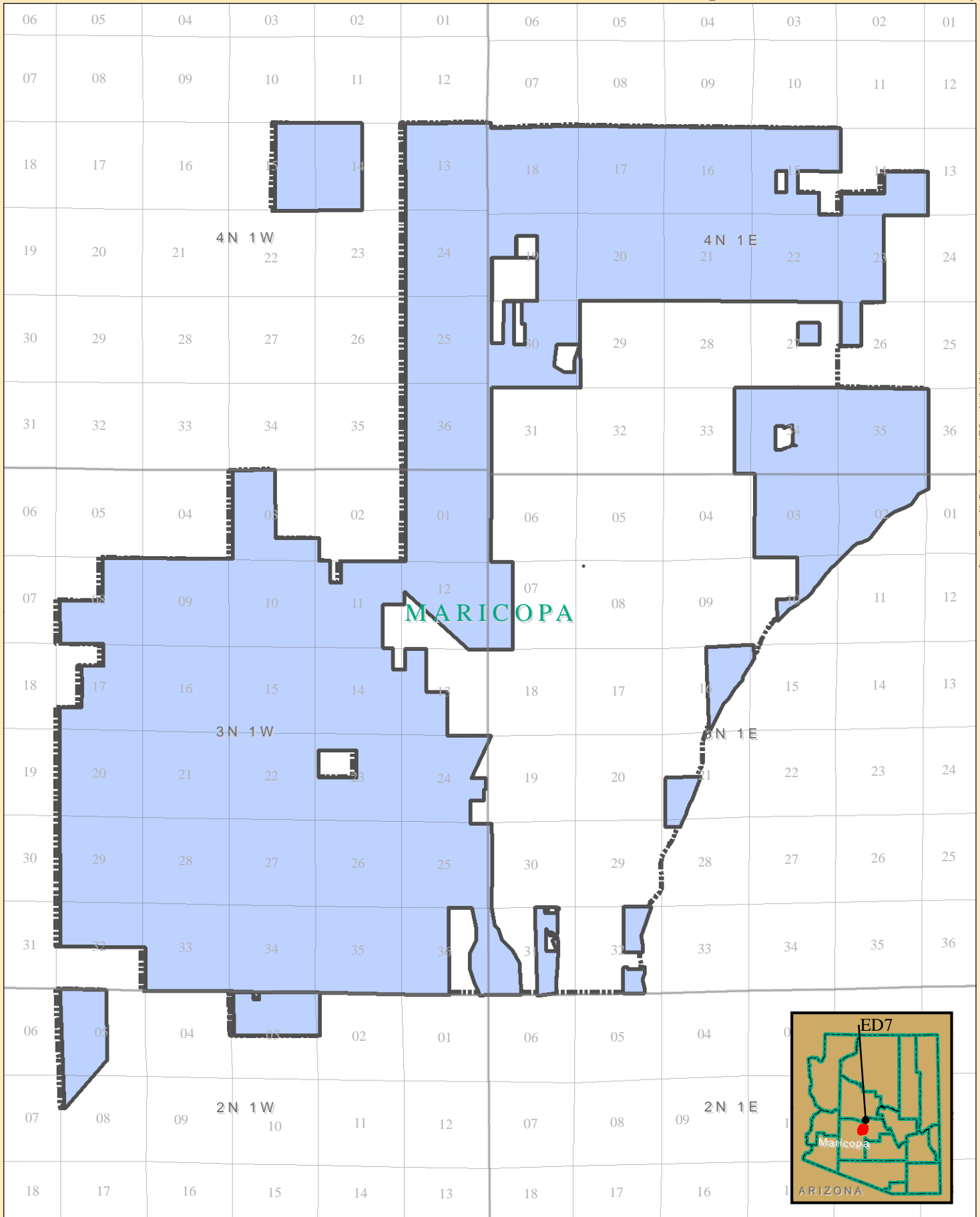
The District has held one public meeting to discuss the District's updated IRP.

Prior to the meeting, the District posted notice in advance of the meeting, giving the time and place of the meeting and specifying that the District would have possible approval of the District's new IRP at the meeting. The notice was posted in accordance with statutory open meeting law requirements. A copy of the notice is attached as **Appendix E**.

At the meeting, the IRP was presented to the Board. After discussion and the opportunity for public comment, the Board authorized the preparation of this final IRP. There were no public comments.

1 in = 1 miles

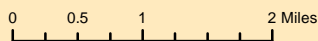
APPENDIX A -- Map of District Service Territory



Sources: Township Range Section: AZ State land - AHS
 District Boundary : Verified by KRSA per legal
 Resolutions - Last updated in 2009

Kssudin2011JRFMAPED7 Created: 06/01/2011 Edited: 06/14/2011 by BLS review 10

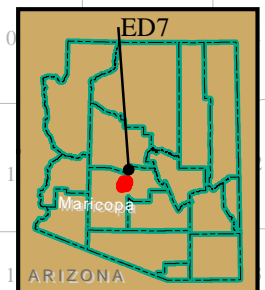
Electrical District Number Seven



Legend

- Townships
- County Boundary
- Sections
- District Boundary

DISCLAIMER:
 K.R. Saline & Associates, PLC
 Does not warrant the accuracy
 or location of the facilities shown



*Electrical District Number Seven
of the County of Maricopa and State of Arizona*

RATE 1 - IRRIGATION SERVICE

Standard Electric Rate Schedule for Irrigation Service

Effective for the May 1993 Billing Cycle and Thereafter

AVAILABILITY

Where facilities of adequate capacity are available within the boundaries of the District.

APPLICABILITY

To service pumping loads for commercial agricultural production, such as: pumps, sumps, lift stations, drip pumps.

CHARACTER OF SERVICE

Single or three-phase, 60 Hertz, at one standard voltage (12,500; 2,400/4,160; 480; 277/480; 120/240 or 120/208 volts as may be selected by the customer subject to availability at the premises).

MONTHLY RATE

APS Administrative Charge.....	\$19.00
APS Customer Charge	\$11.00
Monthly Demand Charge per kW.....	\$ 1.00
Monthly Energy Charge per kWh.....	\$0.046

Customer-Owned Transformer Discount. Only applied to the first 275 kWh per kW of monthly energy

Credit of \$0.0009 per kWh for the first 55,000 kWh, plus
Credit of \$0.0004 per kWh for the remaining energy
(e.g., 275 kWh per kW – 55,000 kWh)

DETERMINATION OF KW

The average kW supplied during the 15-minute period of maximum use during the month, as determined from readings of the customer's meter.

TERMS AND CONDITIONS

Subject to District's Terms and Conditions for electric service and provisions set forth in the contract between the District and Customer.

*Electrical District Number Seven
of the County of Maricopa and State of Arizona*

AGRIBUSINESS 2 RATE SCHEDULE

Standard Electric Rate Schedule for Cotton Ginning Service

Effective for the September 1992 Billing Cycle and Thereafter

AVAILABILITY

Where facilities of adequate capacity are available within the boundaries of the District.

APPLICABILITY

To service agricultural processing loads for cotton ginning and related facilities.

CHARACTER OF SERVICE

Single or three-phase, 60 Hertz, at one standard voltage (12,500; 2,400/4,160; 480; 277/480; 120/240 or 120/208 volts as may be selected by the customer subject to availability at the premises).

MONTHLY RATE

APS Administrative Charge.....	\$19.00
APS Customer Charge	\$11.00
Monthly Demand Charge per kW	\$11.00
Monthly Energy Charge per kWh.....	\$ 0.03

Plus all applicable taxes

DETERMINATION OF KW

The average kW supplied during the 15-minute period of maximum use during the month, as determined from readings of the customer's meter.

TERMS AND CONDITIONS

Subject to District's Terms and Conditions for electric service and provisions set forth in the contract between the District and Customer.

*Electrical District Number Seven
of the County of Maricopa and State of Arizona*

AGRIBUSINESS 3 RATE SCHEDULE

Standard Electric Rate Schedule for Agriculture
Related Businesses, Other than Cotton Gins

Effective for the May 1999 Billing Cycle and Thereafter

AVAILABILITY

Where facilities of adequate capacity are available within the boundaries of the District.

APPLICABILITY

To service agricultural loads for cooling facilities, grain elevators, feed lots, dairies, rose sheds, wind machines, packing sheds, and farm shops and related facilities.

CHARACTER OF SERVICE

Single or three-phase, 60 Hertz, at one standard voltage (12,500; 2,400/4,160; 480; 277/480; 120/240 or 120/208 volts as may be selected by the customer subject to availability at the premises).

MONTHLY RATE

Customer Charge	\$15.00/meter-month
Demand Charge	\$ 4.00/kW-month
Energy Charge	\$ 0.0450/kWh (first 500 kWh)
.....	\$ 0.0600/kWh (all additional energy)

Plus all applicable taxes

DETERMINATION OF KW

The average kW supplied during the 15-minute period of maximum use during the month, as determined from readings of the customer's meter.

TERMS AND CONDITIONS

Subject to District's Terms and Conditions for electric service and provisions set forth in the contract between the District and Customer.

*Electrical District Number Seven
of the County of Maricopa and State of Arizona*

AGRIBUSINESS 4 RATE SCHEDULE

Standard Electric Rate Schedule for Residential Agribusiness

Effective for the May 1999 Billing Cycle and Thereafter

AVAILABILITY

Where facilities of adequate capacity are available within the boundaries of the District.

APPLICABILITY

To service agricultural loads for farm labor residences and farm residences.

CHARACTER OF SERVICE

Single or three-phase, 60 Hertz, at one standard voltage (12,500; 2,400/4,160; 480; 277/480; 120/240 or 120/208 volts as may be selected by the customer subject to availability at the premises).

MONTHLY RATE

Customer Charge\$15.00/meter-month
Energy Charge\$ 0.0650/kWh

Plus all applicable taxes

TERMS AND CONDITIONS

Subject to District's Terms and Conditions for electric service and provisions set forth in the contract between the District and Customer.

*Electrical District Number Seven
of the County of Maricopa and State of Arizona*

**RATE 5
WATER AND WASTEWATER TREATMENT RATE SCHEDULE**

Standard Electric Rate Schedule for Water and Wastewater Treatment Plants

Effective for the February 2011 Billing Cycle and Thereafter

AVAILABILITY

Where facilities of adequate capacity are available within the boundaries of the District.

APPLICABILITY

To service loads for the treatment of water and wastewater and related facilities.

CHARACTER OF SERVICE

Single or three-phase, 60 Hertz, at one standard voltage (12,500; 2,400/4,160; 480; 277/480; 120/240 or 120/208 volts as may be selected by the customer subject to availability at the premises).

MONTHLY RATE

APS Administrative Charge.....	\$19.00
APS Customer Charge	\$11.00
Monthly Demand Charge per kW.....	\$ 5.75
Monthly Energy Charge per kWh.....	\$0.0414

Plus all applicable taxes

DETERMINATION OF KW

The average kW supplied during the 15-minute period of maximum use during the month, as determined from readings of the customer's meter.

TERMS AND CONDITIONS

Subject to District's Terms and Conditions for electric service and provisions set forth in the contract between the District and Customer.

*Electrical District Number Seven
of the County of Maricopa and State of Arizona*

**RATE 6
MUNICIPAL AND INDUSTRIAL WATER PUMPING RATE SCHEDULE**

Standard Electric Rate Schedule for Municipal and Industrial Water Pumping Service

Effective for the February 2011 Billing Cycle and Thereafter

AVAILABILITY

Where facilities of adequate capacity are available within the boundaries of the District.

APPLICABILITY

To service non-agricultural loads for municipal and industrial wells and related facilities.

CHARACTER OF SERVICE

Single or three-phase, 60 Hertz, at one standard voltage (12,500; 2,400/4,160; 480; 277/480; 120/240 or 120/208 volts as may be selected by the customer subject to availability at the premises).

MONTHLY RATE

APS Administrative Charge.....	\$19.00
APS Customer Charge	\$11.00
Monthly Demand Charge per kW.....	\$ 2.30
Monthly Energy Charge per kWh.....	\$0.0529

Plus all applicable taxes

DETERMINATION OF KW

The average kW supplied during the 15-minute period of maximum use during the month, as determined from readings of the customer's meter.

TERMS AND CONDITIONS

Subject to District's Terms and Conditions for electric service and provisions set forth in the contract between the District and Customer.

ELECTRICAL DISTRICT NO. 7 OF MARICOPA COUNTY

Demand @ Meters (kW)

Year	October	November	December	January	February	March	April	May	June	July	August	September	Max
2002	7,285	7,714	8,135	8,481	7,457	8,947	8,903	8,009	8,735	8,142	7,627	8,242	8,947
2003	8,093	7,966	6,928	7,082	7,533	4,513	7,175	7,598	7,620	8,254	8,187	7,995	8,254
2004	8,055	7,056	6,675	6,319	7,360	6,566	6,837	7,361	7,027	6,392	6,515	5,385	8,055
2005	6,081	6,103	5,143	4,143	4,088	3,284	6,395	6,640	6,891	7,453	6,878	7,012	7,453
2006	6,798	5,509	5,153	4,997	5,114	6,044	6,841	6,656	6,445	6,351	5,592	5,547	6,841
2007	5,756	6,392	5,734	4,889	4,844	6,035	6,505	6,202	5,930	6,516	6,474	6,173	6,516
2008	6,012	6,032	5,609	5,101	4,472	5,206	5,373	5,408	5,456	5,871	6,303	5,386	6,303
2009	5,447	5,222	5,136	3,848	3,997	5,074	6,304	7,274	6,831	7,207	7,355	7,153	7,355
2010	6,894	6,475	6,684	8,970	10,611	9,662	11,212	11,165	11,061	11,024	12,093	11,415	12,093
2011	11,329	11,585	11,328	9,706	10,923	11,045	11,417	11,608	11,526	11,150	11,378	12,447	12,447

Demand @ Substation (kW)

Year	October	November	December	January	February	March	April	May	June	July	August	September	Max
2002	7,910	8,376	8,833	9,208	8,097	9,714	9,667	8,696	9,484	8,840	8,281	8,949	9,714
2003	8,787	8,649	7,522	7,689	8,179	4,900	7,790	8,250	8,274	8,962	8,889	8,681	8,962
2004	8,746	7,661	7,248	6,861	7,991	7,129	7,423	7,992	7,630	6,940	7,074	5,847	8,746
2005	6,603	6,626	5,584	4,498	4,439	3,566	6,944	7,210	7,482	8,092	7,468	7,613	8,092
2006	7,381	5,982	5,595	5,426	5,553	6,562	7,428	7,227	6,998	6,446	6,072	6,023	7,428
2007	6,250	6,940	6,226	5,308	5,260	6,553	7,063	6,734	6,439	7,075	7,029	6,702	7,075
2008	6,528	6,549	6,090	5,539	4,856	5,653	5,834	5,872	5,924	6,375	6,844	5,848	6,844
2009	5,914	5,670	5,577	4,178	4,340	5,509	6,845	7,898	7,417	7,825	7,986	7,767	7,986
2010	7,485	7,030	7,257	9,739	11,521	10,491	12,174	12,123	12,010	11,970	13,130	12,394	13,130
2011	12,301	12,579	12,300	10,539	11,860	11,992	12,396	12,604	12,515	12,106	12,354	13,515	13,515

Energy @ Meters (kWh)

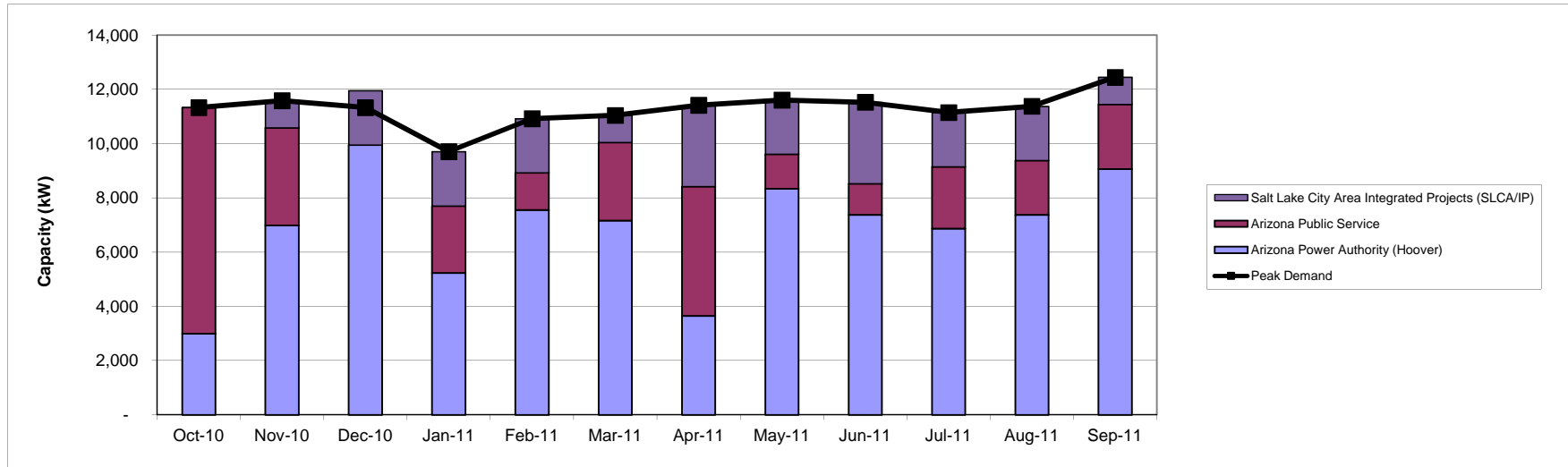
Year	October	November	December	January	February	March	April	May	June	July	August	September	Total
2002	2,263,744	2,282,164	2,295,397	2,238,420	2,025,085	3,224,766	3,217,807	2,885,737	3,518,554	3,544,779	2,709,803	2,225,455	32,431,711
2003	1,949,043	1,826,433	1,714,472	1,389,619	1,531,581	519,802	1,697,593	2,474,518	2,505,201	2,763,095	2,479,068	2,351,348	23,201,773
2004	1,945,139	1,714,257	2,057,118	1,483,727	1,821,946	1,521,982	1,870,314	2,399,797	2,123,632	2,215,135	2,011,668	1,605,295	22,770,010
2005	1,473,871	1,141,737	1,034,807	996,256	695,838	413,454	1,821,212	1,650,865	1,891,812	2,911,633	1,810,569	2,236,721	18,078,775
2006	1,839,459	1,102,129	1,507,651	1,389,219	1,419,492	1,689,146	1,981,735	1,991,807	2,108,406	2,551,288	2,124,387	1,495,520	21,200,239
2007	1,810,679	1,692,428	1,611,059	1,234,367	1,077,203	2,075,167	1,898,933	1,671,305	1,891,579	2,755,958	1,942,330	2,567,253	22,228,261
2008	2,055,235	1,536,062	1,171,500	1,008,720	793,068	1,429,897	1,738,599	1,597,590	2,027,100	2,364,533	2,029,837	2,243,047	19,995,188
2009	1,721,001	1,359,168	1,247,818	531,691	1,160,432	1,316,317	2,211,890	2,351,776	2,837,971	3,159,720	3,181,229	2,707,693	23,786,706
2010	2,182,059	2,265,457	2,384,720	3,415,336	3,437,083	2,861,570	3,652,267	4,039,949	4,274,263	4,484,449	4,745,871	4,320,984	42,064,008
2011	3,766,989	3,768,109	4,171,974	3,252,430	3,636,660	3,497,982	4,327,457	4,568,260	4,340,172	4,852,195	4,673,444	4,774,626	49,630,298

Energy @ Substation (kWh)

Year	October	November	December	January	February	March	April	May	June	July	August	September	Total
2002	2,395,496	2,414,988	2,428,992	2,368,698	2,142,947	3,412,451	3,405,087	3,053,690	3,723,338	3,751,089	2,867,516	2,354,979	34,319,271
2003	2,062,479	1,932,733	1,814,256	1,470,496	1,620,721	550,055	1,796,395	2,618,538	2,651,006	2,923,910	2,623,352	2,488,199	24,552,140
2004	2,058,348	1,814,029	2,176,844	1,570,081	1,927,985	1,610,563	1,979,168	2,539,468	2,247,230	2,344,058	2,128,749	1,698,725	24,095,248
2005	1,559,652	1,208,187	1,095,034	1,054,239	736,337	437,517	1,927,208	1,746,947	2,001,917	3,081,093	1,915,946	2,366,901	19,130,978
2006	1,946,517	1,166,274	1,595,398	1,470,073	1,502,108	1,787,456	2,097,074	2,107,732	2,231,117	2,699,776	2,248,029	1,582,561	22,434,115
2007	1,916,062	1,790,929	1,704,824	1,306,208	1,139,897	2,195,944	2,009,453	1,768,577	2,001,671	2,916,358	2,055,376	2,716,670	23,521,969
2008	2,174,852	1,625,462	1,239,683	1,067,429	839,225	1,513,119	1,839,787	1,690,571	2,145,079	2,502,151	2,147,976	2,373,595	21,158,929
2009	1,821,165	1,438,273	1,320,442	562,636	1,227,970	1,392,928	2,340,624	2,488,652	3,003,144	3,343,619	3,366,380	2,865,284	25,171,117
2010	2,309,057	2,397,309	2,523,513	3,614,112	3,637,125	3,028,116	3,864,833	4,275,078	4,523,030	4,745,449	5,022,086	4,572,470	44,512,178
2011	3,986,232	3,987,417	4,414,787	3,441,725	3,848,317	3,701,568	4,579,320	4,834,138	4,592,775	5,134,598	4,945,443	5,052,514	52,518,834

ELECTRICAL DISTRICT NO. 7 OF MARICOPA COUNTY

SCHEDULED RESOURCES TO COVER TYPICAL PEAK DEMAND



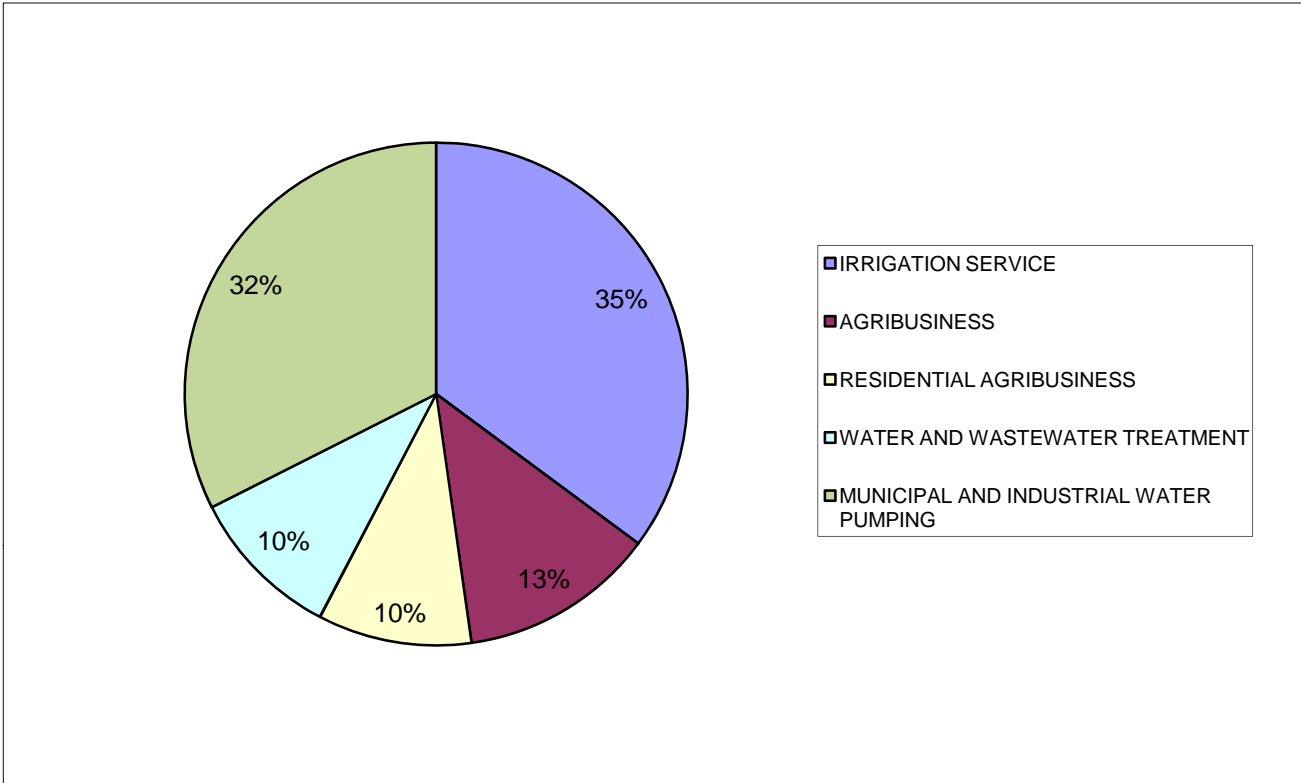
Resources

	<u>Oct-10</u>	<u>Nov-10</u>	<u>Dec-10</u>	<u>Jan-11</u>	<u>Feb-11</u>	<u>Mar-11</u>	<u>Apr-11</u>	<u>May-11</u>	<u>Jun-11</u>	<u>Jul-11</u>	<u>Aug-11</u>	<u>Sep-11</u>
<i>Arizona Power Authority (Hoover)</i>	2,987	6,979	9,953	5,226	7,553	7,162	3,646	8,330	7,376	6,864	7,374	9,060
<i>Salt Lake City Area Integrated Projects (SLCA/IP)</i>	-	1,000	2,000	2,000	2,000	1,000	3,000	2,000	3,000	2,000	2,000	1,000
<i>Arizona Public Service</i>	8,342	3,606	-	2,480	1,370	2,883	4,771	1,278	1,150	2,286	2,004	2,387
Peak Demand	11,329	11,585	11,328	9,706	10,923	11,045	11,417	11,608	11,526	11,150	11,378	12,447

ELECTRICAL DISTRICT NO. 7 OF MARICOPA COUNTY

Customer Profile

Customer Type	# of Accounts
IRRIGATION SERVICE	39
AGRIBUSINESS	14
RESIDENTIAL AGRIBUSINESS	11
WATER AND WASTEWATER TREATMENT	11
MUNICIPAL AND INDUSTRIAL WATER PUMPING	<u>36</u>
Total	111



APPENDIX D

CONSERVATION REGULATION

The District and its customers actively undertake to reduce water use and power use through a variety of conservation activities.

The greatest potential for conservation from District customers lies in water conservation. Because the District's customers rely primarily on deep-well irrigation to provide water to crops, saving water means saving electricity.

In 1980, the Arizona legislature enacted a comprehensive regulatory program to manage and conserve the State's groundwater resources. The Groundwater Code designated certain large area of the State as Active Management Areas ("AMAs"). A.R.S. § 45-411. Within the AMAs, groundwater use for irrigation purposes is heavily regulated. Farmers within AMAs must obtain certificates of irrigation grandfathered groundwater right in order to continue irrigating their property. See A.R.S. §§ 45-416, 45-465.

The District is located within the Phoenix AMA. The management goal for the Phoenix AMA is to achieve "safe yield" by January 1, 2025. A.R.S. § 45-562.A. "Safe yield" means a balance between the amount of groundwater withdrawn in the AMA and the amount of natural or artificial groundwater recharge in the AMA. A.R.S. § 45-561.6.

The goal of safe yield is to be met by applying increasingly stringent conservation requirements, the retirement of certain water uses, and augmentation of the groundwater supply with other sources of water. To date, efforts have focused primarily on conservation requirements.

The management goal of safe yield will be achieved through the enactment and enforcement of five different management plans. A.R.S. § 45-563. The Arizona Department of Water Resources ("the Department") is charged with the task of promulgating and enforcing the management plans. The first management plan ("FMP") covered the period 1980 to 1990.¹ A.R.S. § 45-564. The second management plan covered the period 1990 to 2000. A.R.S. § 45-565. The third management plan covers the period 2000 to 2010. A.R.S. § 45-566. The fourth management plan will cover the period 2000 to 2010. A.R.S. § 45-567. The fifth and final management plan will cover the period 2020 to 2025, and beyond. A.R.S. § 45-568.

¹ The first management plan for the Phoenix AMA was developed over the first several years after the adoption of the Groundwater Code. It became effective for most Phoenix AMA water users on January 1, 1987.

For the first management period, the Department was directed by statute to include conservation measures for irrigation in the first management plan. Specifically, the Department was required to establish an irrigation water duty for each farm in the AMA. A.R.S. § 45-564. Section 45-564.A.1. provides that the Department shall establish:

An irrigation water duty for each farm unit in the active management area. The irrigation water duty shall be calculated as the quantity of water reasonably required to irrigate the crops historically grown in a farm unit and shall assume conservation methods being used in the state which would be reasonable for the farm unit including lined ditches, pump-backs systems, land leveling and efficient application practices, but not including a change from flood irrigation to drip irrigation or sprinkler irrigation.

A.R.S. § 45-564.A.A. (Emphasis added.) Lined ditches, pump-back systems, land leveling and good management practices are conservation methods that are currently in use throughout the District.

The first management plan for the Phoenix AMA established the initial irrigation water duties and total water allotments for each farm. In order to establish the water duties, the Department first considered the types of crops, the number of acres of each and the amount of water historically used on each farm. The Department then determined a farm's historic irrigation efficiency by comparing historical water use to the amount of water the Department determined was adequate for the crop's total irrigation requirement.²

Research by the Department indicated that with good management practices, all irrigation systems could achieve more than 55% irrigation efficiency. Taking into account the achievable level of efficiency and the average historic efficiency, the Department set the minimum irrigation efficiency for District lands at 55%.

If a farm's historic efficiency was less than 55%, the Department assigned an irrigation efficiency that required the farm to either meet a 55% efficiency level or to reduce water use by 6%, whichever resulted in greater water savings.³ (FMP, p. 51)

If a farm's historic efficiency was between 55% and 70%, the Department assigned an irrigation efficiency requirement of either 70% or a percentage that reflected a 6% reduction in water use, whichever gave the higher water duty. (FMP, p. 51).

² "Total irrigation requirement" takes into account the crop's consumptive use, special crop needs (such as frost protection water), leaching requirements and "effective" precipitation. Historic irrigation efficiencies in the Phoenix AMA ranged generally between 55% and 85%. (FMP, pp. 46-48)

³ The Department determined that a 6% reduction in water use could be achieved by employing good irrigation management practices. (FMP, p. 51)

If a farm's historic efficiency was between 70% and 85%, the Department assigned the historic efficiency as the required efficiency. The Department concluded that efficiencies in this range reflected satisfactory conservation methods. (FMP, p. 51).

If a farm's historic use was greater than 85%, the Department assigned an 85% irrigation efficiency requirement. The Department considered 85% efficiency the maximum reasonable efficiency for the first management period. (FMP, p. 51).

Based upon the assigned irrigation efficiency requirements, the Department calculated water duties (the amount of water use permitted per acre) and total water allotments for each farm.

In December, 1989, the Department promulgated the management plan for the second management period (1990 to 2000). For the second management plan, the Department was directed to impose the following further conservation requirements on irrigation. A.R.S. § 45-565.A.1. provides that the Department shall:

Establish a new irrigation water duty for each farm unit to be reached by the end of the second management period any may establish one or more intermediate water duties to be reached at specified intervals during the second management period. The irrigation water duty and any intermediate water duties shall be calculated as the quantity of water reasonably required to irrigate the crops historically grown in the farm unit and shall assume the maximum conservation consistent with prudent long-term farm management practices within Areas of similar farming conditions, considering the time required to amortize conservation investments and financing costs.

A.R.S. § 45-565.A.1. (Emphasis added)

Under the second management plan, the Department established two interim water duties and a final water duty for each farm. The first interim water duty and the total allotment were effective from January 1, 1992 to December 31, 1994. The second interim water duty and total allotment were effective from January 1, 1995 to December 31, 1999. The final water duty and allotment was scheduled to become effective January 1, 2000, and remain in effect until altered under the third management plan.

In setting the final water duty under the second management plan. The Department concluded that most farms within the Phoenix AMA were capable of achieving 85% irrigation efficiency. The Department determined that level basin irrigation is economically prudent and feasible, and that with level basin irrigation and good management practices most farms could achieve 85% irrigation efficiency. Farms with limiting soils or poor water quality were generally assigned a 70% efficiency requirement. Citrus farms, because they cannot economically be leveled, were assigned a 65% efficiency level.

There has been considerable debate and extensive additional study regarding whether the 85% efficiency requirement can be met, even under the best of circumstances. The implementation of the final water duty under the second management plan has been suspended, pending the conclusion of additional study and negotiation. In the fall of 2001, the Department and the agricultural community reached an agreement in principle to reduce the required efficiency to 80% for most farms. In 2002, the statutes were amended to provide that the maximum irrigation efficiency to be imposed is 80%.

The effect of the Groundwater Code is to cause an overall, continuing reduction in water use by the farms served by the District and many other Arizona preference customers. Compliance with the water conservation measures imposed under the State regulatory scheme necessarily results in significant power savings.

Conservation has been an economic necessity to growers in the area served by the District since the first pump was installed over sixty years ago. The land was uneven, ditches were unlined and the lengths of water runs were often long. Growers learned that more even fall of the land and less fall per measured distance resulted in a more efficient use of their water resource and a savings in their cost of operation. Land was leveled with more uniformity and less fall. Growers worked with such agencies as the Soil Conservation Service and the University of Arizona Cooperative Extension Service. Experience and education taught them that such practices as the lining of ditches was a major conservation tool that would save water for unlimited years into the future if properly maintained. In the early years, many miles of ditches were concrete lined by hand. As technology advanced, it became possible to concrete line ditches mechanically. Miles and miles of ditches were lined, until today there are practically no head or carry ditches in the District that are not either concrete lined or underground pipeline. Long water runs were proven to be inefficient and were eliminated by dividing field lengths in half and in some cases into quarters by placing new lined ditches across them. As technology improved, lands were releveled and today with laser leveling it is possible to level to a fraction of a degree or even dead level.

Fields are also situated to enable growers to use run off water from one field and apply it to another field. In the very early 1950's growers started building water recovery systems. The systems called sumps or pump backs, retain runoff water in ponds and use small, energy efficient pumps to push the water to the high corner of the farm and reuse the water in the irrigation system. It is a major conservation tool used by most growers to ensure that no water is wasted and that energy is conserved.

As technology advances, District growers continue to be more efficient in their operations. New water efficient crop varieties have been introduced, new types of irrigation systems are being installed and highly accurate high technology moisture measuring instruments are in use to determine the exact moisture needs of crops. All of these activities increase the efficiency of water and energy use.

ELECTRICAL DISTRICT NUMBER SEVEN
of the County of Maricopa and State of Arizona

OFFICE OF THE CHAIRMAN-MANAGER

14629 WEST PEORIA AVENUE WADDELL, ARIZONA 85355-9617

PHONE: 623-935-6253

FAX: 623-935-4360

EMAIL: powerandwater@aol.com

AGENDA
BOARD OF DIRECTORS
ELECTRICAL DISTRICT NUMBER SEVEN
October 31, 2011

1. Call to Order;
2. Approval of the Minutes of the May 23, 2011 meeting;
3. Approval of the financial reports of the District for the months of May, 2011, through September, 2011, and the payments of all invoices of the District submitted prior to or on the date of the meeting;
4. Report of the Chairman/Manager;
5. Action on Report;
6. Discussion of IRP activities;
7. Discussion of Hoover reallocation issues;
8. Nomination of two Board of Directors positions for the January 2012 election;
9. Authorization for all actions to be taken by the Manager to cause the January, 2012 election of Directors to be properly noticed and held;
10. Discussion and possible approval of distributing two trust fund returns per year;
11. Approval of the District's Third Five-Year Integrated Resource Plan Update;
12. Approval of the District's audited financial statement for the fiscal year ended June 30, 2011;
13. Adoption of Resolution approving form and authorizing submission of the annual report and audited financial statement (pursuant to A.R.S. §48-251 and A.R.S. §48-253) to the Board of Supervisors, Arizona State Treasurer, and Maricopa County Treasurer ;
14. Authorization for all actions to be taken by the Manager to cause the biannual registration of the District, as a public body engaging lobbyists on its behalf, and the annual registration of Ryley Carlock & Applewhite, as the District's designated public lobbyist, to be properly prepared and filed with the office of the Secretary of State;
15. The Board may vote to hold an Executive Session for the purpose of obtaining legal advice from the District attorney on any matter listed on the Agenda, pursuant to A.R.S. § 38-431.03(A)(3). The discussions and minutes of the Executive Session shall be kept confidential. The Executive Session of the Board is not open to the public.
16. Any other business that may come before the meeting, and;
17. Adjournment.