



**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](mailto: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 Eight 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 December 20, 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](http://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](mailto: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 cursive script that reads "Audrey Lynn Colletti".

Audrey Lynn Colletti  
Public Utilities Specialist

cc: Darrick Moe  
Joe Mulholland  
Jim Downing  
Jay Moyes



**Via E-mail & USPS**

December 29, 2011

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

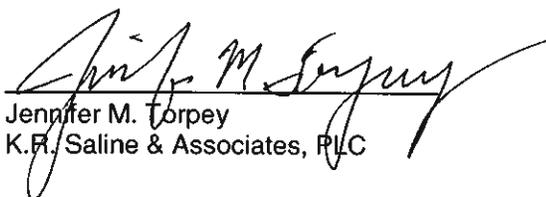
Re: Electrical District Number Eight Integrated Resource Plan

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 Eight ("ED8"), pursuant to 10 C.F.R. § 905.13(b), is the third five-year update to ED8's Integrated Resource Plan. This update was approved by ED8's Board of Directors at a public meeting held on December 20, 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, PLLC

Enclosure

cc: Jim Downing (w/encl.)  
Jay Moyes (w/encl.)  
Audrey Colletti (w/encl.)  
Joe Mulholland (w/encl.)

# **INTEGRATED RESOURCE PLAN**

**THIRD FIVE-YEAR UPDATE**

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

**December 20, 2011**

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## Profile Data

Electrical District Number Eight of Maricopa County (“ED8” or “the District”) is a political subdivision of the State of Arizona. ED8 is an electrical district established in 1984 by the Board of Supervisors of Maricopa County pursuant to Chapter 3 of Title 30 of the Arizona Revised Statutes. The District was formed for the purpose of providing power for use primarily for pumping water for irrigation.

ED8 is located in western Maricopa County and eastern Yuma County, Arizona, west of the Phoenix metropolitan area. The District has a service area of approximately 175,000 acres. ED8 serves predominantly irrigation pumping loads and certain other agriculturally related 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 ED8’s service area is provided in **Appendix A**.

ED8 is governed by an eleven-member Board of Directors elected annually by freeholders of property within ED8’s boundaries. Its current staff consists of one District Administrator. The District’s current Board of Directors and relevant contact persons are detailed below.

- **Board of Directors**

Ron Rayner—Chairman  
 Brian Turner—Vice Chairman  
 Denton Ross—Secretary  
 John Utz—Treasurer  
 C. W. Adams  
 Billy Hickman

Marvin John  
 Greg Pierce  
 Jason Pierce  
 Jerry Rovey  
 Jim Warkomski

- **Contact Persons**

Jim Downing—District Administrator  
 The Harcuvar Company  
 P. O. Box 70  
 Salome, AZ 85348-0070  
 Ph: (928) 859-3647  
 Fax: (928) 859-3145

Jay I. Moyes—Legal Counsel  
 Moyes Sellers & Hendricks, Ltd.  
 1850 N. Central Ave., Ste. 1100  
 Phoenix, AZ 85004  
 Ph: (602) 604-2141  
 Fax: (602) 274-9135

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

ED8 purchases Hoover power from the Arizona Power Authority (“the Authority”), and other power from Arizona Public Service Company (“APS”). In addition, ED8 is a party to the Hoover Resource Exchange Program that permits ED8 and other similarly situated utilities to integrate and exchange Hoover power resources. The power and energy from APS and the Authority are transmitted over the Parker-Davis transmission system, the Pacific Northwest-Pacific Southwest Intertie transmission system and the transmission system of APS. Under a contract with APS, the power and energy are delivered over APS’s facilities from the transmission system delivery points to the customers of ED8. ED8 does not own any portion of the electrical transmission or distribution system. Certain distribution transformers located at ED8 customer locations are owned by ED8 customers.

ED8 currently levies an ad valorem property tax and an acreage assessment 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 ED8 to its customers are determined and set by its Board of Directors. Copies of ED8’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 ED8 electrical power. ED8 purchases the majority of its power resources from the Authority and APS.

The current projection of the District loads for the upcoming two-year period does not indicate that additional resources are needed. Over the past several years the District has added a 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 has been managed through the Resource Exchange Program for the Hoover resource. This resource management program has 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 that can temporarily utilize the power during the same periods. With the continuation of this program, 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 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, the Resource Exchange Program, 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)  
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)

- **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 ED8. In many instances, APS and ED8 serve power to different loads of the same customer.

There is competition for leasing the farm ground within ED8. Many of the landowners in ED8 and other districts lease ground to tenant farmers at net rates based upon land cost and water costs (i.e., pumping costs). Therefore, to the extent that the pumping electrical costs in ED8 become significantly higher than other areas, ED8's landowners will be disadvantaged in the competition for tenant farmers, which may significantly impact the irrigated acreage and electric load of the District, as well as further depress property values.

## 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	36,341	42,313		203,242,273	192,063,949	55%
2003	38,279	47,165	11%	205,909,146	194,584,143	50%
2004	41,681	47,321	0%	237,636,465	224,566,460	57%
2005	43,463	46,546	-2%	199,099,727	188,149,243	49%
2006	41,180	48,737	5%	223,012,056	210,746,393	52%
2007	44,885	51,202	5%	253,387,554	239,451,238	56%
2008	46,206	51,637	1%	252,738,790	238,838,157	56%
2009	48,621	53,404	3%	261,000,002	246,645,002	56%
2010	47,398	51,941	-3%	226,424,475	213,971,130	50%
2011	48,495	56,039	8%	276,953,778	261,721,320	56%
<b>Current Forecast</b>						
2012	48,495	56,039	0%	276,953,778	261,721,320	56%
2013	48,495	56,039	0%	276,953,778	261,721,320	56%
2014	48,495	56,039	0%	276,953,778	261,721,320	56%
2015	48,495	56,039	0%	276,953,778	261,721,320	56%
2016	48,495	56,039	0%	276,953,778	261,721,320	56%

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—100%

- Irrigation Pumping Plants—87%
- Other Ag-Related Loads—13%

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

- **Supply Side Resources**

The District anticipates that current federal resources under contract and continuation of the 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.

As described in the District's prior Plan, ED8 spent several years participating with the SPPR Group in evaluating future resource opportunities. The SPPR Group is an association of forty not-for-profit electric utilities, including cooperatives, municipalities, tribal power authorities, and irrigation and electric districts providing service in Arizona, California, and Nevada. Taking advantage of the Group's size to broaden the scope of possible supplies, multiple options for resources were considered, including both construction of a generating unit and purchase of a portion of an existing generating unit. Ultimately, however, both of these options became infeasible due to economic and regulatory circumstances. The Group then issued a Request for Proposals ("RFP"), in response to which a variety of proposals could be submitted, including unit contingent proposals, turnkey proposals, 25-year purchase power agreements, slice of utility system offers in which the sale would be treated with the same firmness as native load, and the sale of existing generating units. The RFP was later modified to reflect the changing requirements of the participants, and required bids to be for unit contingent power or firm power from dedicated units, including slice of system sales. Bids were also required to be for fully dispatchable service. Ultimately, due to economic and other considerations, it was determined that the most practicable option was a long-term power purchase agreement. 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
  - 23,260 kW (Maximum with Hoover Firming Capacity)
  - 55,705,000 kWh (Contract Entitlement)
- Expires September 30, 2017

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: 7.9% Demand, 5.5% Energy
- Expires December 31, 2020

Power Purchase Agreement (Sempra Generation—through SPPR Group)

- Firm Capacity and Energy

- 20,000 kW
- Energy as needed
- Effective January 1, 2015; expires December 31, 2039

- **Demand Side Resources**

The majority 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.

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

## **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, opportunities for additional energy savings through demand side management ("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.

## **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 to 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 power to supply as much as possible of its projected power requirements over the five-year planning period. The current federal resources and continuation of the Authority Hoover Resource Exchange Program 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.

Over the past several years, several farming enterprises requested addition to ED8's service area. These parcels were added and the District's loads increased incrementally. New lands are only added on a case-by-case basis and require Board approval and County Board of Supervisor notification. Recent increases in cotton and alfalfa crop prices may give rise to increased potential for such additions to be requested in the future as currently fallowed lands may be considered economically feasible for return to cultivation and irrigation.

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 to serve as a successor for long-term contracts which will terminate in coming years. Therefore, ED8 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 Integrated Resource Plan 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 Integrated Resource 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 once or twice each year.  
**Activity:** Irrigation Pump Efficiency Testing

**Period:** Calendar Year 2012 through 2016  
**Goal:** Continue funding AZMET Program to provide District farmers with real-time weather information to assist in scheduling irrigation.  
**Activity:** AZMET Program

- **Validation and Evaluation**

### **Irrigation Pump Efficiency Testing**

The District's farmers own and operate their own pumps. The District's program of testing customer pumping plants will continue to help the customers evaluate each pumping plant and identify pumping plants which may be experiencing a decrease in overall pumping efficiency. Under this program the District will attempt to test each pumping plant operated within the District periodically in cooperation with the District's customers. 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. With the pump test information, and previous test information, an efficiency trend pattern can be prepared. From the test information, the associated cost savings that might 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.

### **AZMET Program**

The District sponsors the University of Arizona's Arizona Meteorological Network ("AZMET") program. This program provides meteorological data and weather-based information to agricultural and horticultural interests operating in southern and central Arizona. Meteorological data is collected from a network of automated weather stations located in both rural and urban production settings. This data includes temperature (air and soil), humidity, solar radiation, wind (speed and direction), and precipitation. AZMET also provides a variety of computed variables, including heat units (degree-days), chill hours, and reference crop evapotranspiration (ET<sub>o</sub>). This real-time information allows District customers to more accurately schedule irrigation application in keeping with current weather conditions. As irrigation is more efficient, less water must be pumped to meet the farming needs, which results in the conservation of energy. The Conservation Action Plan will be evaluated annually to determine whether or not the expected benefit to the farmers continues to be greater than the cost of continuing funding for the program.

## **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 ED8, 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 to meet the majority of its electric loads. To the extent the District utilizes the Program and its 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 hydro resources, the District's farmers are involved in substantial water conservation programs. The installed water conservation investment by the District's farmers is extensive and far-reaching. The ongoing conservation practices and ongoing maintenance of conservation investments continue to conserve significant amounts of water annually. To the extent the District sponsors conservation activities and information activities with its customers, the conservation of water is the fundamental achievement, which is environmentally beneficial and economically sound.

## Public Participation

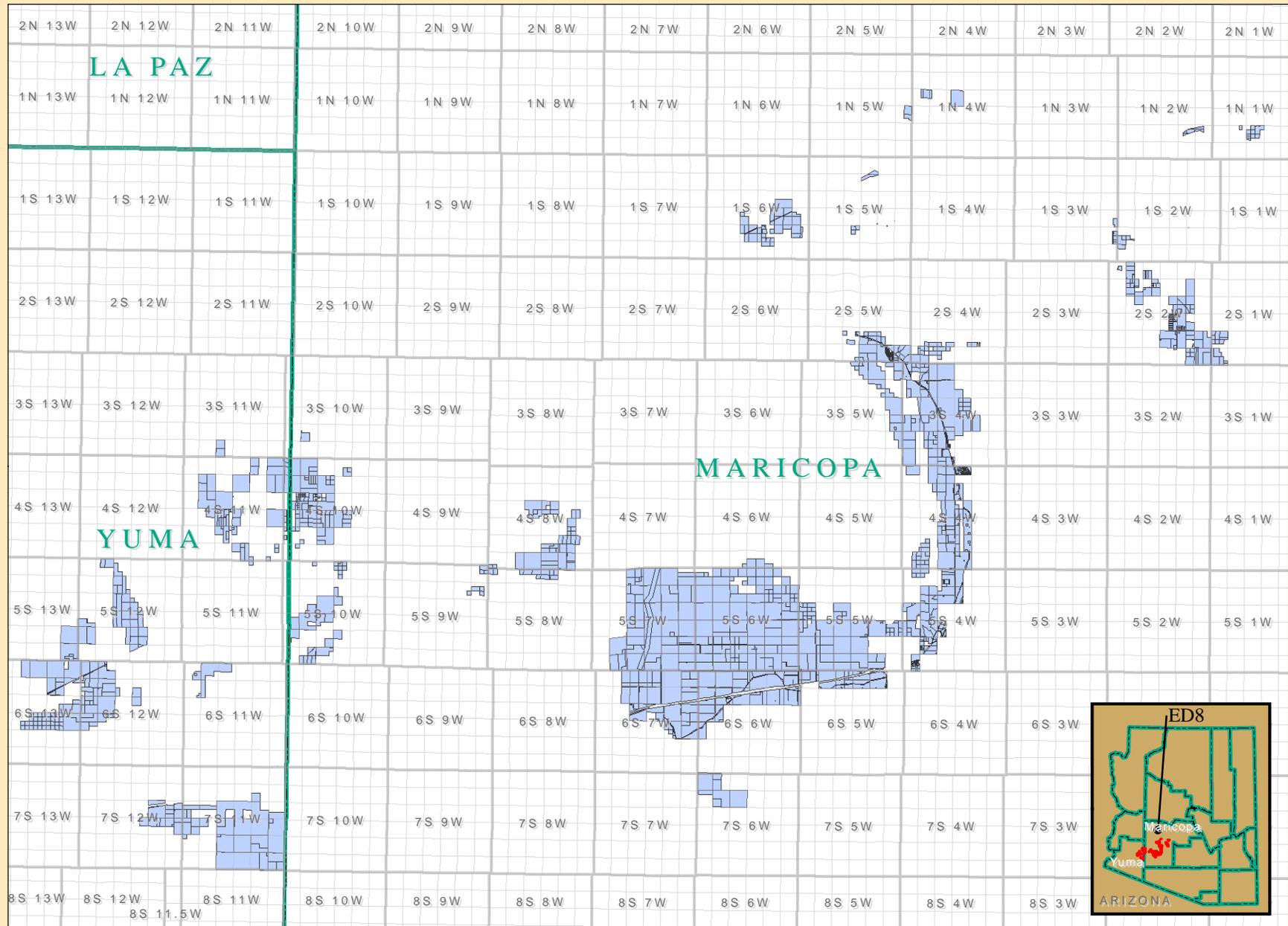
The District has held one public meeting to discuss the development of ED8's IRP.

Prior to the first meeting, the District posted notice in advance of the meeting, giving the time and place of the meeting and specifying that the District would be considering a draft IRP at the meeting. The notice was posted in accordance with statutory open meeting law requirements. The notice stated that the draft IRP would be available to the public in advance of the meeting and that public comment on the draft IRP would be accepted at the meeting. A copy of the notice is attached as **Appendix D**.

At the meetings, the draft IRP was presented to the Board. After discussion and the opportunity for public comment, the Board authorized the preparation of a final IRP, with such revisions as the Board deemed appropriate. There were no public comments.

1 in = 8 miles

### APPENDIX A -- Map of District Boundary



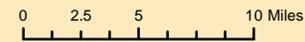
Sources: Township Range Section: AZ State land - AFRS  
District Boundary : Verified by KRS A per legal Resolutions -

Krsdata2011\RP\MAP\ED8 Created: 06/01/2011 - Edited: 06/14/2011 by BLS arcview 10

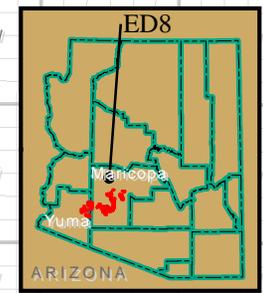
## Electrical District Number Eight

**Legend**

- Townships
- County Boundary
- Sections
- District Boundary



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



APRIL 2008						Added OCT. 2008	
	Original Member Lands <u>Rate 1</u>		Other Irrigation <u>Rate 10</u>		Non- Irrigation <u>Rate 11&amp;12</u>		Primary Meter <u>Rate 13&amp;14</u>
Demand	\$	5.38	\$	6.80	\$	8.00	\$ 7.70
Energy	\$	0.0359	\$	0.0453	\$	0.0533	\$ 0.0513
Customer	\$	49.50	\$	49.50	\$	49.50	\$ 49.50
Yuma Co. Tax						7.70%	7.70%
Maricopa Co. Tax						7.30%	7.30%

**ELECTRICAL DISTRICT NO. 8 OF MARICOPA COUNTY**

*Demand @ Meters (kW)*

Year	October	November	December	January	February	March	April	May	June	July	August	September	Max
2002	27,226	23,572	20,032	23,961	23,956	33,470	36,658	37,422	37,659	38,799	38,970	38,939	38,970
2003	30,732	25,307	27,108	27,555	26,115	35,255	37,885	42,774	43,439	42,665	41,809	40,251	43,439
2004	36,618	30,600	26,717	27,991	29,891	38,388	41,780	43,412	43,190	43,490	43,458	43,583	43,583
2005	40,029	21,255	18,539	21,135	21,329	37,007	41,534	41,882	42,594	41,686	42,712	42,869	42,869
2006	37,927	30,464	27,089	29,067	30,305	31,702	40,842	43,581	44,163	44,515	44,814	44,887	44,887
2007	41,339	34,218	35,261	34,507	36,604	39,457	45,799	47,157	46,004	46,575	46,043	45,037	47,157
2008	42,126	39,147	29,025	30,892	37,638	42,556	43,972	45,601	46,396	47,073	47,558	46,343	47,558
2009	44,780	35,508	24,554	29,936	35,326	39,291	45,869	49,185	48,167	48,199	47,918	47,766	49,185
2010	43,654	36,032	28,722	28,782	28,108	29,549	37,760	42,985	46,906	47,838	47,119	46,497	47,838
2011	44,664	36,742	30,767	32,484	32,212	35,637	46,278	48,442	49,554	51,612	50,830	51,372	51,612

*Demand @ Substation (kW)*

Year	October	November	December	January	February	March	April	May	June	July	August	September	Max
2002	29,561	25,594	21,751	26,017	26,011	36,341	39,802	40,603	40,840	42,127	42,313	42,279	42,313
2003	33,368	27,478	29,433	29,919	28,355	38,279	41,135	46,443	47,165	46,325	45,395	43,704	47,165
2004	39,759	33,225	29,009	30,392	32,455	41,681	45,364	47,136	46,895	47,221	47,186	47,321	47,321
2005	43,463	23,078	20,129	22,948	23,159	40,181	45,097	45,474	46,248	45,262	46,376	46,546	46,546
2006	41,180	33,077	29,413	31,560	32,904	34,421	44,345	47,319	47,951	48,333	48,658	48,737	48,737
2007	44,885	37,153	38,286	37,467	39,744	42,841	49,727	51,202	49,950	50,570	49,992	48,900	51,202
2008	45,739	42,505	31,515	33,542	40,866	46,206	47,744	49,512	50,376	51,111	51,637	50,318	51,637
2009	48,621	38,554	26,660	32,504	38,356	42,661	49,803	53,404	52,299	52,333	52,028	51,863	53,404
2010	47,398	39,123	31,186	31,251	30,519	32,084	40,999	46,672	50,929	51,941	51,161	50,485	51,941
2011	48,495	39,894	33,406	35,270	34,975	38,694	50,248	52,597	53,805	56,039	55,190	55,779	56,039

*Energy @ Meters (kWh)*

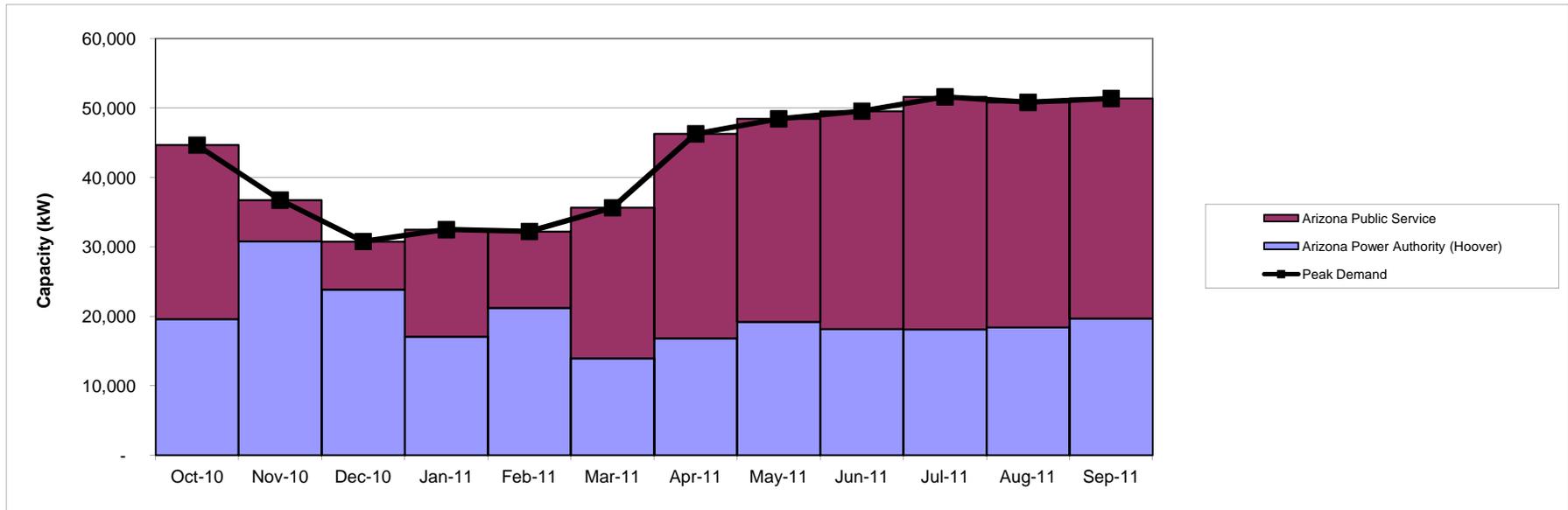
Year	October	November	December	January	February	March	April	May	June	July	August	September	Total
2002	10,232,814	8,047,168	4,840,123	8,778,413	8,427,904	15,348,902	21,539,011	22,098,734	22,077,034	25,946,178	24,600,897	20,126,771	192,063,949
2003	12,379,244	7,316,215	6,519,027	7,312,599	6,771,753	12,541,487	19,633,161	23,373,864	25,310,020	27,094,058	23,324,431	23,008,284	194,584,143
2004	17,689,575	8,277,672	7,560,179	8,885,688	9,293,197	17,098,074	22,335,742	23,841,093	27,319,283	27,840,736	26,825,157	27,600,064	224,566,460
2005	15,613,307	4,445,476	4,550,759	4,752,977	4,970,097	14,697,348	21,292,595	21,522,613	24,734,415	26,735,139	21,953,746	22,880,771	188,149,243
2006	14,567,984	11,675,327	7,250,277	8,460,389	11,414,459	10,457,305	18,307,207	24,548,616	26,920,950	27,916,780	26,838,352	22,388,747	210,746,393
2007	18,466,069	13,913,088	10,126,838	9,652,414	12,817,162	16,232,886	22,909,441	25,605,013	27,344,166	29,016,186	26,433,001	26,934,974	239,451,238
2008	18,888,270	13,486,925	7,252,067	7,965,925	13,603,102	22,146,222	23,903,458	23,804,778	25,749,505	28,420,911	28,073,475	25,543,519	238,838,157
2009	22,344,610	12,983,275	6,598,466	9,367,457	12,465,956	19,489,187	23,376,710	27,073,766	28,494,668	28,370,196	27,956,502	28,124,209	246,645,002
2010	19,009,897	11,980,095	8,425,414	7,306,895	8,864,369	10,378,041	19,090,189	21,339,396	25,836,580	29,041,568	25,550,649	27,148,037	213,971,130
2011	19,147,718	12,835,555	9,521,973	9,511,909	11,045,021	15,016,303	24,680,017	27,043,337	32,586,369	32,695,980	33,824,514	33,812,624	261,721,320

*Energy @ Substation (kWh)*

Year	October	November	December	January	February	March	April	May	June	July	August	September	Total
2002	10,828,375	8,515,521	5,121,823	9,289,326	8,918,417	16,242,224	22,792,604	23,384,903	23,361,941	27,456,273	26,032,696	21,298,170	203,242,273
2003	13,099,729	7,742,026	6,898,441	7,738,200	7,165,876	13,271,415	20,775,832	24,734,248	26,783,090	28,670,961	24,681,938	24,347,390	205,909,146
2004	18,719,127	8,759,441	8,000,189	9,402,844	9,834,071	18,093,200	23,635,706	25,228,670	28,909,294	29,461,096	28,386,410	29,206,417	237,636,465
2005	16,522,018	4,704,207	4,815,618	5,029,605	5,259,362	15,552,749	22,531,847	22,775,252	26,173,984	28,291,152	23,231,477	24,212,456	199,099,727
2006	15,415,856	12,354,843	7,672,251	8,952,793	12,078,793	11,065,931	19,372,706	25,977,371	28,487,778	29,541,566	28,400,372	23,691,796	223,012,056
2007	19,540,814	14,722,844	10,716,231	10,214,195	13,563,134	17,177,657	24,242,795	27,095,252	28,935,625	30,704,959	27,971,430	28,502,618	253,387,554
2008	19,987,587	14,271,878	7,674,145	8,429,550	14,394,817	23,435,156	25,294,665	25,190,241	27,248,153	30,075,038	29,707,381	27,030,179	252,738,790
2009	23,645,090	13,738,915	6,982,504	9,912,653	13,191,488	20,623,478	24,737,259	28,649,488	30,153,088	30,021,371	29,583,600	29,761,068	261,000,002
2010	20,116,293	12,677,349	8,915,782	7,732,164	9,380,285	10,982,054	20,201,258	22,581,371	27,340,296	30,731,818	27,037,724	28,728,081	226,424,475
2011	20,262,135	13,582,598	10,076,162	10,065,512	11,687,853	15,890,268	26,116,420	28,617,288	34,482,930	34,598,921	35,793,137	35,780,554	276,953,778

**ELECTRICAL DISTRICT NO. 8 OF MARICOPA COUNTY**

*SCHEDULED RESOURCES TO COVER TYPICAL PEAK DEMAND*



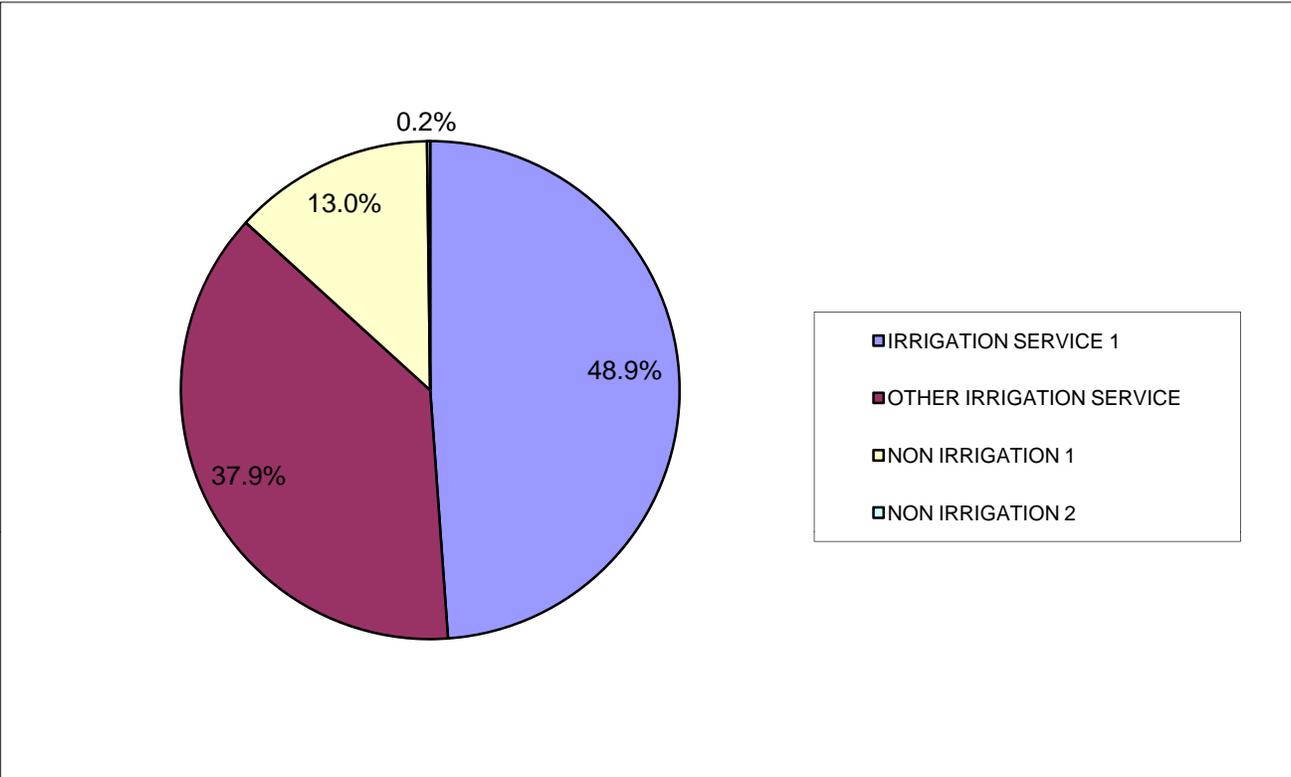
**Resources**

	<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>	19,601	30,789	23,858	17,074	21,214	13,923	16,829	19,200	18,173	18,109	18,378	19,688
<i>Arizona Public Service</i>	25,063	5,953	6,909	15,410	10,998	21,714	29,449	29,242	31,381	33,503	32,452	31,684
<b>Peak Demand</b>	<b>44,664</b>	<b>36,742</b>	<b>30,767</b>	<b>32,484</b>	<b>32,212</b>	<b>35,637</b>	<b>46,278</b>	<b>48,442</b>	<b>49,554</b>	<b>51,612</b>	<b>50,830</b>	<b>51,372</b>

**ELECTRICAL DISTRICT NO. 8 OF MARICOPA COUNTY**

*Customer Profile*

Customer Type	# of Accounts
IRRIGATION SERVICE 1	236
OTHER IRRIGATION SERVICE	183
NON IRRIGATION 1	63
NON IRRIGATION 2	1
<b>Total</b>	<b>483</b>



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**ELECTRICAL DISTRICT NUMBER EIGHT**

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**Board of Directors**

<b>Ronald Rayner</b> <i>Chairman</i>	<b>C. W. Adams</b> <b>Billy Hickman</b>
<b>Brian Turner</b> <i>Vice-Chairman</i>	<b>Marvin John</b> <b>Greg Pierce</b>
<b>Denton Ross</b> <i>Secretary</i>	<b>Jason Pierce</b> <b>Jerry Rovey</b>
<b>John Utz</b> <i>Treasurer</i>	<b>James N. Warkomski</b>

**Reply to:**

**James D. Downing, P.E.**  
**66768 Hwy 60**  
**P.O. Box 99**  
**Salome, AZ 85348**

**ED8@HARCUVARCO.COM**  
**PHONE: (928) 859-3647**  
**FAX: (928) 859-3145**

**PUBLIC NOTICE**

**Electrical District No. 8** ("the District") will be holding a board meeting at 1:00 pm on December, 20, 2011 at Mill Iron Plaza Conference Room, 25560 West Highway 85, Buckeye, Arizona. At that board meeting the District will review and approve its updated Integrated Resource Plan. This Integrated Resource Plan, which is required by the Western Area Power Administration, details the District's power resource plan for the next five years. The final Integrated Resource Plan will be available to the public at the District's office prior to the meeting. Written comments regarding the Integrated Resource Plan will be accepted any time prior to or at the meeting. Public comments will also be accepted at this time. Please contact James D. Downing, P.E., District Administrator, (928) 859 3647 for more information.