



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

APR 27 2012

Via Email: jmt@krsaline.com

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

Re: San Carlos Irrigation Project 5-year Integrated Resource Plan

Dear Ms. Torpey:

Thank you for submitting this plan to Western Area Power Administration (Western). The report, dated January 3, 2012, 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: Mike Miller



Via E-mail & USPS

January 26, 2012

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

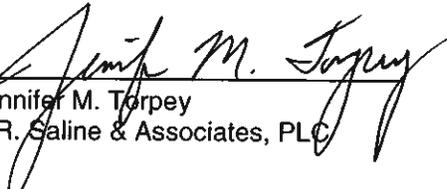
Re: San Carlos Irrigation Project Integrated Resource Plan

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 San Carlos Irrigation Project ("SCIP"), pursuant to 10 C.F.R. § 905.13(b), is the third five-year update to SCIP's Integrated Resource Plan.

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: Mike Miller (w/encl.)
Audrey Colletti (electronic only)

**INTEGRATED
RESOURCE
PLAN**

THIRD FIVE-YEAR UPDATE

**SAN CARLOS IRRIGATION PROJECT
STATE OF ARIZONA**

January 3, 2012

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Profile Data

The San Carlos Irrigation Project ("SCIP" or "the Project") was authorized by an act of Congress in 1924 and is a Department of Interior, Bureau of Indian Affairs Agency, established to provide irrigation water to lands on the Gila River Reservation and certain lands adjacent to the reservation. Originally, power facilities were established at the Coolidge Dam to serve the SCIP loads. However, this facility was damaged by severe flooding in 1983 and has not been operational since.

The territory in which SCIP presently provides service encompasses approximately 3,000 square miles in Pinal County and parts of Pima, Maricopa, Graham and Gila counties. A map detailing SCIP's service area is provided in **Appendix A**. The customer base is primarily agricultural and rural, with a large industrial base in the Lone Butte industrial park area and large residential populations in the San Carlos, Gila River and Oracle areas. In FY2011, the Project served electricity to approximately 16,000 customers, both on and off the reservation.

To provide service to its customers, SCIP receives power at three points: the Lone Butte Substation, the Coolidge Substation and the Oracle Junction Substation. From there, the power is stepped down through 29 Project-owned substations, 250 miles of Project-owned transmission facilities and about 3,000 miles of Project-owned distribution lines.

The Regional Director of the Phoenix Area Office of the Bureau of Indian Affairs is the final authority on all policies, rate schedules and disputes. SCIP is organized under a Project Engineer with two divisions, Water and Power, and has offices located in Coolidge. There are 104 full-time employees engaged in the utility operations.

The Project's relevant contact person is as follows.

Project Manager
P.O. Box 250
Coolidge, AZ 85228
Ph: (520) 723-6200
Fax: (520) 723-5770

SCIP purchases Parker-Davis Project ("P-DP") Firm Electric Service and Salt Lake City Area/Integrated Projects ("SLCA/IP") power from the Western Area Power Administration ("Western"), and supplemental power from other providers. SCIP has a scheduling and resource management agreement with Arizona Electric Power Cooperative, Inc ("AEPCO") and is a party to an Integrated Resource Scheduling Agreement with other similarly situated utilities to integrate and exchange SLCA/IP power resources. This resource management program provides flexibility for SCIP 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 other

coordinated time periods. In addition, SCIP also has the opportunity to participate in the P-DP annual energy exchanges program, which allows SCIP additional flexibility in meeting its resource needs on a month-to-month basis.

SCIP has attempted to maintain rate stability and minimize increases in the electric rates through participation in these resource management efforts. The Project continues to work closely with other similarly situated utilities to efficiently use the preference resources to which it has access. Copies of SCIP's current rate schedules are attached as **Appendix B**.

The Project's existing power and energy resources are transmitted over the Parker-Davis transmission system to the Project's interconnections at Lone Butte, Coolidge and Oracle Junction substations. The power and energy are then distributed to the customers of SCIP over facilities owned and operated by the Project.

The current projection of SCIP's loads for the upcoming near-term period does not indicate that additional resources are needed. To the contrary, it is possible that loads may somewhat decline due to the continued economic downturn. The current contracted firm resources and resource management of short-term purchases are expected to be sufficient for the Project through 2014. Supplemental resources to meet forecasted loads are anticipated to be needed beginning in calendar year 2015.

SCIP Goals and Objectives

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

Competitive Situation

- **SCIP Contract Information**
 - Western Area Power Administration (SLCA/IP Firm Electric Service Contract)
 - Western Area Power Administration (Contract between P-DP, SLCA/IP and Firm Power Contractors for Integrated Federal Resource and Power Transactions)
 - Western Area Power Administration (P-DP Firm Power and Transmission)
 - Western Area Power Administration (P-DP Excess Energy Contract)
 - Parker-Davis Project Firm Transmission Contract

- Barclays Capital (Base and Peak Load)
- Arizona Electric Power Cooperative, Inc. (Scheduling and resource management agreement)
- Arizona Power Authority (Boulder Canyon Power)

- **Regulations Applicable to SCIP**

Energy Planning and Management Program (EPACT '00)

- **Competition With SCIP Service**

There is aggressive competition for new as well as existing customers within the Project's service area. Therefore, to the extent that the electric rates in the Project become significantly higher than other options, the competition for electric load may significantly impact the electric load of SCIP. In FY2010, ten customers accounted for approximately 30% of the Project's total energy sales and are the most susceptible to competition.

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	66,251	82,728	4%	371,526,000	341,803,920	51%
2003	62,194	89,583	8%	411,454,799	378,538,415	52%
2004	71,539	86,835	-3%	428,169,994	393,916,394	56%
2005	64,000	87,000	0%	397,895,068	366,063,463	52%
2006	70,800	100,000	15%	445,849,875	410,181,885	51%
2007	76,500	91,800	-8%	442,796,500	407,372,780	55%
2008	70,700	82,886	-10%	420,295,119	386,671,510	58%
2009	66,069	78,072	-6%	359,980,015	331,181,614	53%
2010	53,525	76,309	-2%	341,902,763	314,550,542	51%
2011	66,755	79,105	4%	362,839,170	333,812,036	52%
Current Forecast						
2012	61,425	81,627	3%	363,933,237	334,818,578	51%
2013	61,834	82,170	1%	366,353,459	337,045,183	51%
2014	61,954	82,330	0%	367,068,512	337,703,031	51%
2015	62,204	82,662	0%	368,546,937	339,063,182	51%
2016	62,521	83,083	1%	370,426,828	340,792,682	51%

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

- **Load Profile Information**

Detailed below is a summary of the historical energy sales by customer class, in megawatt-hours (MWh), for the years of 1997 through 2010.

ENERGY SALES BY CUSTOMER CLASS (MWH)

	<u>Residential</u>	<u>Commercial</u>	<u>Industrial</u>	<u>Public (Hwy&Lghtng)</u>	<u>Other</u>	<u>Total</u>
1997	98,300	60,500	103,400	600	48,800	311,600
1998	103,762	66,054	99,707	567	31,518	301,608
1999	105,038	65,668	94,450	574	49,904	315,634
2000	121,204	135,056	79,649	3,463	6,926	346,298
2001	125,500	120,011	58,897	0	18,488	322,896
2002	119,233	130,183	55,213	0	44,050	348,679
2003	125,927	143,673	59,299	6	38,723	367,628
2004	125,100	141,176	70,658	0	40,468	377,402
2005	119,799	144,187	72,859	3	25,820	362,668
2006	149,211	168,930	77,567	0	31,652	427,360
2007	141,878	171,421	67,592	0	30,035	410,926
2008	142,485	159,280	70,484	0	29,571	401,820
2009	125,857	129,372	42,334	0	39,862	337,425
2010	131,216	124,387	45,097	0	21,522	322,222
Total by Class	1,734,510	1,759,898	997,206	5,213	457,339	4,954,166
Percentage	35.01%	35.52%	20.13%	0.11%	9.23%	100.00%

Please see **Appendix C** for a graphical illustration of the Project's 2011 number of accounts by customer class.

- **Supply Side Resources**

SCIP has determined that to provide reliable electric power at the lowest practicable cost, consistent with sound business principles, the Project will continue using its long-term entitlements to supply its projected power requirements. The current federal resources and continuation of the Integrated Resource Scheduling procedures, combined with short-term purchase activities, will be sufficient for the Project to meet its monthly power and energy requirements through the short-term planning period. For the long term planning period, supplemental arrangements to meet forecasted loads are anticipated to be needed beginning in calendar year 2015. Detailed below are the Project's current contractual arrangements.

- Parker-Davis Project at Coolidge, Oracle Junction and Lone Butte Substations:
 - Winter Season CROD: 13,047 kW
 - Summer Season CROD: 17,067 kW
 - Annual Firm Energy: 80,946,588 kWh
 - Contract Term: expires September 30, 2028
- Salt Lake City Area/Integrated Project Capacity at Coolidge Substation
 - Winter Season CROD: 1,840 kW
 - Summer Season CROD: 1,366 kW
 - Contract Term: Expires September 30, 2024
 - 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	3,373,246	2,486,780

- Parker-Davis Project Excess Energy at Coolidge, Oracle Junction and Lone Butte Substations:
 - An apportioned amount of Excess energy is irregularly offered to SCIP depending upon Parker and Davis dam operations. All energy is offered under SCIP's Parker-Davis Project transmission capacity entitlement; combined Excess and Firm Parker-Davis Project energy cannot exceed 100% load factor.
 - Expires September 30, 2028
- Barclays Capital Supplemental Power Supply
 - Annual energy 270,400,000 kWh
 - Contract expires December 31, 2014
- Scheduling and resource management agreement (AEPCO)
 - Terminates upon six months' notice
- Arizona Power Authority (Hoover Power) at Coolidge Substation:
 - Hoover B Capacity & Energy: SCIP's allocation has been recaptured by CAWCD.
 - Contract expires September 30, 2017
- **Demand Side Resources**

The Project has several ongoing Demand Side Management ("DSM") activities primarily relating to the improvement of the system reliability and improved loss factors as well as load management and customer education. Although SCIP will continue to seek opportunities to increase system reliability and reduce losses through DSM efforts, SCIP's anticipated resource shortfall beginning in 2015 is of a magnitude that DSM efforts are inadequate to meet the load need.

- **Renewable Resources**

At this time, SCIP is holding preliminary discussions with officials in the Bureau of Indian Affairs to explore options to enable SCIP to work directly with its customers on solar photovoltaic installations. SCIP has seen an increase in interest from its customer base in such installations, and is working towards a mechanism by which it can incentivize or otherwise assist interested customers with their efforts. At this time, however, it is too early to estimate what form SCIP's assistance will take and when it will be implemented.

In 2010, in cooperation with the National Park Service, SCIP installed a solar panel field on its property which was intended to meet a portion of the needs of the Casa Grande Ruins National Monument. Through a bill crediting agreement, the National Park Service receives the benefit of this resource while avoiding the environmental impact of direct installation. The photovoltaic system produces almost half the energy the park uses in a year.

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. Supply side resource options will be considered for both the short-term and also for the long-term. Because the Project already implements numerous system efficiency improvement practices in its operations, and because the Project is restricted to a certain extent by budgetary constraints, opportunities for additional energy savings through DSM are limited. However, the Project will continue to look for other opportunities for energy savings from distribution improvements and evolving distribution technological advances and practices.

Designation of Options

The least cost option for any additional necessary resources is identified from a cost benefit analysis. This information is considered by the Project in combination with other information to select an Action Plan for the Project that conforms to the regulations and guidelines of the Energy Planning and Management Program. The selection of the Project'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 Project's Action Plan is the five-year period from 2012 through 2016.

The Project has determined that to provide reliable electric power at the lowest practicable cost, consistent with sound business principles, it will continue using its Federal Hydro entitlements and current market contracts to supply the Project's projected power requirements. Existing firm contracts and participation in the SLCA/IP Integrated Resource Scheduling program and the Parker-Davis Project annual energy exchanges program should enable SCIP to satisfy the Project's load projections for the upcoming months. Resources produced by the Parker-Davis Project Excess Energy provides a lower cost resource to SCIP's supply mix. However these are offered on a non-regular basis and are not considered "firm" in this resource plan. Additional supplemental power purchases will continue to be made to cover any of SCIP's short-term power deviations. These current entitlements and contracts are sufficient to meet the Project's forecasted loads through 2014.

With the termination of the Barclays contract at the end of 2014, an additional supply must be secured to meet the forecasted loads beyond that point. It is expected that any additional resource needs will be met through purchased power contracts. Conventional generation options are not currently feasible due to multiple drawbacks in the areas of implementation issues, financing cost, energy impacts and environmental impacts. Current hydrology indicates that renewable generation from the Coolidge dam is not a feasible option.

As the contracted resources are anticipated to be insufficient to meet load after 2014, the following actions will be taken to implement the IRP:

Action: SCIP will evaluate the feasibility of extending its present contractual arrangements with Barclays.

Milestone: If negotiations do not produce a satisfactory result within a timeframe agreeable to both parties, SCIP will seek an alternative.

Action: In the event it is infeasible to extend the Barclays contract, SCIP will evaluate other supply side options, such as purchase power contracting, in an effort to secure sufficient resources for the post-2014 forecasted load.

Milestone: A study of purchase power contract options will be performed prior to mid-2014.

- **Validation and Evaluation**

The Project will evaluate and secure sufficient additional supply side options, such as a purchase power contract, in order to meet forecasted loads at the lowest practicable cost, consistent with sound business principles. Securing sufficient purchased power resources is integral to maintaining the rate stability of the Project and necessary to maintain transmission system reliability. SCIP's review of resource options (Barclays or otherwise) will include 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.

- **Conservation Action Plan**

The Project has decided to continue certain conservation activities to promote and maintain the energy efficiency of its distribution facilities and the conservation of electric resources.

Period: Calendar Year 2012 through 2016

Activity:

1. Use of Infrared Heat Detection Equipment
2. SCIP Irrigation Pump Testing
3. Transmission and Distribution Efficiency Improvements
4. Customer Education and Outreach

- **Validation and Evaluation**

USE OF INFRARED HEAT DETECTION EQUIPMENT

Following its success using infrared test equipment on loan from Western through the Arizona Power Authority, SCIP purchased its own infrared heat detection equipment. This test activity has become a very successful ongoing maintenance program for SCIP. The infrared equipment will be used to locate thermal related problems on the power system to improve system reliability and reduce system losses on a regular basis.

SCIP IRRIGATION PUMP TESTING

The Irrigation Division of SCIP began a pump efficiency-testing program in 1990 to improve the operating "Wire-to-Water" efficiencies of SCIP pumps. All of SCIP's pumps are tested on a regular basis and the necessary remedial action started. The remedial actions consist of adjusting the pump impellers, replacing over or undersized motors and rehabilitating worn out pumps. The pumps have

also been fitted with flow meters to monitor their efficiency; when the efficiency drops below a specified level, repairs are made to restore the pump to optimal condition.

TRANSMISSION AND DISTRIBUTION EFFICIENCY IMPROVEMENTS

SCIP traditionally incorporates numerous transmission and distribution improvements into its Budget and System Rehabilitation plan; these plans represent a significant financial commitment and personnel commitment by the Project towards improved efficient use of current resources. These many transmission and distribution efforts can be grouped in three main categories: Substation Upgrades, Substation Maintenance and Transmission/Distribution System Improvements.

Substation Upgrades: SCIP currently has multiple substation improvement activities underway. SCIP is upgrading and replacing many transformers and breakers and is adding new controls and SCADA equipment at its substations. These activities will result in reduced losses and improved reliability. At present, two substations in particular are undergoing extensive modification. To the extent that the new equipment installed is more efficient than the older facilities, the replacements should result in additional energy efficiency and savings.

Substation Maintenance: Tests are performed on a monthly basis on all twenty-nine of SCIP's substations and associated equipment. Any equipment exhibiting marginal or hazardous conditions is scheduled for repair or replacement as deemed necessary. This activity is an ongoing program that has improved system reliability and reduced losses throughout the entire power system.

Transmission/Distribution System Upgrades: SCIP currently has multiple transmission and distribution improvements underway and planned for in the immediate future. These upgrades include reconductoring existing lines, upgrading existing lines to higher rated wires, and feeder improvements and upgrades. All of these activities will result in reduced losses and improved system reliability.

CUSTOMER OUTREACH AND EDUCATION

Over the past several years, SCIP personnel have appeared at public education forums, promoting energy conservation and providing information on solar installations. SCIP has also distributed brochures and flyers to its customers discussing both of these issues. SCIP plans to continue these outreach efforts over the upcoming five-year planning period.

Environmental Effects

The Project is required, to the extent practicable, to minimize adverse environmental effects of new resource acquisitions and document these efforts in the IRP. To the extent the Project utilizes the Integrated Resource Scheduling program to exchange and better utilize the hydro resources of the Project and other similarly situated utilities, such efforts should be environmentally beneficial, as increased utilization would offset thermal generation purchases. In addition, to the extent the Project sponsors conservation activities and informational activities with its customers, and achieves progress in its efforts to support photovoltaic installation, the anticipated effects will be environmentally beneficial and economically sound.

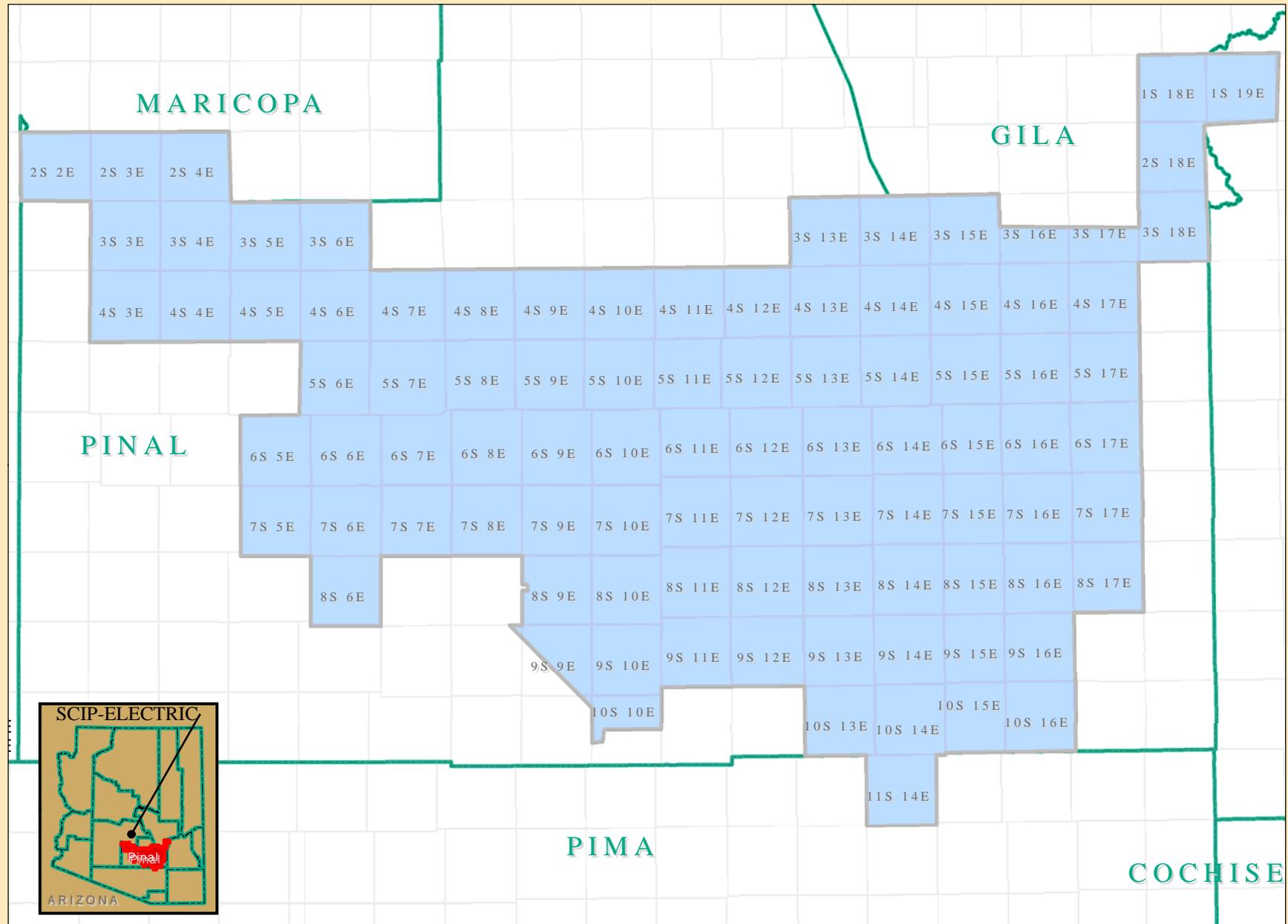
In the acquisition of additional resources to meet post-2014 forecasted loads, conventional and hydro generation options have been considered and are deemed unfeasible at this time in part due to hydrological-based environmental factors. The supply side options to meet post-2014 forecasted loads will take environmental effects into consideration and an attempt to minimize environmental effects will be factored into the options evaluation process.

Public Participation

The Project posted a notice stating that the draft Integrated Resource Plan was available for public review and comment. The notice was posted in the regional office on the public notices board for thirty days. A contact person and contact phone number were listed on the notice to ensure a clear line of communication for public input. See **Appendix D** for a copy of the posted public notice. No public comments were submitted. SCIP's managing Project Engineer has reviewed and concurred on the final SCIP IRP submission.

1 in = 12 miles

APPENDIX A -Project Boundary



Sources: Township Range Section: AZ State land - Atris
District Boundary: ADWR
Not verified by KCSA

krstata2011\IRP\MAP\SCIP Created: 06/03/2011 - Edited: 12/05/2011 by BLS areview 10

San Carlos Irrigation Project

Legend

- Townships
- County Boundary
- Sections
- Project Boundary



0 3.75 7.5 15 Miles

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



SAN CARLOS IRRIGATION PROJECT

ELECTRIC RATE SCHEDULES

Effective March 1, 2006

RATE SCHEDULE NO 1 - RESIDENTIAL

RATE SCHEDULE NO 2 - SMALL COMMERCIAL

RATE SCHEDULE NO 3 - LARGE COMMERCIAL

RATE SCHEDULE NO 4 - INDUSTRIAL

RATE SCHEDULE NO 5 - PROJECT PUMPS

RATE SCHEDULE NO 6 - COMMERCIAL PUMPS

RATE SCHEDULE NO 7 - LIGHTING/SPECIAL

RATE SCHEDULE NO. 1

RESIDENTIAL SERVICE

AVAILABILITY: In all territory served by the San Carlos Irrigation Project (SCIP) at all points where facilities of adequate capacity and the required phase and suitable voltage are adjacent to the premises served.

APPLICATION: This schedule is applicable to all single-phase or three-phase electric service residences. Unless specifically permitted by the contract, use must be limited to the consumer's own premises and power supplied must not be resold. If more than one meter is required by the customer's installation, or for the customer's convenience, bills will be independently calculated for each meter.

MONTHLY RATE: **The monthly billing for this class of service shall consist of a summation of the following costs based on monthly usage.**

MINIMUM BILL: **The minimum bill shall be \$10.00 per month**

- A. Minimum Bill, which includes the first 50 kilowatt-hours.**
- B. 12.0 cents per kilowatt-hour for the next 500 kilowatt-hours.**
- C. 9.0 cents per kilowatt-hour for all additional kilowatt-hours.**

Purchased Power Adjustment: **If determined necessary, pursuant to CFR 25 §175.13, a purchased power adjustment may also be added to each kWh used.**

Approved by : _____
WESTERN REGIONAL DIRECTOR DATE

EFFECTIVE DATE _____

RATE SCHEDULE NO. 2

SMALL COMMERCIAL SERVICE

AVAILABILITY: In all territory served by the San Carlos Irrigation Project (SCIP) at all points where facilities of adequate capacity and the required phase and suitable voltage are adjacent to the premises served.

APPLICATION: To all electric service required when each service is applied at one point of delivery and measured through one meter with a demand reading of less than or equal to 249 kW.

TYPE OF SERVICE: Single or three phase, 60 Hertz, at one standard voltage as may be selected by customer subject to availability at the customer's premise. Three phase service is furnished under the SCIP's standard rules covering line extensions.

MONTHLY RATE: The monthly billing for this class of service shall consist of a summation of the following costs based on monthly usage.

Minimum Bill : \$20.00 per month
Includes the first 50 kWh of energy used in a month

Demand Charge: \$2.00/kW of Billing Demand

Energy Charge: \$0.13/kWh for the next 950 kWh
\$0.080/kWh for the next 9,000 kWh
\$0.060/kWh for all Energy

Purchased Power Adjustment: If determined necessary, pursuant to CFR 25 §175.13, a purchased power adjustment may also be added to each kWh used.

DETERMINATION OF BILLING DEMAND KW

The greater of:

1. The average kW supplied during the 15-minute period (or other period as specified by individual customer's contract) of maximum use during the month, as determined from readings of the Company's meter.
2. The minimum kW specified in the agreement for service or individual customer's contract.

Approved by : _____

WESTERN REGIONAL DIRECTOR DATE

EFFECTIVE DATE _____

RATE SCHEDULE NO. 3

LARGE COMMERCIAL SERVICE

AVAILABILITY: In all territory served by the San Carlos Irrigation Project (SCIP) at all points where facilities of adequate capacity and the required phase and suitable voltage are adjacent to the premises served.

APPLICATION: To all electric service required when each service is applied at one point of delivery and measured through one meter with a demand reading greater than or equal to 250 kW and less than or equal to 999 kW.

TYPE OF SERVICE: Single or three phase, 60 Hertz, at one standard voltage as may be selected by customer subject to availability at the customer's premise. Three phase service is furnished under the SCIP's standard rules covering line extensions.

MONTHLY RATE: **The monthly billing for this class of service shall consist of a summation of the following costs based on monthly usage.**

Minimum Bill : **\$50.00 per month**
Includes the first 500 kWh of energy used in a month

Demand Charge: **\$3.00/kW of Billing Demand**

Energy Charge: **\$0.095/kWh for the next 10,000 kWh**
\$0.065/kWh for all Energy

Purchased Power Adjustment: **If determined necessary, pursuant to CFR 25 §175.13, a purchased power adjustment may also be added to each kWh used.**

DETERMINATION OF BILLING DEMAND KW

The greater of:

3. The average kW supplied during the 15-minute period (or other period as specified by individual customer's contract) of maximum use during the month, as determined from readings of the Company's meter.

4. The minimum kW specified in the agreement for service or individual customer's contract.

Approved by : _____

WESTERN REGIONAL DIRECTOR DATE

EFFECTIVE DATE _____

RATE SCHEDULE NO. 4

INDUSTRIAL SERVICE

AVAILABILITY: In all territory served by the San Carlos Irrigation Project (SCIP) at all points where facilities of adequate capacity and the required phase and suitable voltage are adjacent to the premises served.

APPLICATION: To customers whose monthly maximum demand is 1,000 kW or more for three (3) consecutive months in any continuous twelve (12) month period ending with the current month. Service must be supplied at one point of delivery and Measured through one meter unless otherwise specified by individual customer's contract.

TYPE OF SERVICE: Three phase, 60 Hertz, at SCIP's standard voltages that are available within the vicinity of customer's premises.

MONTHLY RATE: The monthly billing for this class of service shall consist of a summation of the following costs based on monthly usage.

Minimum Bill : \$250.00 per month

Demand Charge: \$7.00/kW of Billing Demand

Energy Charge: \$0.050/kWh for all kWh

Purchased Power Adjustment: If determined necessary, pursuant to CFR 25 §175.13, a purchased power adjustment may also be added to each kWh used.

DETERMINATION OF BILLING DEMAND KW

The greater of:

1. The average kW supplied during the 15-minute period (or other period as specified by individual customer's contract) of maximum use during the month, as determined from readings of the Company's meter.
2. The minimum kW specified in the agreement for service or individual customer's contract.

Approved by : _____

WESTERN REGIONAL DIRECTOR DATE

EFFECTIVE DATE _____

RATE SCHEDULE NO. 5

PROJECT PUMPS

APPLICATION OF SCHEDULE: This schedule is applicable to Pumps owned by the Irrigation Division of San Carlos Irrigation Project (SCIP) for providing pumped water to the irrigation systems of San Carlos Irrigation and Drainage District and the Gila River Indian Community.

MINIMUM TERM The minimum term of the rate will be 12 months

MONTHLY RATE: The monthly rate will consist of the blended cost of power, energy and transmission of the Parker-Davis preference Power Allocation received by the Project and the current proportional average Project Operation, Maintenance and Administrative costs.

This rate is presently: 35.0 mills/kWh

Approved by : _____
WESTERN REGIONAL DIRECTOR DATE

EFFECTIVE DATE _____

RATE SCHEDULE NO. 6

COMMERCIAL PUMPS

APPLICATION OF SCHEDULE: This schedule is applicable to all non-San Carlos Irrigation Project (SCIP) owned irrigation motors with demand meters for the purposes of pumping either surface or deep well water.

TYPE OF SERVICE: Single-phase of three-phase electric service. Unless specifically permitted by contract, use must be limited to the customer's premises and the power supplied must not be resold.

MONTHLY RATE: The monthly billing for this class of service shall consist of a summation of the following costs based on monthly usage.

MONTHLY RATE: Minimum Bill : \$25 per month
 Energy Charge: \$0.039/kWh for all kWh
 Demand Charge: \$2.40/kW of billing demand

Purchased Power Adjustment: If determined necessary, pursuant to CFR 25 §175.13, a purchased power adjustment may also be added to each kWh used.

DETERMINATION OF BILLING DEMAND KW

The greater of:

1. The average kW supplied during the 15-minute period (or other period as specified by individual customer's contract) of maximum use during the month, as determined from readings of the Company's meter.
2. The minimum kW specified in the agreement for service or individual customer's contract.

Approved by : _____
 WESTERN REGIONAL DIRECTOR DATE

EFFECTIVE DATE _____

RATE SCHEDULE NO. 7

STREET AND AREA LIGHTING

APPLICATION: This rate schedule applies to service for yard lighting, lighting streets, alleys, thoroughfares, parks, schoolyards, industrial areas, parking lots, and similar areas where such dusk-to-dawn service is desired. The Project will own and operate lighting systems and provide normal lamp replacements. Other maintenance shall be at customer's expense.

MINIMUM TERM: The minimum term of service contract will be 12 months, payable in advance. The advance payment may be waived in special cases by the Project Engineer. Installation charges, the cost of wood poles or special steel, aluminum, or other supports, special fixtures, and the cost of underground service will be charged as determined by the Project Engineer.

MONTHLY RATE:

	<u>Each First</u>	<u>Each 2 to 5</u>	<u>Each 6 or more</u>
150 Watts (approximately 6,500 lm)	\$17.00	\$15.40	\$13.75
250 Watts (approximately 10,000 lm)	\$20.85	\$19.00	\$16.35
400 Watts (approximately 18,000 lm)	\$27.72	\$24.27	\$20.85

Approved by : _____

WESTERN REGIONAL DIRECTOR DATE

EFFECTIVE DATE _____

NOTICE

Notice is hereby given that the Western Regional Director has approved revisions to each of the San Carlos Irrigation Project Rate Schedules, effective **March 1, 2006** pursuant to Section 175.12, Title 25 of the Code of Federal Regulations. The basis for these Rate Schedules is a detailed cost-of-service and competitive position analysis. These Schedules will affect all existing and future customers of the San Carlos Irrigation Project and will remain in effect until further notice. The Rate Schedules are as follows: **Residential** - \$10 monthly minimum includes first 50 kWh/12.0 cents per kWh for next 500 kWh/9.0 cents per kWh for all additional; **Small Commercial** - \$20 monthly minimum includes first 50 kWh/13.0 cents per kWh for next 950 kWh/8.0 cents per kWh for next 9,000 kWh/6.0 cents per kWh all additional energy/\$2.00 per kW of billing demand; **Large Commercial** - \$50 monthly minimum includes first 500 kWh/9.5 cents per kWh for next 10,000 kWh/6.5 cents all additional energy/\$3.00 per kW of billing demand; **Industrial** - \$250 monthly minimum/5.0 cents per kWh for all energy/\$7.00 per kW of billing demand; **Street & Area Lighting** - 150watt \$17.00 first, \$15.40 next 4, \$13.75 six or more/250watt \$20.85 first, \$19.00 next 4, \$16.35 six or more/400watt \$27.72 first, \$24.27 next 4, \$20.85 six or more; **Commercial Pumps** - - \$25 monthly minimum/3.9 cents per kWh for all energy/\$2.40 per kW of billing demand. Each of these rate schedules will also include a pass through Power Cost Adjustor based on supplemental power cost adjustments.

Approved By : _____
 Western Regional Director
 Bureau of Indian Affairs

Date _____

NOTICE

POWER COST ADJUSTMENT

Pursuant to Section 175.13, Title 25 of the Code of Federal Regulations, notice is hereby given that effective October 15, 2007, the San Carlos Irrigation Project (SCIP) will apply a Purchased Power Cost Adjustment (PCA) of **\$0.0218/kWh** to each kWh used by its customers.

In addition to its hydro contracts for power from the Parker-Davis and SLCA/IP projects, SCIP also receives power from the Salt River Project. The combined effect of the continued drought on the Colorado River, resulting in less low cost hydro power and more SRP supplemental power purchases, will result an estimated under collection of \$6.12 million over the next 7 months (October-April). This PCA is intended to collect these additional costs which have not been included in our base rates.

This PCA will remain in effect until amended by the Area Director. Please contact Mr. Ed Begay at 520-723-6200 or at the San Carlos Irrigation Project, P.O. Box 250, Coolidge, AZ 85228 with any questions.

Approved

by:

Western Regional Director

Date

Effective Date:
October 15, 2007

SAN CARLOS IRRIGATION PROJECT

Demand @ Meters (kW)

Year	October	November	December	January	February	March	April	May	June	July	August	September	Max
2002	55,097	50,842	60,951	59,528	59,451	56,591	58,321	67,405	74,797	75,767	76,110	70,440	76,110
2003	52,523	46,478	55,308	51,791	57,218	50,715	54,485	71,788	77,293	82,417	80,480	75,069	82,417
2004	65,816	54,430	58,307	60,209	61,039	59,058	56,371	66,951	75,238	79,888	78,739	71,760	79,888
2005	58,880	57,960	57,960	57,040	55,200	50,600	51,520	73,600	80,040	71,760	65,320	75,440	80,040
2006	65,136	55,568	61,088	64,001	57,472	54,619	55,897	72,639	92,000	89,332	89,332	77,924	92,000
2007	70,380	56,856	61,732	66,516	60,628	61,456	60,444	69,736	80,408	83,628	84,456	78,384	84,456
2008	65,044	55,752	61,272	64,952	64,860	55,200	60,444	71,208	74,524	76,255	74,787	64,734	76,255
2009	58,919	50,762	47,903	60,784	49,213	42,038	50,669	58,632	68,266	71,826	71,131	59,233	71,826
2010	47,718	38,550	49,243	48,979	48,166	44,484	43,908	49,241	67,108	69,655	70,205	63,307	70,205
2011	55,478	51,871	47,161	51,307	61,415	44,454	48,166	53,249	68,601	67,454	72,777	66,936	72,777

Demand @ Substation (kW)

Year	October	November	December	January	February	March	April	May	June	July	August	September	Max
2002	59,888	55,263	66,251	64,704	64,620	61,512	63,393	73,266	81,301	82,355	82,728	76,565	82,728
2003	57,090	50,520	60,117	56,295	62,194	55,125	59,223	78,031	84,014	89,583	87,478	81,597	89,583
2004	71,539	59,163	63,377	65,445	66,346	64,194	61,273	72,772	81,781	86,835	85,586	78,000	86,835
2005	64,000	63,000	63,000	62,000	60,000	55,000	56,000	80,000	87,000	78,000	71,000	82,000	87,000
2006	70,800	60,400	66,400	69,566	62,470	59,369	60,758	78,955	100,000	97,100	97,100	84,700	100,000
2007	76,500	61,800	67,100	72,300	65,900	66,800	65,700	75,800	87,400	90,900	91,800	85,200	91,800
2008	70,700	60,600	66,600	70,600	70,500	60,000	65,700	77,400	81,004	82,886	81,290	70,363	82,886
2009	64,042	55,176	52,068	66,069	53,493	45,693	55,075	63,730	74,202	78,072	77,317	64,383	78,072
2010	51,867	41,902	53,525	53,238	52,354	48,353	47,726	53,523	72,944	75,712	76,309	68,812	76,309
2011	60,303	56,381	51,262	55,768	66,755	48,320	52,355	57,880	74,566	73,320	79,105	72,756	79,105

Energy @ Meters (kWh)

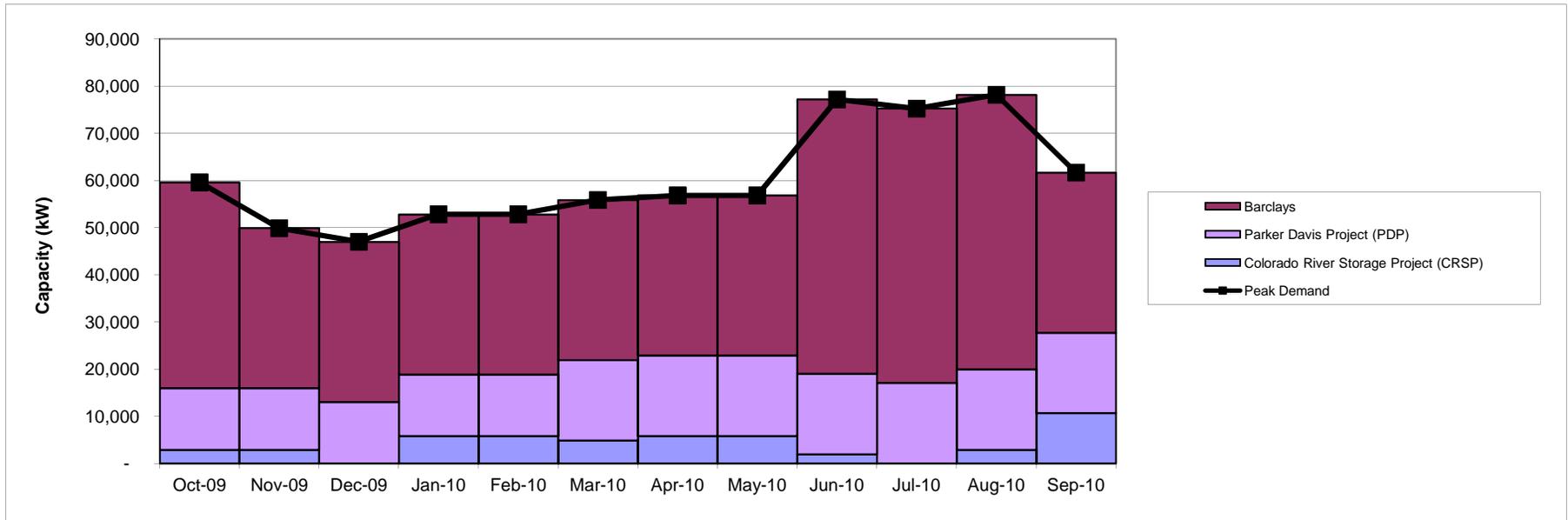
Year	October	November	December	January	February	March	April	May	June	July	August	September	Total
2002	24,693,720	25,760,000	28,199,472	25,474,156	23,697,268	26,960,048	24,046,224	30,260,640	31,435,020	40,320,104	32,042,312	28,914,956	341,803,920
2003	25,771,776	23,441,292	27,799,771	26,067,508	24,131,840	28,161,761	28,208,489	33,486,474	38,415,023	44,345,566	42,139,318	36,569,596	378,538,415
2004	31,450,994	25,600,731	30,021,480	29,824,925	27,323,730	30,169,783	28,254,523	34,412,841	40,362,503	42,525,169	40,008,836	33,960,880	393,916,394
2005	28,554,960	25,853,840	30,068,360	28,364,520	24,724,080	27,399,440	27,681,880	34,227,680	38,865,400	35,967,400	33,425,440	30,930,463	366,063,463
2006	29,615,812	26,536,664	30,686,876	31,202,636	26,691,094	29,702,476	29,162,252	36,864,958	45,541,380	46,515,292	43,271,372	34,391,072	410,181,885
2007	30,657,620	26,475,760	31,758,032	33,036,372	27,039,536	31,058,556	29,580,852	34,992,108	39,337,452	42,732,068	43,756,672	36,947,752	407,372,780
2008	30,914,300	27,742,232	31,224,432	32,413,532	28,944,304	30,319,060	29,684,904	31,138,461	36,356,986	38,374,595	38,148,382	31,410,322	386,671,510
2009	28,344,512	23,354,858	25,580,254	26,729,656	22,028,759	23,469,095	23,801,592	28,891,159	30,394,182	36,526,895	33,994,604	28,066,049	331,181,614
2010	22,276,497	19,652,693	25,781,472	24,072,601	20,975,931	22,346,376	22,459,299	24,290,374	30,503,596	35,708,403	35,222,593	31,260,708	314,550,542
2011	24,461,474	22,114,613	24,224,398	26,262,807	23,503,962	24,309,517	24,662,003	26,516,462	32,706,346	36,063,212	38,398,776	30,588,465	333,812,036

Energy @ Substation (kWh)

Year	October	November	December	January	February	March	April	May	June	July	August	September	Total
2002	26,841,000	28,000,000	30,651,600	27,689,300	25,757,900	29,304,400	26,137,200	32,892,000	34,168,500	43,826,200	34,828,600	31,429,300	371,526,000
2003	28,012,801	25,479,666	30,217,142	28,334,248	26,230,261	30,610,610	30,661,402	36,398,341	41,755,459	48,201,702	45,803,606	39,749,561	411,454,799
2004	34,185,863	27,826,881	32,632,044	32,418,396	29,699,706	32,793,242	30,711,438	37,405,262	43,872,286	46,223,010	43,487,865	36,914,000	428,169,994
2005	31,038,000	28,102,000	32,683,000	30,831,000	26,874,000	29,782,000	30,089,000	37,204,000	42,245,000	39,095,000	36,332,000	33,620,068	397,895,068
2006	32,191,100	28,844,200	33,355,300	33,915,909	29,012,059	32,285,300	31,698,100	40,070,607	49,501,500	50,560,100	47,034,100	37,381,600	445,849,875
2007	33,323,500	28,778,000	34,519,600	35,909,100	29,390,800	33,759,300	32,153,100	38,034,900	42,758,100	46,447,900	47,561,600	40,160,600	442,796,500
2008	33,602,500	30,154,600	33,939,600	35,232,100	31,461,200	32,955,500	32,266,200	33,846,153	39,518,463	41,711,516	41,465,632	34,141,655	420,295,119
2009	30,809,252	25,385,715	27,804,623	29,053,974	23,944,303	25,509,886	25,871,295	31,403,433	33,037,155	39,703,147	36,950,656	30,506,575	359,980,015
2010	24,213,584	21,361,623	28,023,339	26,165,870	22,799,925	24,289,539	24,412,281	26,402,581	33,156,082	38,813,481	38,285,428	33,979,030	341,902,763
2011	26,588,559	24,037,623	26,330,867	28,546,530	25,547,785	26,423,388	26,806,525	28,822,241	35,550,376	39,199,144	41,737,800	33,248,332	362,839,170

SAN CARLOS IRRIGATION PROJECT

SCHEDULED RESOURCES TO COVER TYPICAL PEAK DEMAND



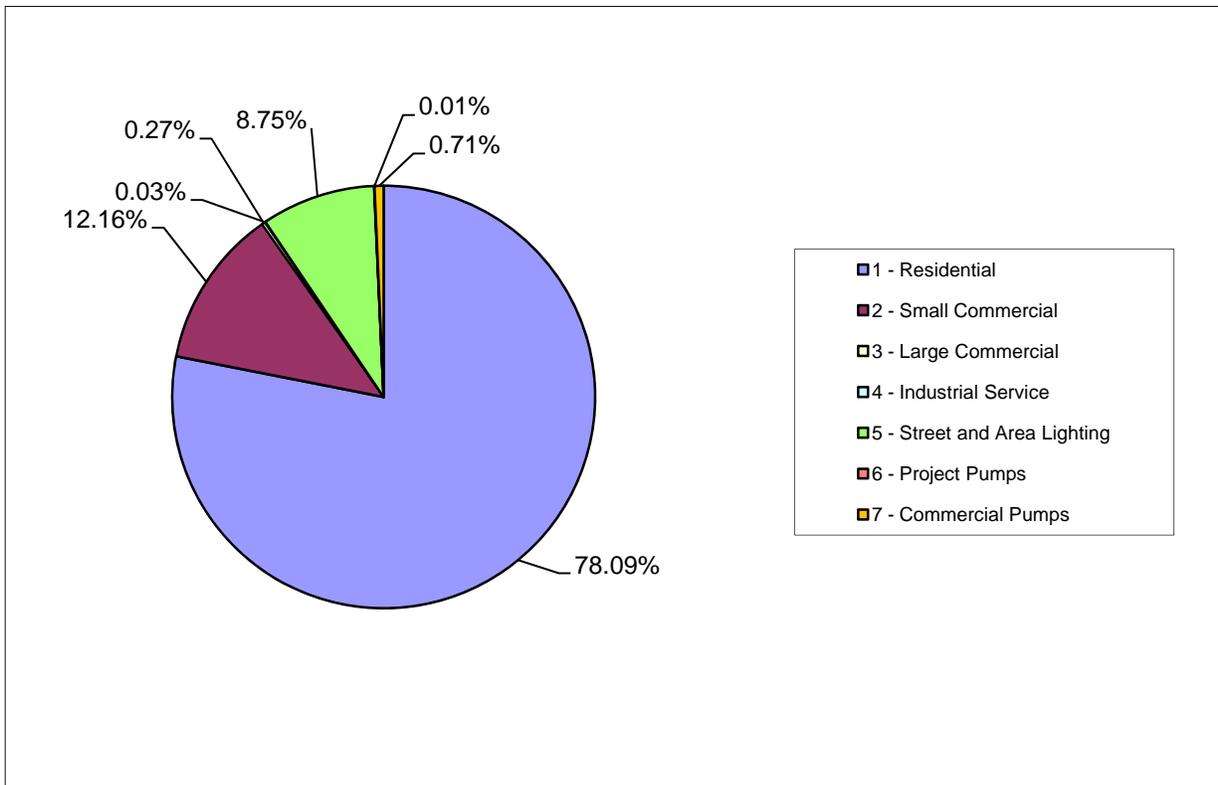
Resources

	<u>Oct-09</u>	<u>Nov-09</u>	<u>Dec-09</u>	<u>Jan-10</u>	<u>Feb-10</u>	<u>Mar-10</u>	<u>Apr-10</u>	<u>May-10</u>	<u>Jun-10</u>	<u>Jul-10</u>	<u>Aug-10</u>	<u>Sep-10</u>
<i>Colorado River Storage Project (CRSP)</i>	2,910	2,910	-	5,820	5,820	4,850	5,820	5,820	1,940	-	2,910	10,670
<i>Parker Davis Project (PDP)</i>	13,047	13,047	13,047	13,047	13,047	17,067	17,067	17,067	17,067	17,067	17,067	17,067
<i>Barclays</i>	43,650	33,950	33,950	33,950	33,950	33,950	33,950	33,950	58,200	58,200	58,200	33,950
Peak Demand	59,607	49,907	46,997	52,817	52,817	55,867	56,837	56,837	77,207	75,267	78,177	61,687

SAN CARLOS IRRIGATION PROJECT

Customer Profile

Customer Type	# of Customers
1 - Residential	12,383
2 - Small Commercial	1,928
3 - Large Commercial	43
4 - Industrial Service	4
5 - Street and Area Lighting	1,387
6 - Project Pumps	1
7 - Commercial Pumps	112
Total	15,858



SAN CARLOS IRRIGATION PROJECT

NOTICE

On or about January 3, 2012, San Carlos Irrigation Project will be submitting an update to its Integrated Resource Plan with the Western Area Power Administration in accordance with the Energy Planning and Management Program requirements. The Integrated Resource Plan details the San Carlos Irrigation Project's general power resource plan for the next five years. A draft Integrated Resource Plan is available to the public and written comments regarding the draft Integrated Resource Plan will be accepted until December 30, 2011. Written comments may be submitted to the attention of Mike Miller, San Carlos Irrigation Project, P. O. Box 250 Coolidge, AZ 85228. Please contact Jennifer Torpey at 480-610-8741 for more information.