

**Via E-mail & USPS**

December 15, 2006

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

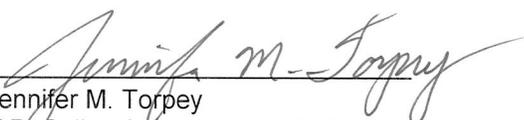
Re: San Carlos Irrigation Project Integrated Resource Plan

Dear Mr. Carlson,

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 second 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: John Li (w/encl.)  
Mike Miller (w/encl.)

**INTEGRATED  
RESOURCE  
PLAN**

**SAN CARLOS IRRIGATION PROJECT  
STATE OF ARIZONA**

**December 5, 2006**

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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 FY2006, the Project served electricity to approximately 14,000 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 130 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 power from the Western Area Power Administration ("Western")(Parker-Davis Firm Electric Service and SLCA/IP power), Salt River Project ("SRP") and other supplemental providers as necessary. SCIP is in SRP's control area 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 Parker-Davis Project 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.

For the near-term, the scheduling and utilization of SCIP's resources are contracted to be managed by SRP. SCIP's short-term purchases and hourly scheduling are managed through this arrangement. The current contracted firm resources and resource management of short-term purchases are expected to be sufficient for the Project through mid-2007. Supplemental resources to meet forecasted loads are anticipated to be needed beginning in calendar year 2007.

## **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

## 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 (Parker-Davis Project Excess Energy Contract)
- Parker-Davis Project Firm Transmission Contract
- 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 FY2006, ten customers accounted for approximately 32% of the Project's total energy sales and are the most susceptible to competition. These ten large customers are detailed in the following table.

<u>Customer Name</u>	<u>Annual kWh</u>	<u>Percentage of Total Project Annual Electric Sales</u>
Alcoa (Pinalco-Chandler, AZ)	60,566,400	14%
Department of Corrections	15,444,000	4%
City of Chandler	10,948,800	3%
Alexco LLC	9,835,200	2%
Kaiser Aluminum	8,150,400	2%
Superlite Block Inc	7,425,600	2%
Alexco	6,364,800	2%
Triumph Precision Casting	6,024,960	1%
CAC Signal Peak Campus	5,414,400	1%
Triumph Termal Processing	4,411,200	1%
* 12 Months Estimated	134,585,760	32%

## Load and Resource Information

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

The Project's annual energy usage from 2001 through 2006 has increased by an average of 3%. Forecasted 2007-2011 loads are based upon an assumption of 3% average annual growth.

Oct-Sep	Winter Demand CP @ Sub (kW)	Summer Demand CP @Sub (kW)	Peak Annual Growth	Energy @Substation (kWh)	Energy @Meters (kWh)	Load Factor
1997	75,400	86,400		364,424,000	335,270,080	48%
1998	81,100	69,600	-6%	358,837,438	330,130,443	47%
1999	58,500	73,800	-9%	371,332,874	341,626,244	57%
2000	62,700	78,600	7%	397,619,130	365,809,600	58%
2001	63,700	79,294	1%	397,022,677	365,260,863	57%
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%
<b>Current Forecast</b>						
2007	85,207	103,984	4%	463,613,000	426,523,960	51%
2008	87,069	107,030	3%	477,193,000	439,017,560	51%
2009	84,707	110,076	3%	490,773,000	451,511,160	51%
2010	86,677	113,122	3%	504,353,000	464,004,760	51%
2011	88,402	116,168	3%	517,933,000	476,498,360	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 2004.

ENERGY SALES BY CUSTOMER CLASS (MWH)

	<u>Residential</u>	<u>Commercial</u>	<u>Industrial</u>	<u>Public (Hwy&amp;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	348,678
2003	125,927	143,673	59,299	6	38,723	367,628
<u>2004</u>	<u>125,100</u>	<u>141,176</u>	<u>70,658</u>	<u>0</u>	<u>40,468</u>	<u>377,403</u>
Total by Class	924,064	862,321	621,273	5,210	278,877	2,691,745
Percentage	34.3%	32.0%	23.1%	0.2%	10.4%	100%

Please see **Appendix C** for a graphical illustration of the Project's 2006 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. As noted in SCIP's previous Integrated Resource Plan ("IRP"), in 2004, the Project's previous contractual arrangements for short-term supplemental resources expired. Due to economic and other considerations (such as the desire for long-term price certainty), it was determined that the most practicable option to replace these arrangements was to negotiate an alternative arrangement with SRP. Beginning in June 2004, the Project began operating under its new Power Services Master Agreement with SRP. Detailed below are the Project's current contractual arrangements. Supplemental arrangements to meet forecasted loads are anticipated to be needed beginning in calendar year 2007.

- Parker-Davis Project at Coolidge, Oracle Junction and Lone Butte Substations: for Operating Years 2007-2008
  - Contract Term: Expires September 30, 2008
  - Winter Season CROD: 13,130 kW
  - Summer Season CROD: 17,185 kW
  - Annual Firm Energy: 81,493,975 kWh

- Parker-Davis Project at Coolidge, Oracle Junction and Lone Butte Substations: Extended Contract for Operating Years 2009-2028
  - Extended Contract Term: starts on October 1, 2008 and expires September 30, 2028
  - Winter Season CROD: 13,047 kW
  - Summer Season CROD: 17,067 kW
  - Annual Firm Energy: 80,946,588 kWh
  
- 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:

Fiscal Year	Winter Season Energy (kWh)	Summer Season Energy (kWh)
FY 2006	3,173,038	2,339,185
FY 2007	3,239,774	2,388,383
FY 2008	3,306,510	2,437,582
FY 2009 - FY 2024	3,373,246	2,486,780

- Power Services Master Agreement with Salt River Project:
  - To the extent SCIP's firm contract power agreements are insufficient to meet hourly load deviation, SCIP has arranged, through SRP, to make short-term supplemental purchases to meet load needs. SRP also provides related scheduling services for all contracted resources.
  - Contract Term: Expires April 30, 2007
  
- 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
  
- 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 street lighting efficiency. SCIP is also exploring the possibility of utilizing its demand meters as the basis of a time-of-use or other similar program, but it is too early to tell if this will be feasible under current circumstances. Although SCIP will continue to seek opportunities to increase system reliability and reduce losses through DSM efforts, SCIP’s anticipated resource shortfall beginning in 2007 is of a magnitude that demand side management efforts are inadequate to meet the load need.

## **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 2007 through 2011.

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 power purchases will continue to be made from time-to-time through the SRP contract 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 mid-2007.

With the termination of the SRP contract in mid-2007, 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 mid-2007, the following actions will be taken to implement the IRP.

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

**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 SRP contract, SCIP will evaluate other supply side options, such as purchase power contracting, in an effort to secure sufficient resources for the post-2007 forecasted load.

**Milestone:** A study of purchase power contract options will be performed prior to mid-2007.

- **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 (SRP 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 2007 through 2011

**Activity:**

1. Use of Infrared Heat Detection Equipment
2. Area Lighting Conservation Program
3. SCIP Irrigation Pump Testing
4. Transmission and Distribution Efficiency Improvements

- **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.

### **AREA LIGHTING CONSERVATION PROGRAM**

SCIP has Dusk-to-Dawn/Street light customers using mercury vapor (MVP) light fixtures under contract. This is in addition to a number of fixtures on SCIP facilities or for SCIP's own use. In order to improve energy and lighting efficiency, as well as meeting the city and county "Dark Sky Ordinances," SCIP will continue the process of replacing all MVP fixtures with High Pressure Sodium fixtures. Each Dusk to Dawn fixture replaced will save 75 watts. Each Street Light

replaced will save 25 watts. As it has been in the past, this activity will be an ongoing program to ensure the savings continue on a yearly 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.

## **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. A partial list of the substations under rehabilitation is as follows: Casa Grande Substation, Coolidge Substation, Dripping Springs Substation, Lone Butte Substation, and Oracle Junction Substation. In addition, SCIP currently anticipates that two existing substations will be replaced within the next several years. 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.

## 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.

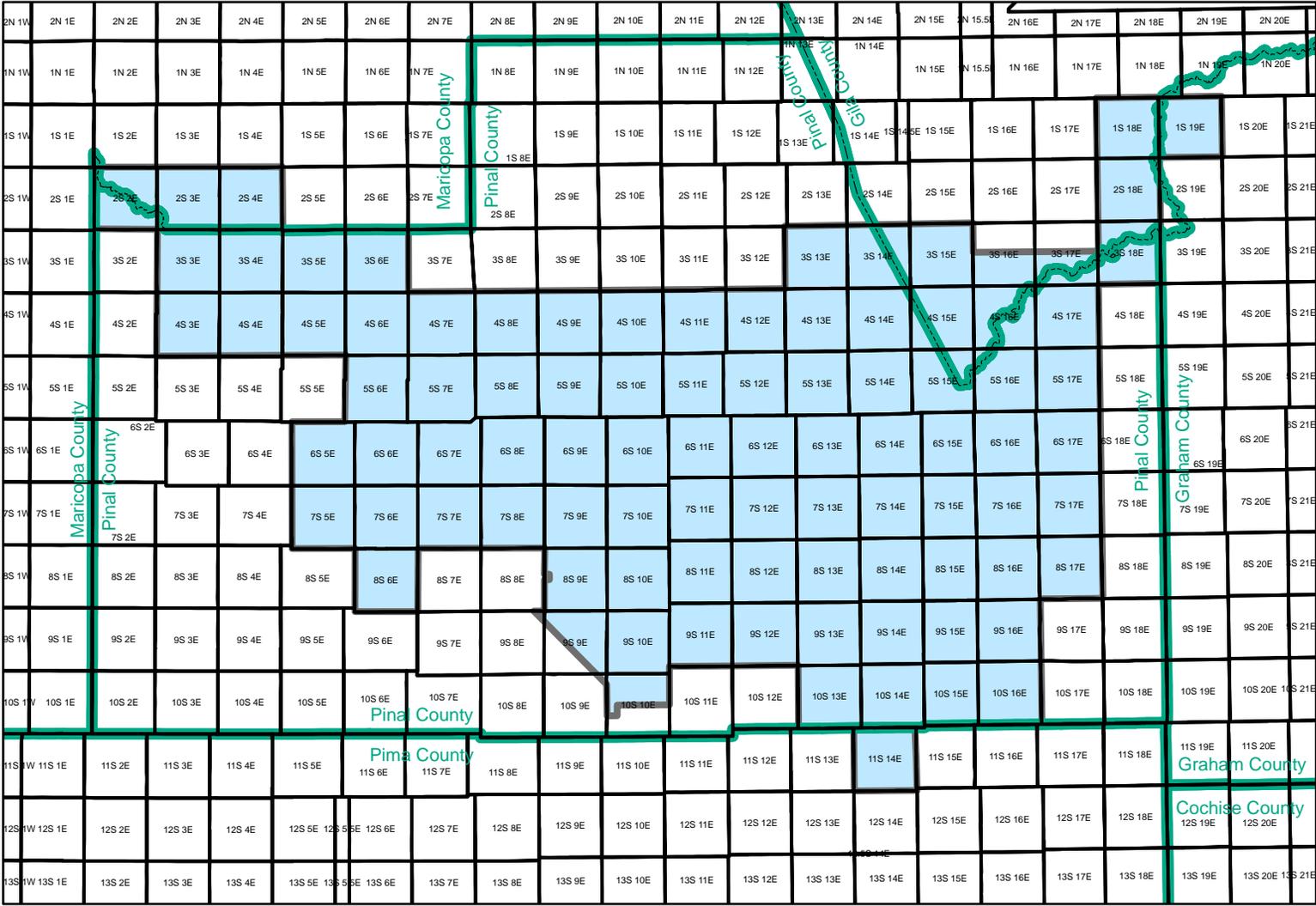
To the extent the Project sponsors conservation activities and informational activities with its customers, the anticipated effects will be environmentally beneficial and economically sound. For example, old mercury vapor lights that are being replaced as a result of SCIP's Area Lighting Conservation program are disposed of in compliance with state and federal regulations.

In the acquisition of additional resources to meet post-2007 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-2007 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. A contact person and contact phone number was 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.) The Project intends to act upon comments and suggestions from its stakeholders to the extent permitted by federal law. SCIP's managing Project Engineer will review and concur on the final SCIP IRP submission.

**APPENDIX A -- Map of Service Territory**



**San Carlos Irrigation Project**



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



8-29-06

# 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.

:

	<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

**SAN CARLOS IRRIGATION PROJECT**

*Demand @ Meters (kW)*

Year	October	November	December	January	February	March	April	May	June	July	August	September	Max
1997	69,368	43,424	54,832	65,412	58,420	52,532	52,716	62,928	65,780	70,380	79,488	56,948	79,488
1998	74,612	48,944	60,076	55,476	50,048	45,080	47,564	52,256	51,520	64,032	63,296	59,340	74,612
1999	46,828	44,620	53,820	52,348	52,256	50,048	47,840	57,040	67,436	67,896	67,436	59,892	67,896
2000	54,372	48,300	53,820	57,684	56,672	49,404	57,684	66,608	68,264	72,312	71,208	64,216	72,312
2001	58,604	51,980	58,420	58,512	55,660	49,128	51,980	63,848	69,411	72,950	67,390	69,821	72,950
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

*Demand @ Substation (kW)*

Year	October	November	December	January	February	March	April	May	June	July	August	September	Max
1997	75,400	47,200	59,600	71,100	63,500	57,100	57,300	68,400	71,500	76,500	86,400	61,900	86,400
1998	81,100	53,200	65,300	60,300	54,400	49,000	51,700	56,800	56,000	69,600	68,800	64,500	81,100
1999	50,900	48,500	58,500	56,900	56,800	54,400	52,000	62,000	73,300	73,800	73,300	65,100	73,800
2000	59,100	52,500	58,500	62,700	61,600	53,700	62,700	72,400	74,200	78,600	77,400	69,800	78,600
2001	63,700	56,500	63,500	63,600	60,500	53,400	56,500	69,400	75,446	79,294	73,250	75,892	79,294
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

*Energy @ Meters (kWh)*

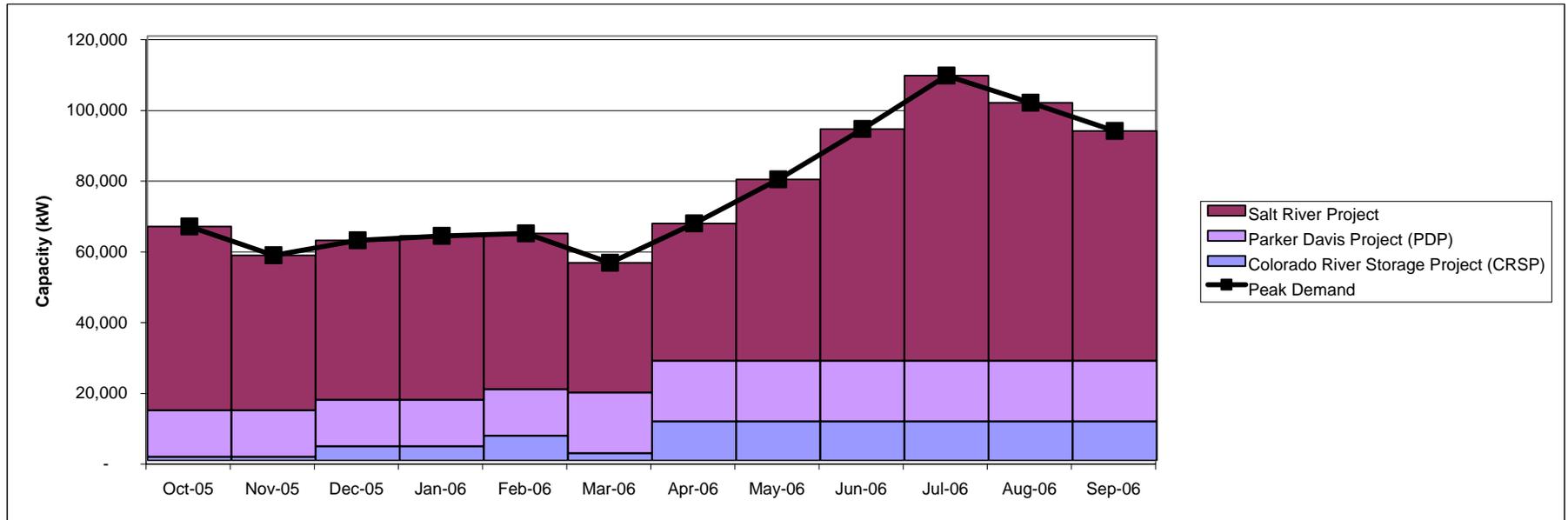
Year	October	November	December	January	February	March	April	May	June	July	August	September	Total
1997	24,773,392	21,543,824	25,212,692	26,259,192	25,205,884	26,379,252	24,668,604	30,256,960	32,929,008	35,378,232	35,013,636	27,649,404	335,270,080
1998	26,619,372	24,293,612	27,602,116	23,787,860	23,787,860	23,699,455	24,676,007	26,617,071	30,273,905	35,168,385	34,203,038	29,401,762	330,130,443
1999	25,135,785	22,599,484	27,078,086	26,254,241	23,167,727	27,260,463	25,130,342	29,533,658	33,986,128	35,490,714	36,606,805	29,382,812	341,626,244
2000	25,889,858	23,277,469	27,890,428	26,843,576	25,219,592	27,350,496	28,390,096	33,332,796	36,541,848	40,320,104	38,552,048	32,201,288	365,809,600
2001	26,102,148	24,909,736	28,862,516	29,394,000	25,209,472	26,702,264	25,641,320	31,968,988	36,459,257	38,660,293	37,870,414	33,480,454	365,260,863
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

*Energy @ Substation (kWh)*

Year	October	November	December	January	February	March	April	May	June	July	August	September	Total
1997	26,927,600	23,417,200	27,405,100	28,542,600	27,397,700	28,673,100	26,813,700	32,888,000	35,792,400	38,454,600	38,058,300	30,053,700	364,424,000
1998	28,934,100	26,406,100	30,002,300	25,856,370	25,856,370	25,760,277	26,821,747	28,931,599	32,906,418	38,226,505	37,177,215	31,958,437	358,837,438
1999	27,321,505	24,564,657	29,432,702	28,537,219	25,182,312	29,630,938	27,315,589	32,101,802	36,941,443	38,576,863	39,790,005	31,937,839	371,332,874
2000	28,141,150	25,301,597	30,315,683	29,177,800	27,412,600	29,728,800	30,858,800	36,231,300	39,719,400	43,826,200	41,904,400	35,001,400	397,619,130
2001	28,371,900	27,075,800	31,372,300	31,950,000	27,401,600	29,024,200	27,871,000	34,748,900	39,629,627	42,022,058	41,163,494	36,391,798	397,022,677
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

**SAN CARLOS IRRIGATION PROJECT**

**SCHEDULED RESOURCES TO COVER TYPICAL PEAK DEMAND**



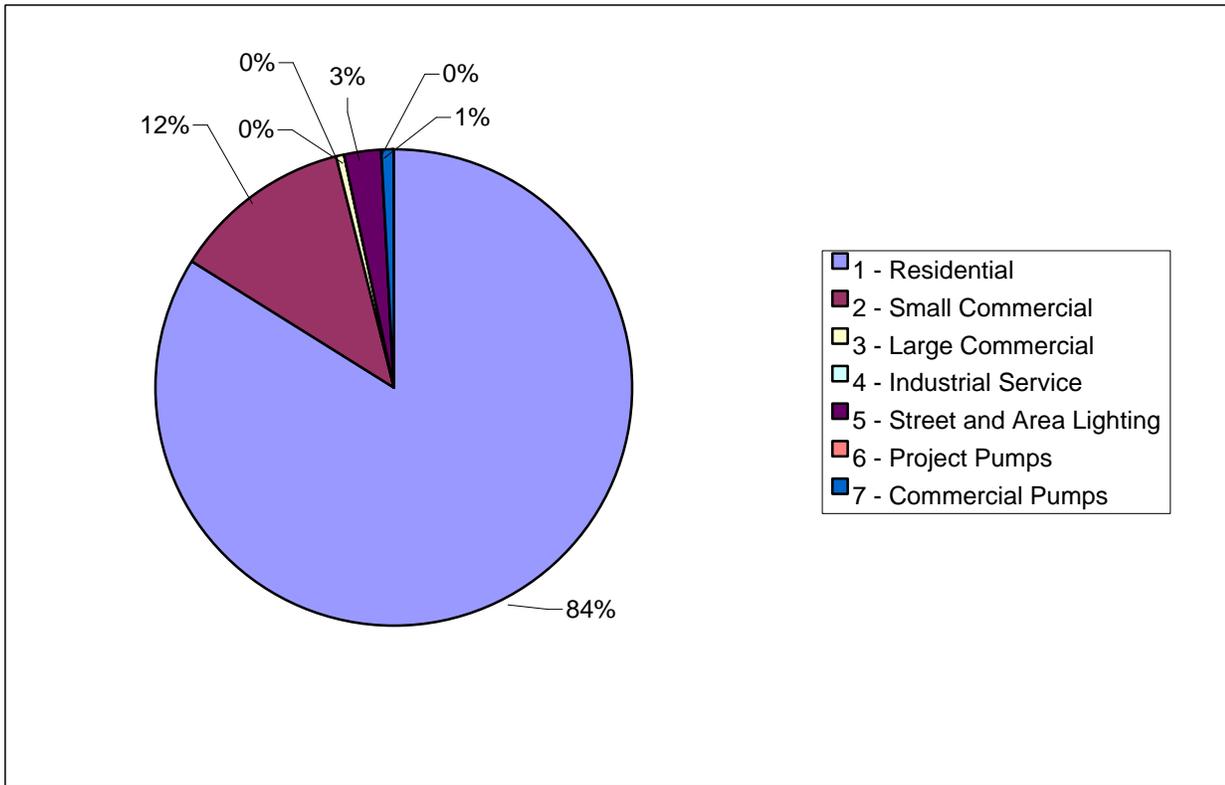
**Resources**

	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06
<i>Colorado River Storage Project (CRSP)</i>	1,000	1,000	4,000	4,000	7,000	2,000	11,000	11,000	11,000	11,000	11,000	11,000
<i>Parker Davis Project (PDP)</i>	13,130	13,130	13,130	13,130	13,130	17,185	17,185	17,185	17,185	17,185	17,185	17,185
<i>Salt River Project</i>	51,990	43,860	45,100	46,340	44,090	36,720	38,800	51,280	65,500	80,650	72,980	64,990
<b>Peak Demand</b>	<b>66,120</b>	<b>57,990</b>	<b>62,230</b>	<b>63,470</b>	<b>64,220</b>	<b>55,905</b>	<b>66,985</b>	<b>79,465</b>	<b>93,685</b>	<b>108,835</b>	<b>101,165</b>	<b>93,175</b>

**SAN CARLOS IRRIGATION PROJECT**

*Customer Profile*

Customer Type	# of Customers
1 - Residential	11,693
2 - Small Commercial	1,726
3 - Large Commercial	59
4 - Industrial Service	3
5 - Street and Area Lighting	360
6 - Project Pumps	1
7 - Commercial Pumps	113
Total	13,955



## **SAN CARLOS IRRIGATION PROJECT**

### **NOTICE**

On or before December 15, 2006, 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 4, 2006. Please contact Mike Miller with any related questions (520-723-6205) and/or written comments (P. O. Box 250 Coolidge, AZ 85228). You may also contact Jennifer Torpey at 480-610-8741 with any questions.