

BUREAU OF INDIAN AFFAIRS

ELECTRIC POWER UTILITIES

TRIBAL RENEWABLE ENERGY BUSINESS DEVELOPMENT AND FINANCING CONFERENCE

AUGUST 24, 2011



BIA ELECTRIC UTILITIES

- COLORADO RIVER**
- MISSION VALLEY POWER (FLATHEAD INDIAN RESERVATION)**
- SAN CARLOS IRRIGATION PROJECT**



Bureau of Indian Affairs Power Projects



Mission Valley Power

Northwest Region

Western Region

Colorado River Power

San Carlos Power

Data Sources
Indian Reservations included in 2005 from USGS maps, US Census, claim reports and records from BIA, USFS, BLM and other sources.
Reservations with Power Project
Reservations without Power Project
Reservations with Power Project

Map Use Comments
The use of this map for engineering work or to legally define reservation boundaries is prohibited.
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Legend

- ★ BIA Regional Office
- Interstate Highway
- Reservations with Power Project
- Reservations without Power Project
- Reservations with Power Project

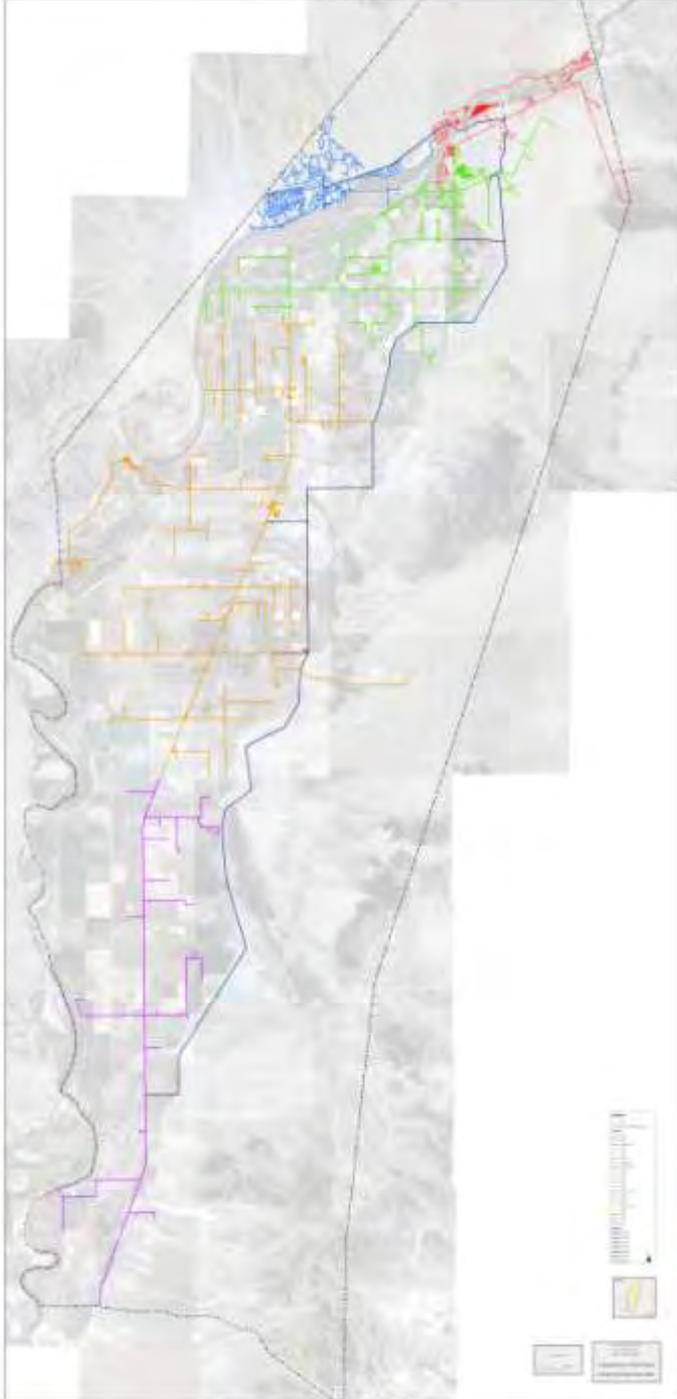
This map is prepared by
Department of the Interior
Bureau of Indian Affairs
Office of Trust Services
Division of Legislation, Power and Safety of Dens
Lafayette, Colorado
May 2009

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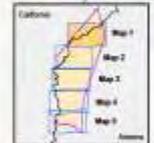
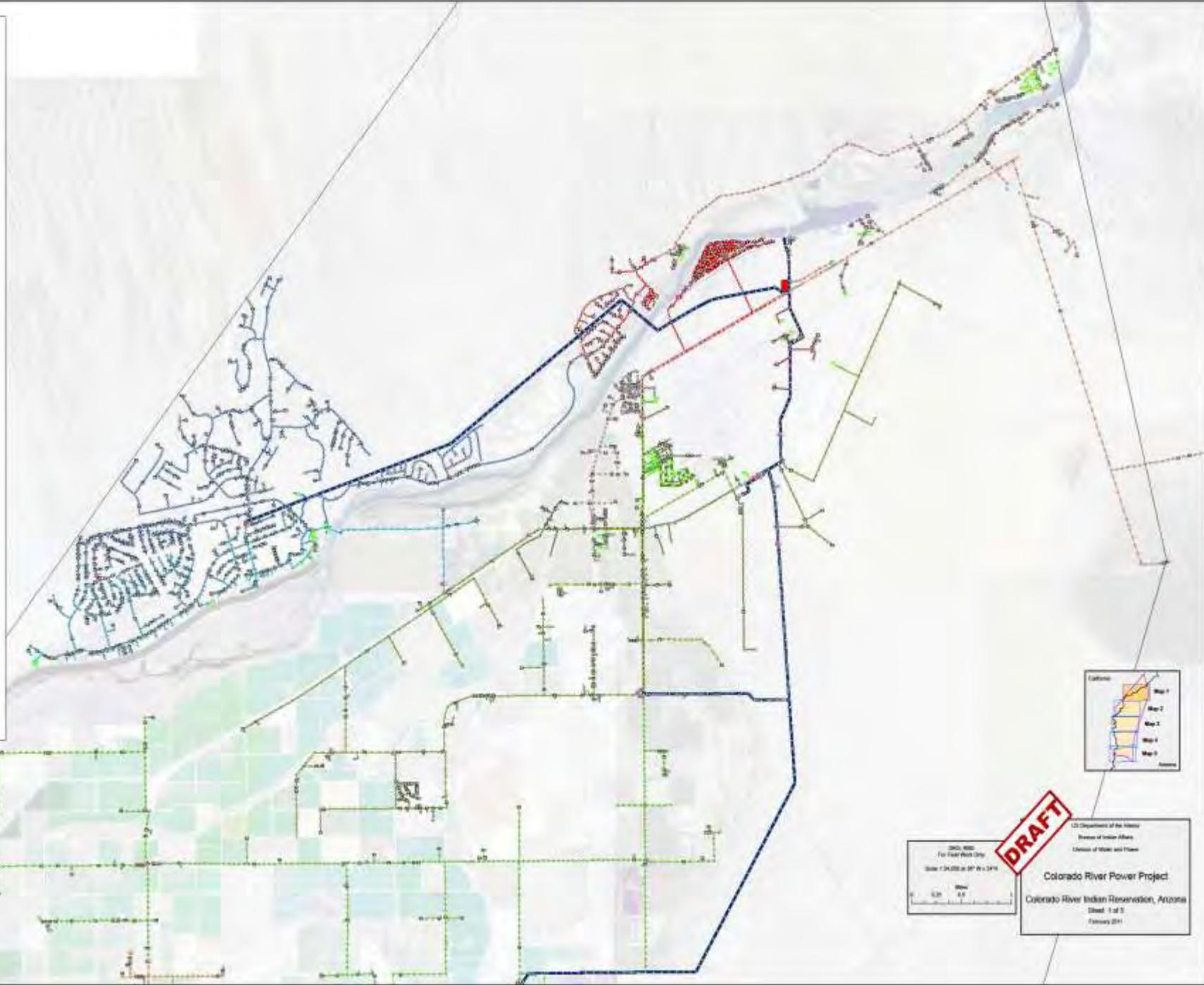
BIA ELECTRIC POWER UTILITIES

- ALL FACILITIES ARE FEDERALLY OWNED**
- RECEIVE NO APPROPRIATED FUNDS**
- FULLY FUNDED BY CUSTOMERS**
- MUST COMPLY WITH FEDERAL REGULATIONS**
- 25 U.S. CODE OF FEDERAL REGULATIONS PART 175-INDIAN ELECTRIC POWER UTILITIES**

COLORADO RIVER



- Legend**
- Pole
 - Guy Pole
 - Transformer on Pole
 - Pad Transformer
- Switches**
- Air - XFF
 - Air - ganged 3phase
 - Fuse
 - Colorado River Boundary
- Circuit**
- 11kV
 - 120kV
 - 120kV/140kV
 - 130kV
 - 140kV
 - 210kV
 - 210kV/140kV
 - 210kV/220kV
 - 220kV
 - 230kV
 - 240kV
 - 310kV
 - 310kV/220kV
 - 320kV
 - 410kV
 - 410kV/300kV
 - 430kV
 - 510kV
 - 610kV
 - 630kV
 - 69
 - 69/110kV
 - 69/120kV
 - 69/130kV
 - 69/210kV
 - 69/230kV
 - 69/310kV
 - 69/410kV
 - 69/510kV
 - 69/610kV
 - Spare Guy
- SubStation**
- Booth
 - Elk River
 - Cochise Can
 - Fish Farms
 - Headgate
 - Headgate Dam
 - Potosi



DRAFT

US Department of the Interior
 Bureau of Indian Affairs
 Division of Water and Power

Colorado River Power Project
 Colorado River Indian Reservation, Arizona
 Sheet 1 of 5
 February 2011

COLORADO RIVER

- BIA OPERATED**
- SERVES THE COLORADO RIVER INDIAN TRIBE RESERVATION**
- STARTED DURING WW II FOR INTERNMENT CAMPS ON THE RESERVATION**
- 4,200 METERS TOTAL, 200 COMMERCIAL, 50 IRRIGATION**
- 7 SUBSTATIONS**
- 331 MILES OF DISTRIBUTION LINE, 46 MILES TRANSMISSION LINE**
- HYDROELECTRIC GENERATION (HEADGATE ROCK DAM) – 19.2 MW**
 - 78,000 MWH GENERATED IN 2010**



COLORADO RIVER (CONT'D)

- **PURCHASED POWER (WAPA)**

- Parker - Davis Project 40,471 MWH

- SLCA (CRSP) 2,379 MWH

- **PEAK LOADS (APPROXIMATE)**

- WINTER: 18.5 MW

- SUMMER 23.2 MW

- **ANNUAL USAGE: APPROXIMATELY 82,000 MWH**

- **34 EMPLOYEES**

- **ANNUAL OPERATING BUDGET: \$6.7 MILLION**

- **POLE REPLACEMENT PROJECT**

COLORADO RIVER (CONT'D)

- **MAJOR OBSTACLES/ISSUES**

- **HIRING**

- **FEDERAL PROCESS**

- **REMOTE LOCATION**

- **FEDERAL PROCUREMENT PROCESS**

MISSION

VALLEY POWER





MISSION VALLEY POWER

- **OPERATED BY TRIBES THROUGH PL 93-638 CONTRACT SINCE 1988**
- **CONSTRUCTION BEGAN IN 1930**
- **SERVES THE SALISH & KOOTENAI TRIBES (FLATHEAD RESERVATION)**
- **18,500 METERS**
 - **12 NET METER ACCOUNTS**
 - **11 SOLAR**
 - **1 WIND**
- **21 SUBSTATIONS**
- **2,175 MILES OF DISTRIBUTION LINE, 147 MILES OF TRANSMISSION LINE**
- **HYDROELECTRIC GENERATION – NOMINAL AMOUNT**
 - **HELLROARING HYDRO : 10,000 MWH (<1%)**

MISSION VALLEY POWER (CONT'D)

- **PURCHASED POWER (BPA)**

- **PP&L: 7,410,000 MWH (78%)**

- **MONTANA (KERR DAM): 1,995,000 MWH (21%)**

- **BOULDER HYDRO: 10,000 MWH (<1%)**

- **PEAK LOADS (APPROXIMATE): 90MW WINTER, 60 MW SUMMER**

- **AVERAGE LOAD: 45 MW**

- **87 EMPLOYEES**

- **TRIBAL UTILITY BOARD: 5 MEMBERS, APPOINTED BY TRIBAL COUNCIL**

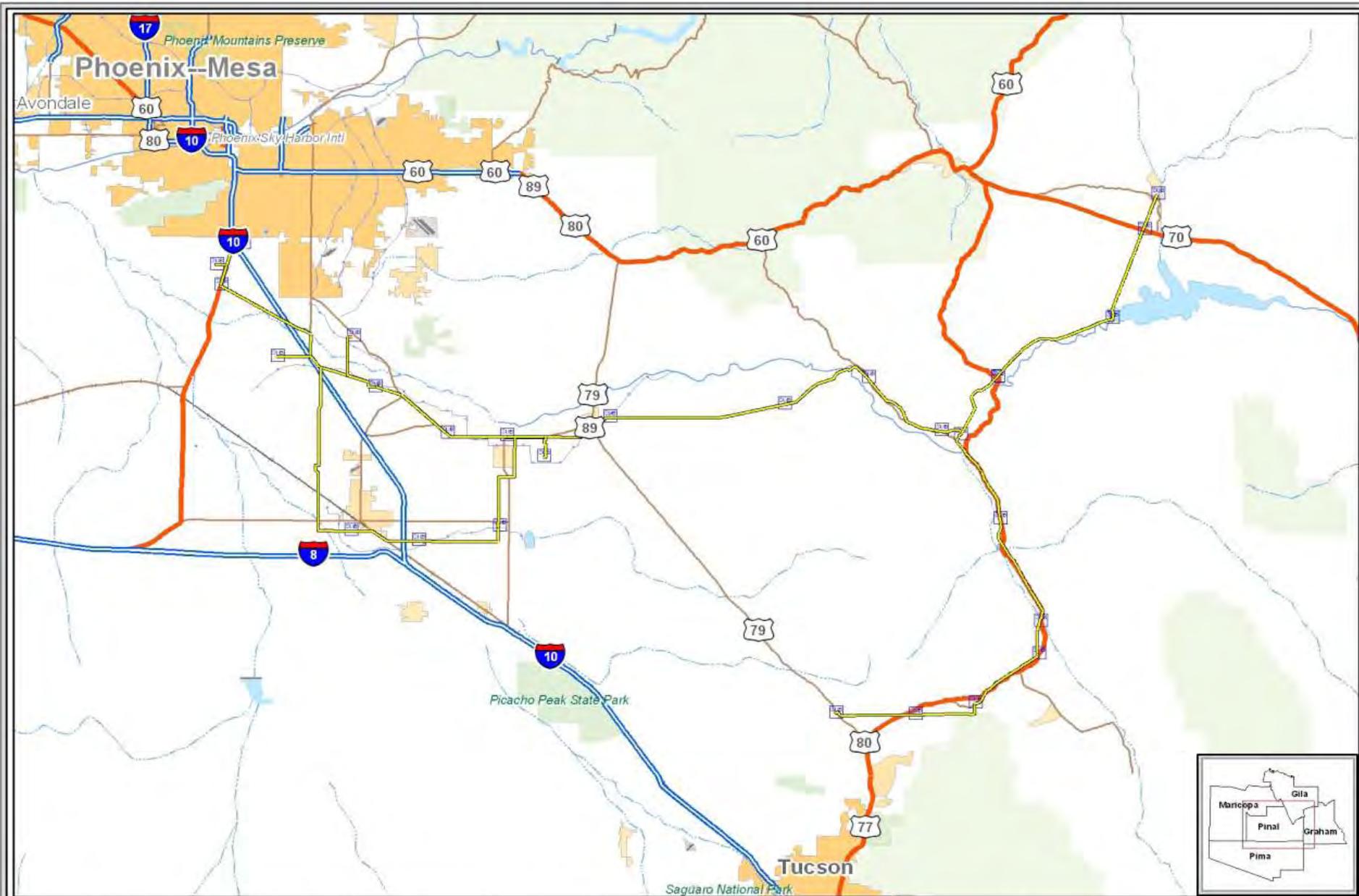
- **CONSUMER COUNCIL: 7 MEMBERS, APPOINTED BY BIA AGENCY SUPERINTENDENT**

- **ANNUAL OPERATING BUDGET: \$22.5 MILLION**

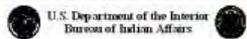
MISSION VALLEY POWER (CONT'D)

- MAJOR OBSTACLES/ISSUES
 - PURCHASE OF ADDITIONAL POWER
 - KERR DAM TAKEOVER

**SAN CARLOS
IRRIGATION
PROJECT**



SCIP System Overview 2011





12.47 kV Primary Distribution System

Coolidge – Florence – Casa Grande

SAN CARLOS IRRIGATION PROJECT

- **BIA OPERATED**

 - **638 CONTRACT WITH TRIBE – GRICUA**

 - **CURRENTLY 1600 CUSTOMERS**

 - **WHEELING AGREEMENT**

 - **LONE BUTTE SUBSTATION**

- **IRRIGATION PROJECT AUTHORIZED IN 1924**

 - **HYDROELECTRIC PLANT AUTHORIZED IN 1928**

- **15,000 (BASE, SUMMER) – 17,000 (WINTER) CUSTOMERS**

 - **13,000 RESIDENTIAL**

 - **2,000 COMMERCIAL**

 - **3 INDUSTRIAL (GREATER THAN 1 MW)**

SAN CARLOS IRRIGATION PROJECT (CONT'D)

- **15,000 (BASE, SUMMER) – 17,000 (WINTER) CUSTOMERS (CONT'D)**
 - **SERVES THE GILA RIVER INDIAN COMMUNITY**
 - **SAN CARLOS RESERVATION**
 - **OFF-RESERVATION (APPROXIMATELY 60%)**
- **30 TRANSMISSION, DISTRIBUTION, AND SWITCHING SUBSTATIONS**
- **265 MILES OF 69 KV TRANSMISSION LINE**
- **1270 MILES OF 12.47 PRIMARY DISTRIBUTION LINE**

SAN CARLOS IRRIGATION PROJECT (CONT'D)

- **430 MILES OF SECONDARY DISTRIBUTION LINE**
- **CURRENTLY NO GENERATION**
- **PEAK LOADS 103 MW SUMMER, 76 MW WINTER (2010)**
- **475,000,000 KWH DELIVERED IN 2010**
- **97 EMPLOYEES**
- **ANNUAL OPERATING BUDGET: \$36.7 MILLION**
- **POTENTIAL USDA LOAN THROUGH RUS**
 - **AUTHORITY: CHANGE REGULATIONS OR LEGISLATION**

SAN CARLOS IRRIGATION PROJECT (CONT'D)

- **NEW BUILDING**

- **GREEN**

- **58 KW SOLAR SYSTEM**

- **FUNDED BY NPS WITH ARA MONEY**



SAN CARLOS IRRIGATION PROJECT (CONT'D)

- **MAJOR OBSTACLES/ISSUES**
 - **DELAPIDATED INFRASTRUCTURE**
 - **FISCAL SITUATION (20% DECLINE IN REVENUE)**
 - **HIRING PROCESS**
 - **PROCUREMENT PROCESS**

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