



2015/16
Annual Report

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SCPPA



TABLE OF CONTENTS

About SCPPA	4
Letter from the President	6
Letter from the Executive Director	8
SCPPA Staff & Officers	10
2015/16 by the Numbers	12
Projects	14
SCPPA Members	28
Legislative Reports	34
Finance	42



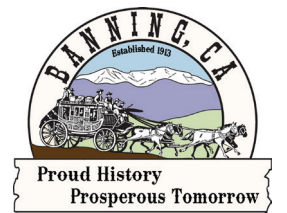
ABOUT SCPPA

SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY (SCPPA or Authority), with headquarters in Glendora, California, is a joint powers agency comprised of eleven municipal utilities and one irrigation district. SCPPA's members consist of the municipal utilities of Anaheim, Azusa, Banning, Burbank, Cerritos, Colton, Glendale, Los Angeles, Pasadena, Riverside, Vernon and the Imperial Irrigation District. Together they deliver electricity to over 2 million customers in the southern California basin, spanning an area of 7,000 square miles, and with a total population that exceeds 5 million. Formed in 1980, SCPPA was created for the purpose of providing joint financing, construction, and operation of transmission and generation projects. Today, SCPPA fulfills a broad range of services for its members by providing effective forums of collaboration through committees such as Customer Service, Finance, Public Benefits, Resource Planning, Transmission and Distribution, Engineering and Operations, Natural Gas, and Renewable Energy Resources.

In order to support its primary purpose, SCPPA is also involved in legislative advocacy, contracting for support services, sharing information, training and regulatory monitoring on behalf of its members.

The Authority currently has thirty-four projects and three transmission projects in operation generating and bringing power from Arizona, California, Nevada, New Mexico, Oregon, Utah, and Washington. In addition, the Authority owns natural gas reserves in Wyoming and Texas.

SCPPA projects have been financed through the issuance of tax-exempt bonds, backed by the combined credit of the SCPPA members participating in each project. As of June 30, 2016, SCPPA has issued \$14.8 billion in bonds, notes, and refunding bonds, of which \$3.1 billion was outstanding.



M I S S I O N

SCPPA provides financing and oversight for large joint projects in the electric utility industry and through coordinated efforts, facilities, implementations, and communicates information relative to issues and projects of mutual interest to its members as determined by the Board of Directors.

SCPPA



SCPPA's twelve members are proud to be public power utilities, customer-based, locally-controlled, and vertically-integrated, who retain the obligation to serve and plan for all the customers in their territories. In these times of change and uncertainty, it is important to realize all the things they are.

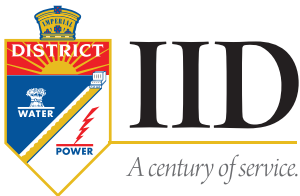


- SCPPA members are non-profit. They are owned by their local customers.



City of Colton
ELECTRIC UTILITY

- They are governed locally, not regulated by the Federal Energy Regulatory Commission or the California Public Utilities Commission.



- They are vertically integrated, responsible for power supply, transmission, distribution, and customer service.



PASADENA
Water&Power

- They are meeting their legally mandated obligation to serve by planning to meet the long-term needs of their customers.



- They are providing aggressive, local demand-side management programs to encourage conservation and energy efficiency.

- They are optimizing their energy supply resources with a mixed portfolio of coal, nuclear, natural gas, hydro, geothermal, wind, landfill gas and solar.

- The twelve SCPPA members, along with their counterparts in the northern part of the state, provide approximately one third of the electricity used in California.

- Finally, they are here to stay. Public power has a history of more than 100 years in Southern California, and it continues to be viable and strong.

SCPPA will provide cost-effective joint action services that supplement member programs and activities, and that secure long-term physical supplies at predictable pricing levels for usage in power generation to assure continued member success.

V I S I O N

LETTER from the President

2016

2016 has been a great year for SCPPA. We have completed a number of significant accomplishments including: The expansion of the SCPPA facility through the acquisition of a neighboring building, which will be used to accommodate our expanded training program; the refunding of three bond issues, which resulted in a Present Value savings of \$26 Million; and the development of an agreement between SCPPA and NCPA to work collaboratively to utilize economies of scale to maximize benefits for both memberships on a variety of projects, products and services.

However, even with all these significant accomplishments, 2016 will be remembered for something else – it is the end of an era. Bill Carnahan, SCPPA’s Executive Director since March 2000, retired at the end of 2016. Bill’s relationship with SCPPA did not begin in 2000. He had served on the Board of

Directors since 1986, representing Riverside Public Utilities.

Bill has had a tremendous impact on SCPPA. Many of the accolades and much of the recognition that we have received over the years is a direct result of his leadership and direction, and we wish him all the best!

Our members will continue to rely on SCPPA to provide the support and representation needed to navigate the rough waters that lie ahead.

Of course, when one Era ends – another Era begins, and Bill has positioned SCPPA well to take on the challenges that are coming our way. The State has continued to raise RPS requirements, which are currently at 50 percent by 2030. In addition, Senate Bill 350 also increased energy efficiency mandates, and Senate Bill 32 is a sweeping climate change bill, which is intended to significantly reduce greenhouse gas emissions. However, one of the biggest challenges facing the SCPPA members is the proliferation of



distributed generation and the impacts it has on system reliability, revenue recovery and cost shifting. Although we must not overlook the continued push by the state of California for grid regionalization as a crucial issue that must be managed as well.

With all these challenges, our members will continue to rely on SCPPA to provide the support and representation needed to navigate the rough waters that lie ahead. However, through membership collaboration with one another as well as various State and Federal regulatory agencies, we can ensure that we will continue to provide safe, reliable and cost effective electricity to the more than 2 Million customers that we serve, for decades to come.



FRED MASON
President

LETTER from the Executive Director

With my pending retirement from SCPPA, this will be my last Annual Report Letter after 15 previous letters. Suffice it to say that I am writing it with mixed emotions. I am sad to be leaving an organization that I have been involved with for 30 years: 14 as a Board Member representing the City of Riverside and the last 16 serving as the Executive Director. But I am excited to be entering a new phase of my life and career. I hope to do consulting upon my retirement to keep in touch with the work I love.

SCPPA is a much different organization than when I started, with the most rapid changes coming since I have been the Executive Director. I believe that SCPPA today is a much stronger “partner” with the members than ever before. In the early years SCPPA was a crucial financial tool with the key function of issuing bonds to finance large-scale generation and transmission projects. Today, while still providing value in the finance area, SCPPA has added renewable project development, program development, training and legislative and regulatory representation to its services menu, to further promote the success of its members.

SCPPA today is a much stronger “partner” with the members than ever before.

SCPPA has nearly 30 projects (and counting) in 8 Western States. These projects range from wind, solar, geothermal, small hydro, landfill gas, and conventional hydro to conventional base load gas-fired generation, gas reserves, and transmission. SCPPA has its own headquarters, and soon-to-be completed training facility as well as an office in Sacramento. Programs include a wide range of energy efficiency programs, such as light bulb replacement, electric vehicle charging stations, and energy storage.

Training has become an integral service provided to SCPPA members. It is much more cost effective to bring the trainers to SCPPA than it is to send the member staff to distant sites for training. Last year, SCPPA provided training opportunities to nearly 750 member staff at a cost savings of nearly three quarters of a million dollars.

Recent history has shown that State and Federal regulators and legislators are becoming increasingly interested in prescribing how our members conduct their business. This interest is not always positive so we must



maintain a strong regulatory presence in both Sacramento and Washington DC. It is critical that these efforts will only grow in the future.

None of the positive changes in SCPPA over the years would have been possible without the support, cooperation and trust of the SCPPA Boards. SCPPA has become a national leader among Joint Action Agencies as a result of the member recognition that working together brings positive results.

Much of the success is attributable to the SCPPA staff. While the staff has grown over the years, outsiders are shocked to find out how small the SCPPA staff is when they see the breadth of the activities, the size of the overall budget (nearly \$750 million), and the fact that the Administrative portion of the budget is less than one half of one percent of the total budget.

I will miss SCPPA, working in the public power community and the SCPPA staff. However, I am leaving confident that SCPPA will continue to grow and find new ways to bring value-added services to the members.

I wish SCPPA all the very best in the future.



BILL CARNAHAN
Executive Director

SCPPA STAFF



BILL CARNAHAN
Executive Director
SCPPA Glendora



TED BEATTY
Director of Resource and
Program Development
SCPPA Glendora



BRYAN COPE
Program Development
Manager
SCPPA Glendora



KEVIN CRAWFORD
Chief Financial Officer
SCPPA Glendora



TANYA DeRIVI
Director of
Government Affairs
SCPPA Sacramento



ROBERT DURAN
Accountant
SCPPA Glendora



KATIE ELLIS
Senior Project Manager
SCPPA Glendora



DANIEL HASHIMI
Senior Assistant
General Counsel
SCPPA Glendora



STEVE HOMER
Director of
Project Administration
SCPPA Glendora



ANASTASIA KOVALCHUK
Administrative Assistant
SCPPA Sacramento



ARPI LEPEDZHIAN
Meeting and Training
Coordinator
SCPPA Glendora



ERIN LEWIS
Records Administrator
SCPPA Glendora



RICHARD MORILLO
General Counsel
SCPPA Glendora



SALPI ORTIZ
Office Manager
SCPPA Glendora



SARAH TAHERI
Energy Analyst
SCPPA Sacramento



**CURRENTLY
VACANT**
Project Development
Manager



**CURRENTLY
VACANT**
Utility Analyst



SCPPA ACCOUNTING GROUP
(from left to right)

- Therese Savery, Manager SCPPA Accounting
- Adrian Chung, Lead Utility Accountant
- Yolanda Pantig, Assistant Accounting Manager
- Atif Haji Datto, Lead Utility Accountant
- Ashanti De La Mesa, Utility Accountant
- Joan Ilagan, Investment Manager
- Grace Elarmo, Utility Accountant
- Jonathan Della, Utility Accountant
- Margarita Estrella, Lead Utility Accountant
- Carolina Parducho, Utility Accountant
- Sharon Moore, Administrative Assistant

SCPPA OFFICERS



FRED MASON
President



**GIRISH
BALACHANDRAN**
Vice President



DAVID WRIGHT
Secretary



BILL CARNAHAN
Treasurer/Auditor and
Assistant Secretary

2015/16 by the Numbers

605

trainees from
member utilities
attended courses
at SCP

9

DC fast chargers
installed under
CEC grant

6

level 2
chargers
installed

1172

Nicole Court
acquired to
provide additional
training space

50

year Hoover
contract
negotiated

1.2

billion dollars
of energy deals
through power
purchase agreements

25

attendees on
SCPPA
State Tour

7

project site
visits

SCPPA

80

grid regionalization
informational meetings
attended in one day

6

percent under
budget for
all projects

200

million dollars
in efficiency
programming

29

operating
projects

3

new projects
brought online



SCPPA PROJECTS

GEOTHERMAL

- 5 Don A Campbell 1 & 2 Geothermal Projects
- 12 Imperial Valley Geothermal
 - Gould 2
 - Heber 1
 - Heber South
 - Ormesa

HYDROPOWER

- 1 Tieton Small Hydro Project
- 9 MWD Small Hydro Projects

LANDFILL GAS

- 7 Chiquita Canyon Landfill Gas
- 10 Puente Hills Landfill Gas

NATURAL GAS RESERVES

- 17 Pinedale Natural Gas Reserves
- 20 Barnett Shale Natural Gas Reserves
- Prepaid Natural Gas Project
(not pictured on map)



SOLAR

- 6 Antelope Valley Projects
 - Antelope Big Sky Ranch Solar Project
 - Antelope DSR 1 & 2 Solar Projects
 - Astoria 2
 - Columbia Two Solar Project
 - Kingbird B Solar Project
 - Springbok 1, 2 and 3 Solar Projects
 - Summer Solar Project
- 15 Copper Mountain Solar 3 Solar Project

TRADITIONAL

- 8 Magnolia Power Plant
- 11 Canyon Power Project
- 14 Hoover Large Hydro Project
- 13 Apex Power Project
- 18 Palo Verde Nuclear Generating Station
- 19 San Juan Unit 3 Generating Station

TRANSMISSION

- Mead-Adelanto
- Mead-Phoenix
- Southern Transmission System

WIND

- 2 Windy Flats Wind Project
- 3 Linden Wind Project
- 4 Pebble Springs Wind Project
- 16 Milford I & II Wind Projects



Don A. Campbell 1 & 2

Burbank and Los Angeles receive up to 25 MWs of geothermal energy from the Don A. Campbell Geothermal Project in Mineral County, Nevada. The commercial operating date was December 31, 2013 but early delivery of energy began in November 2013. LADWP acts as project manager and has balancing authority at the point of delivery of energy at the Mead 230kV Substation in Southern Nevada. Electricity from the project is transmitted through Nevada Energy's transmission system that includes the new 500 kV One Nevada Transmission Line. The facility consists of one Organic Rankine Cycle (ORC) power generating unit with a nameplate capacity of 25 MW. The ORC unit contains a high-pressure and an intermediate-pressure system. The high pressure and intermediate pressure systems consist of a tube and shell vaporizer, a set of preheating heat exchangers, an organic vapor turbine, an air-cooled condenser, and two motive-fluid (condensate) pumps. This fiscal year Don A. Campbell I delivered almost 175,000 MWhs, realizing a 80% net capacity factor.

Los Angeles receives up to 25 MW of geothermal energy from the Don A. Campbell II Geothermal Project in northern Nevada. This facility is adjacent to Don A. Campbell I and is mechanically almost identical. SCPPA entered into a 20 year PPA on December 18, 2014 and commercial operations began on September 17, 2015. This fiscal year Don A. Campbell II delivered over 150,000 MWhs, realizing a 67% annual net capacity factor, with just over 9 months of operations.

Heber 1

Imperial Irrigation District and Los Angeles participate in the Heber 1 Geothermal Project, a 62 MW geothermal project located south of Palm Springs. The facility includes the Heber-1 52 MW gross nameplate dual-flash steam turbo-generator and the 10.5 MW gross nameplate Gould-1 bottoming unit, consisting of three Ormat Energy Converters (OECs). This project has been operating since 1985 and was previously under contract to Southern California Edison. This fiscal year Heber-1 delivered over 175,000 MWhs, realizing a 90% annual net capacity factor in the 6 months it was generating.

Heber South/ Gould 2

SCPPA Members Anaheim, Banning, Glendale, and Pasadena receive up to 14 MWs of geothermal energy from plants in Heber, California, on a long-term purchase contract with Ormat. The participants began receiving energy in June 2006 from an Integrated Two Level Unit consisting of two Ormat turbines powered by geothermal brine, coupled with a water-cooled brush generator. The facility ran well in the 2015-2016 fiscal year, with high availability and delivering over 120,000 MWhs to SCPPA participants.

Ormesa

SCPPA executed a power purchase agreement to receive 35 MW from the Ormesa Geothermal Complex in Imperial Valley. Energy deliveries are anticipated to begin in January 2018. LADWP and Imperial Irrigation District will be the offtakers of this project.



478,588

MWh of Geothermal Energy in FY 15/16



Metropolitan Water District Small Hydro

SCPPA Members Anaheim, Azusa, and Colton receive 17.08 MWs of renewable energy from four small hydroelectric plants on the MWD distribution system, through a purchase contract with MWD. Output is dependent on the water operations of MWD. Transmission is accomplished through the California Independent System Operator, with the city of Anaheim acting as scheduler. The term of the contract is 15 years and 2 months, expiring December 31, 2023. Operations began on November 1, 2008. In this fiscal year the project was impacted by low water flows due to a drought and delivered just under 20,000 MWhs, realizing a 13.4% net capacity factor.

Tieton Small Hydro

Burbank and Glendale receive up to 13.6 MW of power from the Tieton Small Hydro Project, located near Rimrock Lake in Yakima County, approximately 40 miles west of the city of Yakima, Washington. On November 30, 2009, SCPPA acquired the Tieton Hydropower Plant pursuant to an Asset Purchase Agreement, dated as of October 19, 2009. The Tieton Hydropower Project consists of a "run-of-the-reservoir" hydroelectric generation facility, comprised of a powerhouse and a 21-mile 115 kV transmission line. This fiscal year Tieton delivered almost 50,000 MWhs, realizing a 41.5% net capacity factor.

69,075

MWh of Hydro Energy in FY 15/16

Chiquita Landfill

Burbank and Pasadena receive up to 10 MW of energy from the Chiquita Landfill Gas Project in Valencia, California. On March 30, 2004, SCPPA entered into a power purchase agreement with Ameresco Chiquita Energy LLC. The contract is for 100% of the electric generation from a landfill gas to energy facility located at the landfill site. Operations began in November 2010 and will continue for a 20 year term. This fiscal year Chiquita Canyon delivered almost 50,000 MWhs, realizing a 43% net capacity factor.

Puente Hills

Power Purchase Agreements for Puente Hills were signed in 2014 on behalf of Azusa, Banning, Colton, Pasadena and Vernon. This project has a nameplate capacity of 43 MW and SCPPA participants expect to begin receiving energy in 2017.



48,623

MWh of Landfill Gas Energy in FY 15/16

Antelope Big Sky Ranch

Azusa, Pasadena, and Riverside participate in the Antelope Big Sky Ranch Project, a 20 MW solar project located north of Los Angeles. It achieved commercial operation in the first quarter of the 2016-2017 fiscal year.

Antelope DSR 1 and 2

Riverside and Vernon participate in the Antelope DSR 1 Project, a 50 MW solar project located north of Los Angeles. It will achieve commercial operation in the second quarter of the 2016-2017 fiscal year.

Azusa and Colton participate in the Antelope DSR 2 Project, a 5 MW solar project located north of Los Angeles. It will achieve commercial operation in the second quarter of the 2016-2017 fiscal year.

Astoria 2

Azusa, Banning, Colton, and Vernon participate in the Astoria 2 Project, a 35 MW solar project located north of Los Angeles. After 2021 the contracted capacity increases to 45 MWs. SCPPA partnered with several non-member public utilities to make this project happen. It is located in Kern County, CA. It will achieve commercial operation in the second quarter of 2016-2017 fiscal year.

Columbia Two

Azusa, Pasadena, and Riverside participate in the Columbia Two Solar Project, a 15 MW solar project located north of Los Angeles. On September 19th, 2013 SCPPA entered into an agreement with RE Current Energy for the output of the Columbia Two solar farm in Kern County, CA. The project LLC was subsequently sold to Dominion. The commercial operation date was December 19, 2014 for this single access tracking system. This fiscal year Columbia Two delivered over 44,000 MWhs, realizing a 34% annual net capacity factor.



Copper Mountain Solar 3

Burbank and Los Angeles participate in the Copper Mountain 3 Solar Project, a 250 MW solar project located southeast of Las Vegas. The facility achieved full commercial operation date on April 9, 2015. The contract term is 20 years from COD. The project is near Boulder City, NV on 1,375 acres in Clark County. It is the third phase of a much larger project. It is a fixed tilt PV system. The project interconnects at Marketplace substation. This fiscal year Copper Mountain 3 delivered over 600,000 MWhs, realizing a 28% annual net capacity factor.

Kingbird B

Azusa, Colton, and Riverside participate in the Kingbird B Solar Project, a 20 MW solar project located north of Los Angeles. The facility achieved commercial operations on April 30th, 2016. The project is a single access tracking system and SCPPA's first thin film project. This fiscal year Kingbird B delivered over 23,000 MWhs, realizing a 39% annual net capacity factor in the 4.5 months it was generating.

Summer Solar

Azusa, Pasadena, and Riverside participate in the Summer Solar Project, a 20 MW solar facility located north of Los Angeles. SCPPA entered into a power purchase agreement with sPower (Sustainable Power Group) for solar photovoltaic generating capacity for a term of 25 years beginning January 1, 2017. The facility is located in Lancaster, California, in the County of Los Angeles and was commercial in July 2016.

Springbok 1, 2 and 3

Los Angeles participates in the Springbok1 Project, a 105 MW solar project located north of Los Angeles. The generating facility is located approximately 4 miles north of California City and one mile southwest of the unincorporated town of Cantil. The commercial operation date was July 11, 2016, and is contracted for a 25 year term.

Los Angeles participates in the Springbok2 Project, a 150 MW solar project located north of Los Angeles, adjacent to Springbok 1. It achieved commercial operation in the first quarter of the 2016-2017 fiscal year.

Contracts for Springbok 3 were executed with 8minutenergy in April 2016. Expected commercial operation date for this project is early 2018.



669,896

MWh of Solar Energy in FY 15/16

Linden

Los Angeles participates in the Linden Wind Project, a 50 MW wind farm in Klickitat County, Washington. On September 15, 2010, SCPPA acquired the Linden Wind Energy Project pursuant to the terms of the Asset Purchase Agreement, dated as of June 23, 2009. The Project is comprised of 25 Senvion MM92/2050 2.05MW wind turbines near the city of Goldendale. It was developed and constructed by Northwest Wind Partners, LLC. The Facility achieved commercial operation on June 30, 2010. This fiscal year Linden delivered over 145,000 MWhs, realizing a 33% net capacity factor.

Milford I

Los Angeles, Burbank, and Pasadena participate in the Milford I Wind Project, a 203.5 MW wind farm in Milford, Utah. On February 9, 2010, SCPPA financed the prepayment of a specified supply of electricity from the wind farm comprised of 58 Clipper Liberty C100 2.5 MW and 39 GE 1.5sle 1.5 MW turbines. The Facility commenced commercial operation on November 16, 2009. In 2014 SunEdison acquired First Wind and all its assets. SunEdison is the current owner-operator of both Milford plants. This fiscal year Milford I delivered almost 400,000 MWhs, realizing a 22% net capacity factor.



Milford II

Los Angeles participates in the 102 MW expansion of the Milford Wind Farm in Milford, Utah. On August 25, 2011, SCPPA prepaid for a guaranteed supply of energy from the Milford Wind Corridor Phase II Project (the Milford II Project), for a delivery term of 20 years pursuant to a Power Purchase Agreement dated March 1, 2010. The Milford II Project achieved commercial operation on May 2, 2011 and is comprised of 68 GE 1.5sle 1.5 MW turbines. This fiscal year Milford II delivered almost 200,000 MWhs, realizing a 22% net capacity factor.



Pebble Springs

Los Angeles, Glendale, and Burbank participate in the Pebble Springs Wind Project, receiving 98.7 MW of wind power from Oregon. SCPPA entered into an 18 year term power purchase agreement in 2007 and the project began operations in 2009. This fiscal year Pebble Springs delivered almost 210,000 MWhs, realizing a 24% net capacity factor.

Windy Flats

Los Angeles receives up to 262 MW from the Windy Flats Wind Project, in Klickitat County, Washington. On September 9, 2010, SCPPA financed the purchase of a guaranteed amount of prepaid energy from the Windy Flats Project for an initial delivery term of 20 years, pursuant to the terms of a power purchase agreement, dated June 24, 2009. The project is comprised of 114 Siemens SWT 2.3 MW turbines. This fiscal year Windy Flats delivered over 675,000 MWhs, realizing a 30% net capacity factor.

1.59 Million

MWh of Wind Energy in FY 15/16

Palo Verde

Palo Verde enjoys continued good relations with the Nuclear Regulatory Commission, and excellent ratings from the NRC and INPO. In calendar 2015, Palo Verde achieved its 24th consecutive year as the nation's largest power producer.

2015-2016 Operations

	Generation (Millions of MWhs)	Capacity Utilization (%)
Unit 1	10.3	89.6%
Unit 2	10.4	90.5%
Unit 3	11.6	100.8%
Aggregate	32.3	93.6%



Apex

Los Angeles is the sole Participant of the Apex Power Project, a 531 MW natural gas fired generation station located north of Las Vegas. On March 26, 2014, SCPPA acquired the Apex Power Project from LS Power pursuant to an Asset Purchase Agreement, dated as of October 17, 2013. The Facility commenced full commercial operation in May of 2003. The project, located in Clark County, Nevada, consists of a natural gas-fired, combined cycle generating facility. This fiscal year Apex delivered almost 3.5 million MWhs, realizing a 75% annual net capacity factor.

Canyon

Anaheim is the sole Participant and Operator of the Canyon Power Project, a simple cycle natural gas-fired power generating plant, comprised of four General Electric LM 6000 PC Sprint combustion turbines with a combined nominally rated net base capacity of 200 MW, and auxiliary facilities, located in an industrial area of the city of Anaheim. The Project is designed to meet best available control technology/lowest achievable emission rate requirements as required by the South Coast Air Quality Management District. Substantial completion of the Project occurred in the second half of 2011. The Project reached commercial operation on September 15, 2011. Units 3 and 4 of the Project are expected to act primarily as standby reserves. This fiscal year Canyon delivered over 80,000 MWhs, realizing a 5% net capacity factor.

Magnolia

The Magnolia Power Project is a 240 megawatt natural gas-fired, combined cycle plant, located on the site of an existing plant in the City of Burbank. The plant reached commercial operation in September, 2005, and is the first project to be wholly-owned and operated by SCPPA members. The participants are Anaheim, Burbank, Cerritos, Colton, Glendale, and Pasadena.



Hoover Uprating

The Hoover Uprating Project continues to provide six SCPPA members with low-cost, renewable energy (hydro). A SCPPA representative is active in the implementation of the Lower Colorado River Multi-Species Conservation Program.

SCPPA and the other Hoover Contractors worked together to propose legislation to extend the availability of Hoover power 50 years beyond the contracts' expiration in 2017. The Hoover Power Allocation Act of 2011 was signed into law on December 21, 2011. New contracts were negotiated and will become effective October 1, 2017.

San Juan

Five SCPPA participants own 41.8% of Unit 3 at the San Juan Generating Station, a coal-fired plant in New Mexico.

Although San Juan currently meets all environmental standards, the plant was ordered by the EPA to install selective catalytic reduction technology to further reduce NOX emissions, which are a component of regional haze. A state plan to install less expensive selective non-catalytic reduction on two units and close the remaining two units (including Unit 3) was approved. Unit 3 will close at the end of 2017. Trust funds to address mine reclamation and plant decommissioning will be fully funded by the time of closure.

7.55 Million

MWh of Traditional Energy in FY 15/16

Natural Gas Reserves

SCPPA negotiated its first purchase of gas in the ground, with the deal closing July 1, 2005. SCPPA members Los Angeles, Anaheim, Burbank, Colton, Glendale, and Pasadena joined together with the Turlock Irrigation District* to purchase shares of existing natural gas wells in the Pinedale area of Wyoming. This purchase, along with similar future purchases, will provide a secure source of gas for the participants, and hedge against volatile prices in the market.

In 2006, SCPPA members purchased a share of natural gas leases in the Barnett Shale area of Texas.

In 2007 SCPPA financed a one-time prepayment acquire the right to receive approximately 135 billion cubic feet of future natural gas deliveries from J. Aron & Company (now Goldman Sachs) over a 30-year term. This deal isn't tied to a specific physical asset but provides a valuable hedge against volatility and rising prices to the project participants.

* Los Angeles and Turlock hold their interests individually. Anaheim, Burbank, Colton, Glendale, and Pasadena have ownership through SCPPA. Los Angeles serves as Project Manager for the overall project, and SCPPA provides services for Los Angeles and Turlock under agency agreements.



	Pinedale	Barnett
Anaheim	5.3%	25.25%
Burbank	2.1	15.15
Colton	1.1	5.05
Glendale	4.2	0
Pasadena	2.2	10.10
Los Angeles	74.5	0
Turlock	10.6	44.44

8.3 Million

MMBTUs of Delivered Natural Gas in FY 15/16

Mead Phoenix and Mead Adelanto Transmission

The two 500-kV transmission lines, which connect Phoenix to Las Vegas, and Las Vegas to Southern California, completed their twentieth year of dependable operation for the nine SCPPA members who participate in the projects.

In 2016 SCPPA purchased the interest in both projects owned by M-S-R Public Power Agency. These two new interests are treated as separate SCPPA projects, with Los Angeles as the sole participant.



Southern Transmission System

As usual, the STS operated with near-perfect availability (98.14%), delivering over 11 million MWhs to the six SCPPA members who are participants. The power comes 488 miles from the Intermountain Power Project, in Utah, over the + 500-kv DC line. The participants funded the STS Upgrade Project, which increased the capacity of the line by 480 MW. The new capacity is being used to bring power from renewable resources to southern California.

946

Miles of Transmission Lines

SCPPA MEMBER UTILITIES



PUBLIC UTILITIES
ANAHEIM.NET/UTILITIES



DUKKU LEE
General Manager

Customers – Retail	117,578
Power Generated and Purchased (in MWh)	
Self-Generated	317,910
Purchased	3,044,250
Total	3,362,160
Total Revenues (000s)	\$428,485
Operating Costs (000s)	\$366,938

*Unaudited Fiscal Year End June 30, 2016 information

ANAHEIM

Anaheim Public Utilities (APU) began operations in 1894 as the first municipal electric utility in Southern California, and is Orange County’s only publicly owned water and electric utility today. APU provides affordable and reliable water and power to more than 351,000 residents across a city that spans 50 square miles, boasting a thriving business community with world-class sports and entertainment venues.

Anaheim’s electric system supports a diverse customer base, and has a historic peak demand of 593 megawatts. Distinguishing features include commissioning the nation’s first underground substation in 2006, and undergrounding approximately 120 circuit miles as part of an aggressive underground conversion program.



**Proud History
Prosperous Tomorrow**



FRED MASON
Electric Utility Director

Customers – Retail	12,000
Power Generated and Purchased (in MWh)	
Self-Generated	0
Purchased	143,121
Total	143,121
Total Revenues (000s)	\$29,456
Operating Costs (000s)	\$28,923

*Unaudited Fiscal Year End June 30, 2016 information

BANNING

The City of Banning Electric Utility provides electric service to approximately 12,000 accounts covering an area of approximately 22 square miles. Originally established in 1913 as a private utility, the City of Banning purchased the Utility in 1922 and has been providing quality electric service to its residents since that time. Banning’s energy resource base includes portions of coal, nuclear, and hydro generating plants, that provide the majority of electricity required to meet its summer peak demand of 48 MW. The City supports clean-energy, and is committed to adding additional renewable energy resources to its already diverse portfolio. The Utility met the renewable energy requirement of Compliance Period #1 through energy produced from two geothermal generating facilities located in the Imperial Valley. In addition, the Utility has entered into two Power Sales Agreements for energy from Solar and Landfill Gas facilities, which will put the Utility at 77 percent renewable by 2018, far exceeding the current State mandate of 50 percent by 2030. The Utility is dedicated to continue providing quality service to its customers in a safe and reliable manner, at reasonable rates.

AZUSA

Azusa's electric utility was established in 1904 after the City purchased a private power company. Its water utility was established in 1900. The City operates these two utilities through the Azusa Light & Water (ALW) brand. Both utilities provide service within the City of Azusa and the water utility also serves portions of Covina, Glendora, Irwindale, West Covina, and Los Angeles county unincorporated areas. ALW's water and electric utilities are each responsible for resource planning and delivery to retail customers through the City owned, operated and maintained distribution systems.

ALW's electric utility operates within the California ISO Balancing Authority acting as a Utility Distribution Company (UDC) and a Participation Transmission Owner (PTO). The electric utility currently receives power from 11 renewable resource projects and 4 conventional power resources, with total power production capability of up to approximately 300,000 MWh/year. Azusa's utilities are fully compliant with all state and federal laws. The electric utility is on track to meet the 33% renewable power content in 2020 with estimated 2016 deliveries to exceed 25%. Azusa is compliant with AB32 (Global Warming Solutions Act) through its participation in the State's cap-and-trade program.



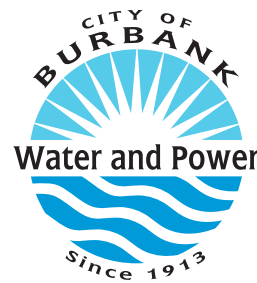
GEORGE MORROW
Director of Utilities

Customers – Retail	16,740
Power Generated and Purchased (in MWh)	
Self-Generated	0
Purchased	286,604
Total	286,604
Total Revenues (000s)	\$43,010
Operating Costs (000s)	\$41,306

*Unaudited Fiscal Year End June 30, 2016 information

BURBANK

For over 100 years Burbank Water and Power (BWP) has provided the City of Burbank with safe, reliable, and affordable electric services; and BWP continues to provide exceptional service at competitive rates to residents, businesses, and the community every day. Keeping a keen eye on innovative technologies and sustainability efforts, BWP constantly looks to find more sustainable ways to do business, lower dependence on fossil fuels, and develop clean and renewable energy sources. BWP now has installed 27 electric vehicle charging stations throughout Burbank and has launched a free citywide wireless community broadband service. During FY 2014-15, Burbank's electric service was available to the average customer an exceptional 99.999% of the time. BWP is committed to continuous improvement that will facilitate serving Burbank customers with competitive rates and providing reliability that is amongst the best in the nation.



Always There for You!



JORGE SOMAONO
General Manager

Customers – Retail	55,301
Retail Sales in MWh	1,108,597
Power Generated and Purchased (in MWh)	
Self-Generated	8,500
Purchased	1,157,500
Total	1,166,000
Total Revenues (000s)	\$184,535
Operating Costs (000s)	\$158,480

*Unaudited Fiscal Year End June 30, 2016 information

SCPPA MEMBER UTILITIES



ART GALLUCI
City Manager

CERRITOS

The City of Cerritos became a member of SCPPA in 2003. Since 2005, the City of Cerritos has been serving the electrical demands of the City's business community. Over the years, the City's customer base has steadily increased and the utility currently serves 318 accounts. The utility serves educational institutions and major retail businesses in the City with the primary goal of providing an economical and reliable supply of electricity. Cerritos continues to receive power primarily from the Magnolia Power Plant. However, with increasing customer load and demand, the City has applied for and received a small allocation of hydroelectric power from the Western Area Power Administration. This hydroelectric power generated by the Boulder Canyon Power project will become available to Cerritos starting in the summer of 2017.

Customers – Retail	328
Power Generated and Purchased (in MWh)	
Self-Generated	75,868
Purchased	14,320
Total	90,188
Total Revenues (000s)	\$5,267
Operating Costs (000s)	\$6,573

*Unaudited Fiscal Year End June 30, 2016 information



STEVE ZURN
General Manager

GLENDALE

Incorporated in 1906, Glendale purchased its electric utility in 1909, obtaining power from outside suppliers. In 1937, it began receiving power from the Hoover Dam and inaugurated the first unit of its own steam generating plant units with 260 MW of gas-fired steam and combustion generating capacity. Glendale Water & Power (GWP) has a diversified portfolio that also includes coal, nuclear, and hydro generating resources, as well as a comprehensive renewables resource program comprised of landfill gas, wind, and geothermal projects. Today, GWP provides reliable electric services to over 86,700 residential, commercial, and industrial customers within a 31 square mile area. GWP continues to invest in improving the system infrastructure to ensure its long term reliability. Our vision is to provide our customers with reliable and sustainable water and power services that are cost-effective and innovative.

Customers – Retail	87,347
Power Generated and Purchased (in MWh)	
Self-Generated	180,493
Purchased	1,869,050
Total	2,049,543
Total Revenues (000s)	\$221,947
Operating Costs (000s)	\$209,459

*Unaudited Fiscal Year End June 30, 2016 information

COLTON

The largest and oldest municipal utility in San Bernardino County, the Colton Electric Department has been meeting the electric needs of Colton’s businesses and residents since 1895. Today, the Department serves approximately 19,000 customers with a diverse mix of generation resources.

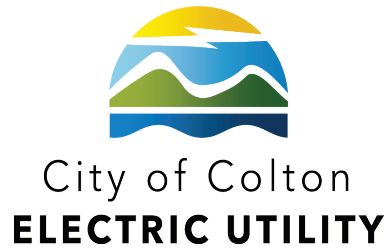
The Department’s employees are proud to provide the community safe, reliable, affordable and environmentally sustainable electric service while working with each customer to meet their home or business’ energy needs.

The Department’s main focus is ensuring that customer’s use electricity effectively to minimize their costs and promote sustainability. Colton’s residents want improved environmental quality and support the steps taken by the Department to improve the quality of life in the city. Department efforts include acquiring renewable resources and working with residential and business customers to install energy efficient equipment and appliances. The Department’s expenses included over \$6.8 million in one-time capital improvements for system expansion to accommodate economic growth in the City of Colton. These improvements include the construction of the new West 66 kV Substation, 66 kV Switchyard, and 66 kV tie line (the Agua Mansa Project) West region of the City and the design of other 66 kV lines to accommodate economic expansion in the Southeast region of the City.

The Department looks forward to serving the electric needs of the community with low-cost, reliable supplies for the next 120 years and to serve as an asset helping promote economic development in the City.

IMPERIAL IRRIGATION DISTRICT

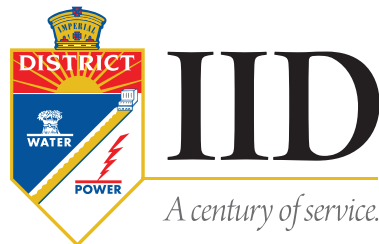
The Imperial Irrigation District(IID)was established in 1911 and entered the power business in 1936. Proudly serving Imperial and Coachella valleys and a portion of San Diego County. IID has a service area of 6,483 square miles that encompasses an expanding 1,400-mile transmission network. One of five balancing authorities in the state, IID controls over 1,100 MW of energy derived from a diverse resource portfolio that includes native generation, SCPPA partnerships, and long and short-term power purchases. IID, in the enviable position of having access to locally-generated geothermal, solar, wind and biomass resources, is on track to meet the 33 percent Renewables Portfolio Standard by 2020. A valuable public resource, IID is regarded as an affordable and reliable service provider serving more than 152,136 customers.



DAVE KOLK, PH.D.
Electric Utility Director

Customers – Retail	19,295
Power Generated and Purchased (in MWh)	
Self-Generated	9,834
Purchased	399,646
Total	409,480
Total Revenues (000s)	\$61,999
Operating Costs (000s)	\$53,371

*Unaudited Fiscal Year End June 30, 2016 information



KEVIN KELLY
City Manager

Customers – Retail	152,136
Power Generated and Purchased (in MWh)	
Self-Generated	1,695,499
Purchased	2,130,777
Total	3,826,276
Total Revenues (000s)	\$438,862
Operating Costs (000s)	\$427,057

*As of December 31, 2014

SCPPA MEMBER UTILITIES



DAVID WRIGHT
General Manager

LOS ANGELES

Providing service for more than a century, the Los Angeles Department of Water and Power began delivering water to the city in 1902, and with the water came power. In 1916, LADWP first delivered electricity to the city purchased from the Pasadena Municipal Plant. A year later, LADWP began generating its own hydroelectric power at the San Francisquito Power Plant No. 1. After purchasing the remaining distribution system of Southern California Edison within the city limits in 1922, LADWP became the sole water and electricity provider for the City of Los Angeles. It is now the largest municipally owned electric utility in the nation, serving a population of more than 4 million residents over a 465 square mile area. LADWP remains on firm financial footing and serves as a valuable asset to the City of Los Angeles. LADWP reached its 20% renewable goal in 2010 with a significant portion of such goal accomplished with projects transacted through the Southern California Public Power Authority (SCPPA). LADWP is undergoing a transformation of its power supply, as documented in its Power Integrated Resource Plan. In the next 15 years, there will be a transition away from coal, replacing such energy through meeting a mandated 33% renewable goal by 2020 and a long-term mandated 50% renewable goal by 2030, increasing energy efficiency to at least 15% by 2020, balancing the system demands with increased use of natural gas from new and rebuilt existing facilities, repowering gas facilities to eliminate the use of ocean water for cooling, investing in the Power System Reliability Program to ensure a robust power system, and supporting electric transportation growth to decrease overall greenhouse gas emissions in the L.A. Basin.

Customers – Retail	117,578
Power Generated and Purchased (in MWh)	
Self-Generated	317,910
Purchased	3,044,250
Total	3,362,160
Total Revenues (000s)	\$428,485
Operating Costs (000s)	\$366,938

*Unaudited Fiscal Year End June 30, 2016 information



GIRISH BALACHANDRAN
General Manager

RIVERSIDE

Established in 1895, Riverside Public Utilities (RPU) is a consumer-owned water and electric utility that provides high quality, reliable services to 109,000 metered electric customers, and 65,000 metered water customers throughout an 82 square mile area in and around the City of Riverside, CA, serving a population of more than 324,000. RPU is committed to providing the highest quality water and electric services at the lowest possible rates to benefit its customer owners.

Customers – Retail	108,776
Power Generated and Purchased (in MWh)	
Self-Generated	67,600
Purchased	1,674,000
Renewables	585,800
Total	2,327,400
Total Revenues (000s)	\$353,767
Operating Costs (000s)	\$282,182

To maintain its energy delivery commitment, the utility maintains a diverse resource portfolio mix that includes: 236 MW of simple-cycle, natural gas peaking generation, and 29.5 MW combined-cycle natural gas generation; participation in joint SCPPA (42 MW) and IPA (137 MW) generation projects; long-term renewable power purchase agreements (184.7 MW), as well as short, mid, and long-term contracts from various other power providers. Riverside is committed to promoting sustainable communities and becoming a municipal leader in the use of renewable energy resources. For calendar year 2015, renewable resources provided 22% of retail sales requirements and RPU is on-target to meet its future RPS procurement goal with a significant number of new renewable energy projects scheduled to come on-line and anticipates having 228.4 MW of long-term renewable power purchase agreements by June 2020.

PASADENA

Pasadena Water and Power (“PWP”) has been providing electricity since 1906 and began delivering water to customers in 1912. The City built its first electric generating steam plant in 1907 and took over operation of its municipal street lighting from Edison Electric. In 1909, Pasadena began the extension of its operations to commercial and residential customers that resulted in the replacement of all Edison Electric service in the City by 1920. While much has changed over the years, PWP’s strong connection to its customer/owner base remains constant. Today, PWP provides electric service to more than 65,000 metered accounts over a 23 square-mile service area at competitive rates.

During 2016, Pasadena made significant progress toward reaching the goal for renewable energy resources defined in its Integrated Resource Plan (“IRP”) update. Pasadena’s IRP includes a commitment to provide 40% of retail energy requirements with renewable resources by 2020, surpassing the State of California’s previously stated goal of 33% by 2020. This proactive commitment to securing a variety of renewable resources places PWP in a strong position meet the revised State requirements of providing 50% of energy from renewable sources by 2030 as defined in SB 350. During calendar year 2015, 29.6% of the City’s retail energy requirements were supplied by renewable resources, well beyond the state-wide requirements of 20% for the period. Pasadena will continue to acquire cost-effective renewable energy and support local renewable energy resources and community solar efforts. PWP is actively pursuing a diversified portfolio of renewable projects to meet state and local goals while remaining committed to its mission of providing reliable service at a reasonable cost to its customers.

During 2016, PWP completed the construction of a repowering project to replace an aging local generation plant with a new 71-megawatt (68

VERNON

City of Vernon Gas and Electric Department began serving industrial customers in 1933, with completion of its diesel generating plant. In addition to its own power from diesel units and gas turbines, Vernon also receives power from the Malburg Generating Station, Palo Verde, Hoover, and various suppliers. The Malburg Generating Station resides within city limits. Vernon is part of the California Independent System Operator (CAISO) Control Area and is a Participating Transmission Owner.



PASADENA
Water & Power



GURCHURAN BAWA
General Manager

Customers – Retail	65,308
Power Generated and Purchased (in MWh)	
Self-Generated	48,489
Purchased	1,099,525
Total	1,148,014
Total Revenues (000s)	\$209,524
Operating Costs (000s)	\$165,073

*Unaudited Fiscal Year End June 30, 2016 information

megawatt net) combined-cycle plant. The new on-site generation will improve the reliability of PWP’s system while increasing the opportunity to participate in wholesale energy markets. Commercial operation of the unit is expected to begin by December 2016. PWP’s success is a result of its commitment to remain a valued community asset, an exceptional employer, and a partner in Pasadena’s prosperous future.



KELLY NGUYEN

Customers – Retail	1,934
Power Generated and Purchased (in MWh)	
Self-Generated	174
Purchased	1,162,807
Total	1,162,981
Total Revenues (000s)	\$168,975
Operating Costs (000s)	\$129,845

*Unaudited Fiscal Year End June 30, 2016 information

The second half of the 2015-2016 Legislative Session continued many efforts from 2015. There continued to be significant debate over long-term environmental policies – with key policies either extended or even expanded. Solar interests yet again attempted to push for extension of more favorable net energy metering policies that result in significant cost-shifts, which they failed to advance in 2015 and again in 2016.

CLIMATE CHANGE

After failing on the Assembly Floor in the final week of the 2015 Session, SB 32 (Pavley) continued to be the highest profile piece of environmental legislation in 2016. In this election year, however, the bill passed out of the Assembly with several votes to spare despite heavy opposition from the oil and gas industry and other stakeholders. While the 2015 version would have established a statewide greenhouse gas emissions reduction target out to 2050, the successful 2016 version only establishes a midterm 2030 target of 40% below 1990 levels.

AB 197 (Garcia) was a companion bill to SB 32. While the bill provides the Legislature with additional oversight and control over the California Air Resources Board, it more importantly directs CARB to “prioritize direct emission reductions” from stationary sources. This directive was added the last week of the legislative session and over the objections of many parties, including SPPA and other municipal utilities. Despite a Letter to the Journal by Assemblymember Garcia stating that it was not his intent to preclude CARB from using market-based approaches – like the Cap-and-Trade program – to achieve the state’s GHG emission reduction goals, environmental justice advocates whom sought the provision have already begun pushing CARB to back away from that program.

California established a new 2030 emissions target of 40% below 1990 levels

NET ENERGY METERING (NEM)

SPPA opposed AB 2339 (Irwin) which was nearly identical to the two attempts in 2015 that would have required municipal utilities to recalculate their net energy metering cap using “aggregate customer peak demand” based upon the “the highest sum of the non-coincident peak demands of all the customers of electric utilities in that service area that occurs in any calendar year” as is used by the three largest Investor-Owned

Utilities. For some municipal utilities, this would have as much as doubled the amount of headroom under their NEM cap. SCPPA worked closely with the California Municipal Utilities Association, the Northern California Power Agency and other municipal utilities, along with organized labor, to defeat the bill and it was ultimately held on the Assembly Appropriations Suspense File.

AB 2163 (Williams) surfaced in the final weeks of session and only impacted the Imperial Irrigation District, who reached their 5% NEM cap earlier in the year and adopted a modified NEM successor program. The bill would have required IID to allow all those customers already in the queue when the cap was reached to interconnect under the previous NEM program, not the new successor program. IID along with SCPPA and other municipal utilities fought the bill, and in the end a compromise was reached where no legislation moved forward and instead the issue would be handled at the local level.

IRPs AND RENEWABLES

SCPPA and other utilities were able to hold off detrimental changes to the state's Integrated Resource Plan requirements for California's largest publicly-owned utilities sought by state agencies, though a last-minute effort by Governor Brown's office to expand the use of biomass successfully passed. SB 859 was a budget trailer bill and contained many provisions, including a mandate for certain electric utilities to purchase a set amount of biomass energy powered by fuel derived by specific high tree mortality areas. This was a response to the ever-worsening epidemic of dead and dying trees throughout California's forests due to the drought and pests. The provision was inserted into a large budget trailer bill in the last days of the session. Despite strong opposition from SCPPA, our member agencies and municipal utilities throughout the state and despite the language being very poorly drafted, the politics and timing were too much to overcome in the final days of session.

ENERGY USAGE DATA

Mostly aimed at large water consumers, AB 1520 (Stone) would have forced local water and electric utilities to disclose commercial customer energy and water data under the Public Records Act. SCPPA, CMUA, other municipal utilities and business groups fought to stop the bill, even once it was narrowed to focus only on water customers given the bad precedent the bill would have established. AB 1520 was ultimately held on the Senate Floor.

Over the last two years, Republicans leading the 114th Congress have worked with their Democratic counterparts to pass bipartisan legislation, to reinforce Republicans' ability to govern, in the hope of winning the White House in November 2016. At the end of the first session of the 114th Congress, bills on cybersecurity information sharing, long-term transportation funding and significant budget and tax legislation - that included extensions of clean energy tax credits - passed into law. In the second session, bipartisan efforts continued as Congress worked to move energy legislation, a Federal Aviation Administration (FAA) reauthorization bill, and the Water Resources Development Act, but other bipartisan legislative efforts fell off the rails as the Presidential election cycle started in earnest.

Throughout the year, SCPPA actively engaged in federal legislative matters affecting its members, including: energy policy; spent nuclear fuel; municipal financing; and drone legislation and regulations, while keeping a close watch over the legal activity in response to the Environmental Protection Agency's (EPA) Clean Power Plan – an issue of importance to SCPPA and its members.

ENERGY BILL

SCPPA was actively involved in the debate on the "Energy Policy Modernization Act," which the House and Senate have been working on for the past year and a half. In December 2015, the House version of the bill passed along party lines, while the Senate version passed in April 2016 by a strong bipartisan vote of 85-12. Now the two versions of the bill must be reconciled in a House-Senate conference committee, producing a final product that can pass both chambers and be signed by the President. It is possible, but not probable, that this may occur in the lame duck session after the November 8 election.

In an October 2016 letter to its Congressional delegation, SCPPA outlined its priorities relating to hydropower licensing/relicensing improvements, expediting Bureau of Land Management and Forest Service approval of permits for utility Rights of Way for vegetation management, and authority to give the Federal Energy Regulatory Commission (FERC) a formal advisory role in future agency rules that have the potential to impact electric reliability.

Some SCPPA members, who have small hydropower projects located on federal land, have experienced difficulty with federal resource agencies demanding multiple, costly, and often redundant studies. Hydropower licensing improvements in both bills would establish FERC as the coordinating agency for the hydropower licensing schedule and

accompanying study process. SCPPA has used its experience with the relicensing of the Azusa Hydropower Plant as an example of a broken process in need of reform. Throughout the year, they worked with Representatives Grace Napolitano and Judy Chu, who sent a letter highlighting their concerns to the U.S. Forest Service. In addition, those legislators helped coordinate a meeting with the U.S. Forest Service and stakeholders in an effort to help find a suitable resolution between all parties. The parties continue to work through the process in the hope that water and power interests will be protected, as will the integrity of the river and national forest system.

As SCPPA members work to reduce greenhouse gasses and comply with state mandates, the overlay of EPA's Clean Power Plan adds a layer of complexity. The energy bills include provisions that would require FERC to conduct a grid reliability analysis and provide recommendations for future major federal rulemakings that have a potential impact on grid operations. The requirement was prompted by concern that implementation of the Clean Power Plan will have implications for electric reliability that were not examined when it was developed. However, the provision would not be retroactive to the Clean Power Plan.

The SCPPA letter also expressed opposition to two provisions in the House bill: one that would expand FERC authority to address the impact of Electromagnetic Pulse attacks and Geomagnetic Disturbances (GMD) on the electric grid, and a second that would require utilities to conduct a process to consider a federal interconnection and net metering standard for community solar projects 2 MW or less. The letter notes that the net metering provision would undermine SCPPA's current ability to make local decisions for its consumer-owners.

NUCLEAR WASTE DISPOSAL

Given SCPPA members' ownership interest in the Palo Verde Nuclear Generating Station, SCPPA continues to urge development of responsible spent fuel disposal options. In meetings with legislators this session, SCPPA expressed support for a regional, consent-based siting effort for interim storage solutions, as well as a permanent, long-term central repository based on current law or through a new, consent-based siting process.

Members of Congress and industry groups have begun laying groundwork for possible movement on spent fuel policy in the 115th Congress. Longtime opponents of storing waste at Yucca Mountain will be leaving office at the end of the year, opening up the prospect of action on a new approach on spent fuel. In 2016, the Department of

Energy (DOE) began work to produce a “consent-based siting” rulemaking, and seek public input on voluntary, privately-run consolidated interim storage sites by the end of 2016. This work is expected to be a “placeholder” for the next Administration to pick up where the current one left off.

MUNICIPAL BONDS

Early in 2016, SCPPA contacted House members of its Congressional delegation to encourage them to join the newly formed House Municipal Finance Caucus, whose goal is to protect the current tax-exempt status of municipal bonds used to build and maintain our nation’s public infrastructure. SCPPA told members that the continued availability of tax-exempt municipal bonds is critical to SCPPA’s and SCPPA Members’ ability to maintain electric reliability and affordability, while meeting California’s renewables, energy efficiency and greenhouse gas emissions targets.

In addition, SCPPA’s Executive Director, Bill Carnahan, participated in two Capitol Hill briefings held by the Municipal Bonds for America Coalition, of which SCPPA is an active member. The Congressional briefings focused on the importance of preserving the present law treatment of tax-exempt municipal bonds. Almost 100 congressional staff attended the House and Senate briefings, which described how previous proposals to eliminate, cap, or otherwise “reform” municipal bond tax treatment would have serious and significant impacts on infrastructure development, student loans, affordable housing, power and water, and other critical projects and programs.

Mr. Carnahan explained how local control is at the heart of public power, and that SCPPA, a not-for-profit joint powers authority formed 35 years ago, has issued over \$14.38 billion in tax-exempt municipal bonds to date.

DRONES USED FOR ELECTRIC UTILITY RESTORATION

SCPPA, in tandem with others in the electric utility sector, worked during 2016 to educate Members of Congress on how new drone technology, or Unmanned Aircraft Systems (UAS), can be used to help enhance the reliability, security, and resilience of the electric grid as well as the safety of line crews. In 2015, the American Public Power Association, the Natural Rural Electric Cooperative Association, and the Edison Electric Institute submitted comments to the Federal Aviation Administration (FAA) highlighting these benefits as they worked to draft rules for small commercial drone use. The final regulation published in February provided some flexibility, but not much, limiting drone use to within line-of sight and day time.

Simultaneously, the electric utility industry and SCPPA lobbied Capitol Hill to use drones for electric utility restoration as Congress considered the FAA reauthorization bill. The effort was successful, as the legislation that was enacted into law included provisions that encouraged FAA to prioritize authorization of UAS operations for electric utility system inspections and restoration. While the bill does not give blanket authorization for drone use for utility restoration, it could certainly expedite their use relative to the tight constraints for operations outlined in recent FAA rules. The bill also showed Congress' interest in using UAS to ensure electric system reliability and restoration, as the new technology is integrated into the national airspace.

CLEAN POWER PLAN

On September 27, the D.C. Circuit Court of Appeals heard oral arguments in the case challenging the Clean Power Plan. The outcome of the case may impact California's Cap-and-Trade Program.

The case was heard in an en banc format, with only Judge Merrick Garland, President Obama's Supreme Court nominee, recusing himself from the case.

Arguments ran for over seven hours, with the most attention given to whether the rule overreached the authority delegated to the Environmental Protection Agency (EPA) by Congress. A major theme was whether or not the Clean Power Plan is "transformational," indicating the need for a more explicit direction from Congress than the current statute contains, or whether the Plan simply accelerates trends in the energy sector.

Given the makeup of the panel (six judges appointed by Democrats, four appointed by Republicans) and the direction of the questioning, many expect the rule to be upheld by the D.C. Circuit when it issues a decision, likely well after the November election. The case is almost certain to head to the Supreme Court.

WHAT IS AHEAD?

With a new President and new Congress, we will see many changes in leadership, committee assignments, as well as energy policy of interest to SCPPA and its member utilities. It will be important for SCPPA to stay engaged and effectively advocate at the Federal level to ensure member utilities can continue to provide reliable and affordable electric service to its customers.

REGULATORY Report

A significant amount of staff time in 2016 focused on state regulatory activities as California continues to be a global leader in its efforts to address climate change. SCPPA also tracks and coordinates regulatory activities and efforts at the federal regulatory level – though much of that effort had been focused on the U.S. Environmental Protection Agency’s “Clean Power Plan” rulemaking, which was “stayed” by the United States Supreme Court in February 2016. That rulemaking is currently being litigated before a federal appellate court.

RENEWABLES PORTFOLIO STANDARD (RPS) AND ENERGY EFFICIENCY

SCPPA Members are working diligently to meet California’s aggressive climate change goals – this includes achieving 50% renewables by 2030, reducing greenhouse gas emissions to 40% below 1990 levels by 2030, and working towards a doubling of energy efficiency in existing buildings. SCPPA dedicated a significant amount of time in 2016 working with the Energy Commission on new rulemakings to incorporate RPS- and Integrated Resource Plans-related changes made by SB 350 (de Leon, 2015); implementing AB 802 (Williams, 2015) that establishes building energy usage benchmarks; and revising the RPS Enforcement Procedures for Publicly-Owned Utilities, drafting the 9th edition of the RPS Eligibility Guidebook that incorporates a new RPS Online Reporting System, and new data collection and analyses efforts. SCPPA is also working on rulemaking efforts before the Energy Commission and the Air Resources Board regarding establishing RPS Enforcement Penalties for Publicly-Owned Utilities.

GREENHOUSE GAS EMISSIONS REDUCTION EFFORTS

SCPPA is heavily involved in the California Air Resources Board’s ongoing efforts to meet GHG emissions reduction goals under the 2006 Global Warming Solutions Act (AB 32) and the newly-enacted SB 32, which sets the “interim goal” announced by Governor Jerry Brown on April 29, 2015 via Executive Order B-30-15 (to further reduce emission levels to 40% below 1990 levels by 2030) in state statute. SCPPA has been engaged in discussions to address post-2020 goals via the 2030 Target Scoping Plan, the proposed 2016 Cap-and-Trade Program amendments and revisions to the Mandatory Reporting rule, and implementation of the federal Clean Power Plan (despite a Supreme Court “stay”). Our Members have made significant strides towards reducing GHG emissions, and SCPPA is working to ensure that the program is implemented in a manner that maintains environmental integrity at affordable costs for California ratepayers without

undermining the RPS Program.

ALISO CANYON RESPONSE

Resulting from the months-long methane gas leak at Southern California Gas Company's Aliso Canyon Natural Gas Storage Facility near Porter Ranch, SCPPA helped coordinate Members' response efforts leading up to the April 2016 "joint agencies" summer assessment workshop (focused on impacts to summertime electric supply reliability) and the August 2016 winter outlook workshop. Efforts included coordinating discussions amongst SCPPA Members that could be disproportionately impacted by gas supply curtailments, working with state energy agencies to keep Members updated on latest developments, providing recommendations on how best to mitigate electricity supply disruptions, and educating legislative staff, regulators, and local officials about Aliso Canyon and its impacts.

CAISO GRID REGIONALIZATION

SB 350 created a process for regionalization of the California Independent System Operator (CAISO) to include other western transmission grids. It establishes a framework for a multi-year stakeholder process to study the benefits of regionalization, and to develop a legislative proposal on CAISO governance modifications to allow other entities in the Western region to join the CAISO. SB 350 explicitly states the Legislature's intent for the transition of the CAISO to a regional entity if it is "in the best interests of California and its ratepayers." SCPPA and many other stakeholders believed that the regionalization process was moving far too quickly -- at the cost of sound policy -- and expressed concern that a hurried decisionmaking process could lead to a number of unintended consequences, including increased electricity charges for California consumers, higher greenhouse gas emissions, and compromised grid reliability. CAISO grid regionalization legislation expected by the end of the 2016 state legislative session was subsequently postponed to 2017.

The State Lobbying Report and Regulatory Report were provided by SCPPA's Sacramento office. Morgan Meguire provided the Federal Legislative Report by request of SCPPA.



SELECTED FINANCIAL DATA & STATEMENTS

The contracts expire as follows:

Palo Verde Project	2030
San Juan Project	2030
Magnolia Power Project	2036
Canyon Power Project	2040
Apex Power Project	2038
Hoover Upgrading Project	2018
Tieton Hydropower Project	2040
Milford I Wind Project	2030
Milford II Wind Project	2031
Linden Wind Energy Project	2035
Windy Point Project	2030
Southern Transmission System Project	2027
Mead-Phoenix Project	2030
Mead-Adelanto Project	2030
Natural Gas Pinedale Project	2040
Natural Gas Barnett Project	2040
Prepaid Natural Gas Project	2038
Ormat Geothermal Energy Project	2031
Pebble Springs Wind Project	2025
MWD Small Hydro Project	2023
Ameresco Chiquita Landfill Gas Project	2030
Don A. Campbell/Wild Rose Geothermal Project	2033
Copper Mountain Solar 3 Project	2040
Columbia 2 Solar Project	2033
Don A. Campbell 2 Project	2035
Heber-1 Geothermal Project	2025
Kingbird Solar Project	2035

The Authority has entered into power sales, natural gas sales, and transmission service agreements with the below project participants. Under the terms of the contracts, the participants are entitled to power output, natural gas, or transmission service, as applicable. The participants are obligated to make payments on a "take-or pay" basis for their proportionate share of operating and maintenance expenses and debt service. The contracts cannot be terminated or amended in any manner that will impair or adversely affect the rights of the bondholders as long as any bonds issued by the specific project remain outstanding.

The Authority's interests or entitlements in natural gas, generation, and transmission projects are jointly owned with other utilities, except for the Magnolia Power Project, Canyon Power Project, Apex Power Project, Tieton Hydropower Project, and the Linden Wind Energy Project, which are wholly owned by the Authority. Under these arrangements, a participating member has an undivided interest in a utility plant and is responsible for its proportionate share of the costs of construction and operation and is entitled to its proportionate share of the energy, available transmission capacity, or natural gas produced. Each joint plant participant, including the Authority, is responsible for financing its share of construction and operating costs. The financial statements reflect the Authority's interest in each jointly owned project as well as the projects that it owns. Additionally, the Authority's share of expenses for each project is included in the statements of revenues, expenses, and changes in net position as part of operations and maintenance expenses. The Authority has entered into power purchase agreements with project participants as follows. These agreements are substantially "take-and-pay" contracts where there may be other obligations not associated with the delivery of energy.

PARTICIPANT OWNERSHIP INTERESTS

The Authority's participants may elect to participate in the projects. As of June 30, 2015, the members have the following participation percentages in the Authority's financed operating projects:

Participants	GENERATION				
	Palo Verde	San Juan	Magnolia Power	Canyon Power	Apex Power
City of Los Angeles	67.0%	-	-	-	100.0%
City of Anaheim	-	-	38.0%	100.0%	-
City of Riverside	5.4%	-	-	-	-
Imperial Irrigation District	6.5%	51.0%	-	-	-
City of Vernon	4.9%	-	-	-	-
City of Azusa	1.0%	14.7%	-	-	-
City of Banning	1.0%	9.8%	-	-	-
City of Colton	1.0%	14.7%	4.2%	-	-
City of Burbank	4.4%	-	31.0%	-	-
City of Glendale	4.4%	9.8%	16.5%	-	-
City of Cerritos	-	-	4.2%	-	-
City of Pasadena	4.4%	-	6.1%	-	-
	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>

Participants	TRANSMISSION		
	Southern Transmission System	Mead-Phoenix	Mead-Adelanto
City of Los Angeles	59.5%	50.4%	48.9%
City of Anaheim	17.6%	15.7%	10.7%
City of Riverside	10.2%	2.7%	10.7%
Imperial Irrigation District	-	-	-
City of Vernon	-	-	-
City of Azusa	-	0.7%	1.8%
City of Banning	-	0.7%	1.1%
City of Colton	-	0.7%	2.0%
City of Burbank	4.5%	10.2%	9.2%
City of Glendale	2.3%	9.7%	8.8%
City of Cerritos	-	-	-
City of Pasadena	5.9%	9.2%	6.8%
	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>

SELECTED FINANCIAL DATA & STATEMENTS

GREEN POWER

Participants	Hoover Uprating	Tieton Hydro-power	Milford I Wind	Milford II Wind	Linden Wind Energy	Windy Point
City of Los Angeles	-	-	92.5%	95.1%	90.0%	92.4%
City of Anaheim	42.6%	-	-	-	-	-
City of Riverside	31.9%	-	-	-	-	-
Imperial Irrigation District	-	-	-	-	-	-
City of Vernon	-	-	-	-	-	-
City of Azusa	4.2%	-	-	-	-	-
City of Banning	2.1%	-	-	-	-	-
City of Colton	3.2%	-	-	-	-	-
City of Burbank	16.0%	50.0%	5.0%	-	-	-
City of Glendale	-	50.0%	-	4.9%	10.0%	7.6%
City of Cerritos	-	-	-	-	-	-
City of Pasadena	-	-	2.5%	-	-	-
	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>

NATURAL GAS

Participants	Pinedale	Barnett	Prepaid Natural Gas
City of Los Angeles	-	-	-
City of Anaheim	35.7%	45.4%	16.5%
City of Riverside	-	-	-
Imperial Irrigation District	-	-	-
City of Vernon	-	-	-
City of Azusa	-	-	-
City of Banning	-	-	-
City of Colton	7.1%	9.1%	11.0%
City of Burbank	14.3%	27.3%	33.0%
City of Glendale	28.6%	-	23.0%
City of Cerritos	-	-	-
City of Pasadena	14.3%	18.2%	16.5%
	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>

SELECTED FINANCIAL DATA & STATEMENTS

Participants	Power Purchase Agreements											
	Ameresco			Don A.			Don A.			Don A.		
	Ormat Geothermal Energy	Pebble Springs Wind	MWD Small Hydro	Chiquita Landfill Gas	Campbell/ Wild Rose Geothermal	Copper Mountain Solar 3	Columbia 2 Solar	Campbell 2 Geothermal	Heber-1 Geothermal	Kingbird Solar	Capacity	Contract expires
	17.00 MW	98.70 MW	17.04 MW	10.00 MW	16.00 MW	250.00 MW	15.00 MW	25.00 MW	62.5 MW	20.00 MW		
City of Los Angeles	-	69.6%	-	-	84.6%	84.0%	-	100.0%	66.7%	-	-	-
City of Anaheim	60.0%	-	56.4%	-	-	-	-	-	-	-	-	-
City of Imperial	-	-	-	-	-	-	-	-	33.3%	-	-	-
City of Riverside	-	-	-	-	-	-	74.3%	-	-	-	-	70.0%
City of Azusa	-	-	21.8%	-	-	-	8.6%	-	-	-	-	15.0%
City of Banning	10.0%	-	-	-	-	-	-	-	-	-	-	-
City of Colton	-	-	21.8%	-	-	-	-	-	-	-	-	15.0%
City of Burbank	-	10.1%	-	16.7%	15.4%	16.0%	-	-	-	-	-	-
City of Glendale	15.0%	20.3%	-	-	-	-	-	-	-	-	-	-
City of Pasadena	15.0%	-	-	83.3%	-	-	17.1%	-	-	-	-	-
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	2031	2025	2023	2030	2033	2040	2033	2035	2025	2035	2025	2035

FINANCING ACTIVITIES

Over the past fiscal year, SCPPA completed transactions that captured market opportunities while accomplishing Participant objectives such as debt restructuring while reducing cost and increasing call optionality, and the acquisition of additional ownership interest in transmission assets. A summary of SCPPA's financing activities for the fiscal year starting July 1, 2015 and ending June 30, 2016 is provided below.

In April 2016, SCPPA issued the Canyon Power Project, Refunding Revenue Bonds, 2016 Series A ("2016 Series A Bonds") to refund \$81,625,000—representing the then outstanding callable par amount—of the Canyon Power Project, Revenue Bonds, 2010 Series A ("2010 Series A Bonds") then outstanding in a par amount of \$110,460,000. The 2016 Series A were issued with a par amount of \$79,635,000. The 2016 Series A Bonds have the same final maturity of July 1, 2028 as the 2010 Series A Bonds which were refunded. However, the 2016 Series A Bonds were issued to defer the refunding savings, thereby shortening the average life of the debt. The 2016 Series A Bonds were issued with a five-year call option. The transaction achieved \$4.2 million, representing 5.2% of refunded par, on a present value basis, while achieving the Participant's objectives of enhanced call optionality and accelerated debt repayment. At the time of issuance, the transaction was assigned a long-term

rating of AA- by Standard & Poor's.

In May 2016, SCPPA issued the Mead-Adelanto Project, Authority Interest (LADWP), Revenue Bonds, 2016 Series A ("Mead-Adelanto 2016 Series A Bonds") and Mead-Phoenix Project, Authority Interest (LADWP), Revenue Bonds, 2016 Series A ("Mead-Phoenix 2016 Series A Bonds") to pay the costs of acquisition of an additional ownership interest (and associated participation share and related rights and interests) in the Mead-Adelanto Project and Mead-Phoenix Project, respectively. The Mead-Adelanto 2016 Series A Bonds were issued with a par amount of \$27,415,000. The Mead-Phoenix 2016 Series A Bonds were issued with a par amount of \$22,610,000. Both the Mead-Adelanto and Mead-Phoenix 2016 Series A Bonds were issued with the same final maturity of July 1, 2030. The transaction was completed at a true-interest-cost of just under 2.0% and had an average life of 8.3 years. At the time of issuance, the transaction was assigned long-term ratings of Aa2 by Moody's Investors Service and AA- by Standard & Poor's.

In addition to these financing actions completed during the fiscal year, SCPPA continues to plan for and develop financing options for renewable projects to help its members meet renewable energy goals, expects to complete financings for additional renewable energy projects in the coming years, and continues to aggressively pursue competitively priced renewable energy projects for its members.

SCPPA also continuously evaluates other financing opportunities and the existing portfolio of financings to balance the lowest possible cost and smallest amount of financial risk exposure for its members.

Public Financial Management provided the Financing Activities Report by request of SCPPA.

COMBINED SUMMARY OF FINANCIAL CONDITION AND CHANGES IN NET POSITION

(\$ in Thousands)

	June 30,		
	2016	2015	2014
Assets			
Net utility plant	\$ 1,427,164	\$ 1,475,962	\$ 1,574,194
Investments	698,007	676,135	679,569
Cash and cash equivalents	304,756	337,374	301,753
Prepaid and other	981,133	1,030,529	1,099,682
Total assets	3,411,060	3,520,000	3,655,198
Deferred outflows of resources	122,257	119,709	95,061
Total assets and deferred outflows of resources	\$ 3,533,317	\$ 3,639,709	\$ 3,750,259
Liabilities			
Noncurrent liabilities	\$ 3,114,994	\$ 3,249,181	\$ 3,456,473
Current liabilities	467,032	449,772	392,473
Total liabilities	3,582,026	3,698,953	3,848,946
Deferred inflows of resources	242	207	-
Net position			
Net investment in capital assets	(575,911)	(594,920)	(608,196)
Restricted	622,340	610,915	583,618
Unrestricted	(95,380)	(75,446)	(74,109)
Total net position	(48,951)	(59,451)	(98,687)
Total liabilities, deferred inflows of resources, and net position	\$ 3,533,317	\$ 3,639,709	\$ 3,750,259
Revenues, expenses and changes in net position for the year ended June 30			
Operating revenues	\$ 851,981	\$ 813,095	\$ 702,327
Operating expenses	(712,059)	(668,880)	(564,690)
Operating income	139,922	144,215	137,637
Investment and other income	23,633	21,909	30,066
Derivative gain (loss)	(10,238)	28,364	395
Debt expense	(132,716)	(157,254)	(156,729)
Change in net position	20,601	37,234	11,369
Net position, beginning of year, before adjustment	(59,451)	(98,687)	(106,999)
Less: Accumulated adjustment for change in accounting principal	-	(1,004)	-
Net position, beginning of year, as adjusted	(59,451)	(99,691)	(106,999)
Net contributions/(withdrawals) by participants	(10,101)	3,006	(3,057)
Net position, end of year	\$ (48,951)	\$ (59,451)	\$ (98,687)



SCPPA

Southern California Public
Power Authority
2015/16 Annual Report
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Glendora, CA 91740
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