



AGENDA

May 24, 2016

PUBLIC UTILITIES COMMISSION MEETING

7:00 p.m.

**City Council Chambers
311 Vernon Street
Roseville, California**

- 1. Roll Call**
- 2. Pledge of Allegiance**
- 3. Approval of the April 26, 2016 Minutes**
 - 3.1. April 26, 2016 Minutes
- 4. Oral Communications/Public Comment**
- 5. New Business**
 - 5.1. Environmental Utilities Monthly Update
Report by Environmental Utilities Director Rich Plecker summarizing monthly status of Environmental Utilities issues, for information.
 - 5.2. Environmental Utilities Fiscal Year 2016-17 Budget Overview
Presentation by Business Services Administrator Carol Margetich summarizing the Fiscal Year 2016-17 Environmental Utilities Budget, for information.
 - 5.3. Roseville Electric Utility Monthly Update
Report by Electric Utility Director Michelle Bertolino summarizing monthly status of Electric issues, for information.
 - 5.4. Roseville Electric Utility Fiscal Year 2016-17 Budget Overview
Report by Electric Utility Director Michelle Bertolino summarizing the Fiscal Year 2016-17 Electric Utility Budget, for information.
 - 5.5. Roseville Electric Utility 2015 Annual System Reliability Overview
Report by Assistant Electric Utility Director Sonny Person and Power Engineering Manager Mark Wilhelm summarizing the 2015 Annual System Reliability Overview, for information.
 - 5.6. Roseville Electric Utility Power Management Services Agreement
Presentation by Energy Portfolio Manager Todd White and Electric Resources Analyst Petra Wallace on the Power Management Services Agreement, for information.

- 6. Reports – Commission/Staff**
- 7. Proposed Future Agenda Items**
- 8. Adjournment**



PUBLIC UTILITIES COMMISSION

Title: April 26, 2016 Minutes

Meeting Date: 5/24/2016
Item #: 3.1.

ATTACHMENTS:

Description

April 26, 2016 Minutes

MINUTES
Public Utilities Commission
April 26, 2016
7:00 p.m.

Council Chambers
311 Vernon Street
Roseville, CA 95678

1. Roll Call

PUC Commissioners Present: Bandon Granger
Gretchen Hildebrand
James McHan
Kerry Schmitz
John Speight
Jim Viele
John Vertido

PUC Commissioners Absent: None

Staff Present: Jim Mulligan, Water Utility Manager
Mike Zacharia, Environmental Utilities Principal Engineer
Colleen Boak, Environmental Utilities Assistant Engineer
Kelye McKinney, Assistant Environmental Utilities Director
Mike Bloom, Assistant Electric Utility Director
Shawn Matchim, Electric Regulatory Compliance Administrator
Sonny Person, Assistant Electric Utility Director
Dale Olson, Environmental Utilities Principal Engineer
Jose Lopez, Environmental Utilities Senior Engineer
Bobby Alvarez, Water Efficiency Administrator
Todd White, Energy Portfolio Manager
Joe Mandell, Senior Deputy Attorney
Karen Sainsbury, Recording Secretary

2. Pledge of Allegiance

3. Minutes of March 22, 2016

The minutes of March 22, 2016 were approved as amended.

4. Oral Comments/Public Comment

None.

5. New Business

a. Environmental Utilities Monthly Update

Report by Water Utility Manager Jim Mulligan summarizing monthly status of Environmental Utilities issues, for information.

b. Asset Management Program Overview

Presentation by Principal Engineer Mike Zacharia on the Asset Management Program Overview, for information.

Commissioner Vertido requested information on the internet security controls in place for Maximo and other mobile systems.

c. Environmental Utilities Urban Water Management Plan

Presentation by Assistant Engineer Colleen Boak on the Urban Water Management Plan, for recommendation.

Commissioner McHan recommended the last three sentences of Chapter 7, Section 7.2.1.2 Deficit Mitigation, be removed.

MOTION: Commissioner Vertido made the motion, which was seconded by Commissioner McHan, to recommend approval of the Urban Water Management Plan, including revisions suggested by Commissioner McHan, to City Council.

Ayes: Granger, Hildebrand, McHan, Schmitz, Speight, Viele, Vertido

Noes:

Absent:

d. Roseville Electric Utility Monthly Report

Report by Assistant Electric Utility Director Mike Bloom summarizing monthly status of Electric issues, for information.

Commissioner McHan expressed concern that the Property Assessed Clean Energy Program (PACE) could be a liability for the city.

Commissioner Schmitz requested the solar workshop schedule be forwarded to the Commission.

e. Roseville Electric Utility Legislative Update

Presentation by Electric Regulatory Compliance Administrator Shawn Matchim on the Electric Legislative Update, for information.

Commissioner McHan requested information regarding Environmental Utilities position on SB1043.

6. Reports – Commission/Staff

Commissioner Viele reported the next Pharmaceutical Collection Day event will be held on April 30 from 10:00 a.m. – 2:00 p.m. Collection locations are Sun City Roseville, Kaiser on Rocky Ridge and Roseville High School.

7. Proposed Future Agenda Items

Commissioner Schmitz suggested presentations on Water Conservation after the State Board takes action on the emergency drought regulations, Sustainable Groundwater Management Act (SGMA), and the City's Aquifer Storage and Recovery Program.

8. Adjournment

Commissioner Viele moved for adjournment of the April 26, 2016 Public Utilities Commission meeting. Commissioner Vertido seconded the motion. The motion passed unanimously at 8:29 p.m.

Blandon Granger
Chairperson

Karen Sainsbury
Recording Secretary



PUBLIC UTILITIES COMMISSION

Title: Environmental Utilities Fiscal Year 2016-17 Budget Overview

Meeting Date: 5/24/2016
Item #: 4.2.

ATTACHMENTS:

Description

Environmental Utilities Budget Overview



Environmental Utilities Budget Overview FY2016-17

May 24, 2016
Roseville Public Utilities Commission
Richard Plecker
Carol Margetich

City of Roseville, California

FY17 EU Highlights

- Budgets consistent with rate model assumptions
- Scheduled Water and Wastewater rate increases in FY17
- Solid Waste organics collection
- Continued water reliability planning
- Wastewater planning for organic waste processing (waste to power/fuel)

City of Roseville, California

Environmental Utilities Operating Revenues

(\$ millions)

Utility	Actual FY2015	Forecasted FY2016	Proposed FY2017
Water	\$22.9	\$23.0	\$27.7
Wastewater	\$31.1	\$33.5	\$35.8
Solid Waste	\$22.2	\$21.7	\$21.9

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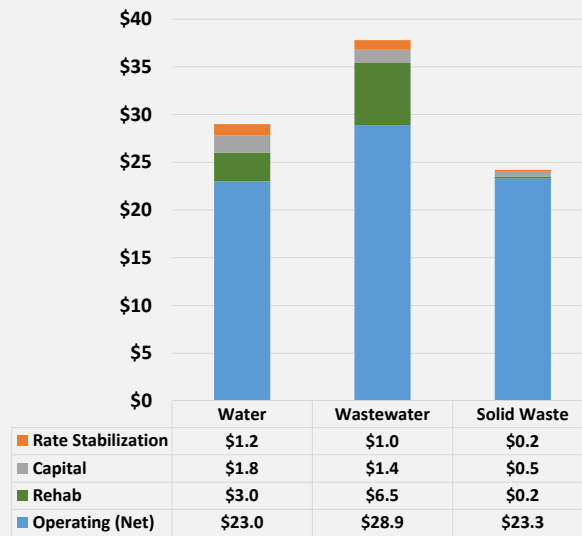
Environmental Utilities Operating Expenditures

(\$ millions)

Utility	Actual FY2015	Forecasted FY2016	Proposed FY2017
Water	\$18.9	\$25.9	\$27.2
Wastewater	\$29.4	\$35.2	\$36.4
Solid Waste	\$20.3	\$22.9	\$23.7

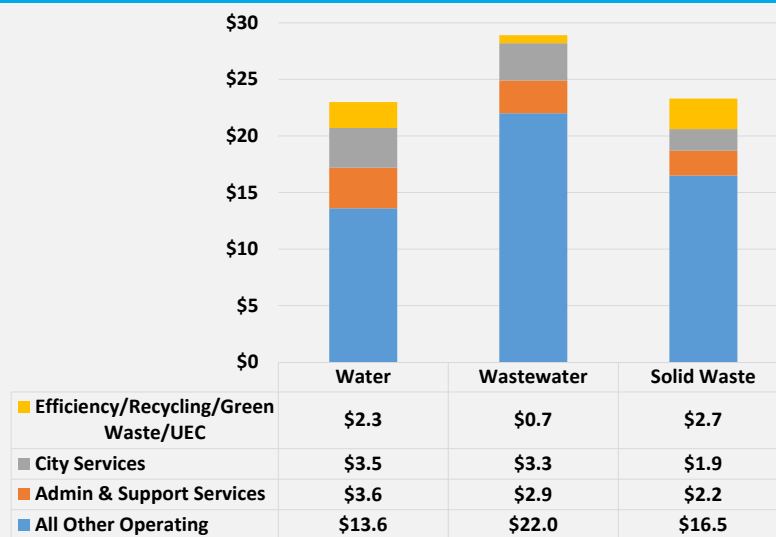
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FY17 Cost Distribution (in millions)



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FY17 Major Operating Expenses (in millions)



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Economic Reserve Funds

Utility	FY17 (Budget)	Fiscal Policy Reserve Goals
Water	62%	75%
Wastewater	43%	75%
Solid Waste	50%	25%

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Major CIP Projects: Budget FY2016-17

Major EU Projects

WTP 2MG Tank Rehab	\$ 1.5M
Sunrise Ave 24 inch Water Rehab	\$ 1.1M
Well 9 Pump Station	\$ 1.0M
Advanced Metering Infrastructure	\$ 1.0M
Other	<u>\$ 2.2M</u>
Total	\$ 6.8M

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Environmental Utilities

Water Treatment Plant 2MG Tank Rehab



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Sunrise Ave. 24 Inch Water Rehab



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Well 9 Pump Station



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Advanced Water Meter Infrastructure (AMI)



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Other CIP Projects: Budget FY2016-17

• Wastewater Operations	\$1.0M
• Wastewater Rehabilitation	\$.8M
• Water Operations	\$.2M
• Water Construction	<u>\$.2M</u>
Total	\$2.2M

City of Roseville, California

Questions?

City of Roseville, California



PUBLIC UTILITIES COMMISSION

Title: Roseville Electric Utility Fiscal Year 2016-17 Budget Overview

Meeting Date: 5/24/2016
Item #: 4.4.

ATTACHMENTS:

Description

Electric Budget Overview



Electric Budget Overview FY2016-17

May 24, 2016
Roseville Public Utilities Commission
Michelle Bertolino

City of Roseville, California

FY17 Electric Highlights

- Revenues down
 - Electricity consumption flat
 - Hydroelectric surcharge eliminated
- Expenses down
 - Power supply costs down
 - Power plant expenses down

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Electric Revenues

(\$ millions)			
	FY2015	FY2016	FY2017
Energy Sales	\$165	\$164	\$162
Other	\$7	\$5	\$6
Total	\$172	\$169	\$168

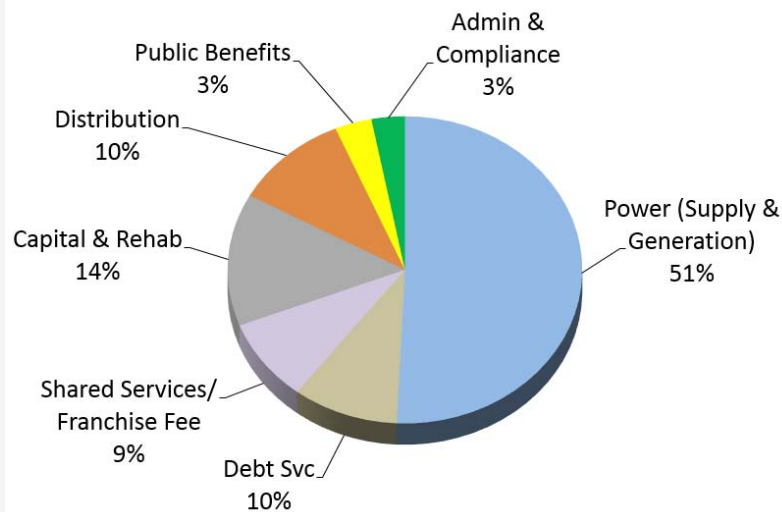
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Electric Expenditures

(\$ millions)			
	FY2015	FY2016	FY2017
Operating	\$126	\$133	\$131
Capital/Debt	\$25	\$41	\$39
Total	\$151	\$174	\$170

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Electric Cost Breakdown



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Major Initiatives in FY2016-17

- Implement new power management services contract
- Improve power plant
- Rehabilitate Douglas and Park substations
- Begin Sierra Vista substation
- Initiate Community Solar program
- Contract for advanced metering

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CIP Budget FY2016-17

Substations Rehabilitation	\$4.5M
Sierra Vista Substation	\$2.5M
Power Plant Improvements	\$5.6M
Development & Technology	\$6.6M
<u>Other Projects</u>	<u>\$2.6M</u>
Total	\$21.8M

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CIP Budget FY2016-17

Substations Rehabilitation

- Douglas: Replace transformers and circuit breakers
- Park: Replace transformer



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CIP Budget FY2016-17

Sierra Vista Substation

- New substation to support the development of Sierra Vista and Westbrook specific plans



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CIP Budget FY2016-17

Power Plant Improvements

- Control System Rehabilitation
- RPP2 Rehabilitation
- Combustion Turbine Gear Replacement



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CIP Budget FY2016-17

Development & Technology

- New Services
- CIS Focus
- Advanced Metering Infrastructure
- Community Solar



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Questions?

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PUBLIC UTILITIES COMMISSION

Title: Roseville Electric Utility 2015 Annual System Reliability Overview

Meeting Date: 5/24/2016

Item #: 4.5.

ATTACHMENTS:

Description

Electric System Reliability



Roseville Electric System Reliability

Assistant Electric Utility Director,
Sonny Person
Power Engineering Manager, Mark Wilhelm

City of Roseville, California



Presentation Overview

- Electric system reliability definition
- System reliability metrics and targets
- Roseville Electric's system performance
- Causes of unscheduled outages
- Outage mitigation
- System design & rehabilitation

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What Does Reliability Mean?

The ability of an electric power system to withstand various conditions while delivering safe and consistent electric service to the customer.

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Electric Key Performance Indicator (KPIs)

- Key Performance Indicators used by Roseville Electric and other electric utilities to evaluate reliability
 - SAIFI – System Average Interruption Frequency Index
 - SAIDI – System Average Interruption Duration Index

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Average Outage Frequency

The System Average Interruption Frequency Index (SAIFI) is a numerical way to measure the average number of times outages occur for all customers.

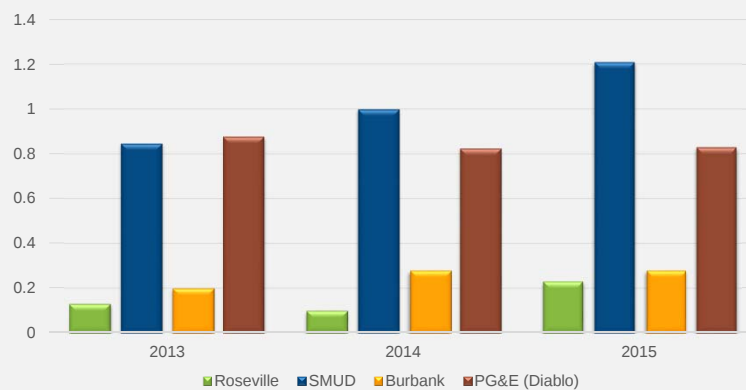
Target:

Roseville Electric strives to have less than one outage every two years for all customers.

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'12-'14 Average Outage Frequency Index(SAIFI)



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Average Outage Duration

The System Average Interruption Duration Index (SAIDI) is the average sustained outage time for all customers.

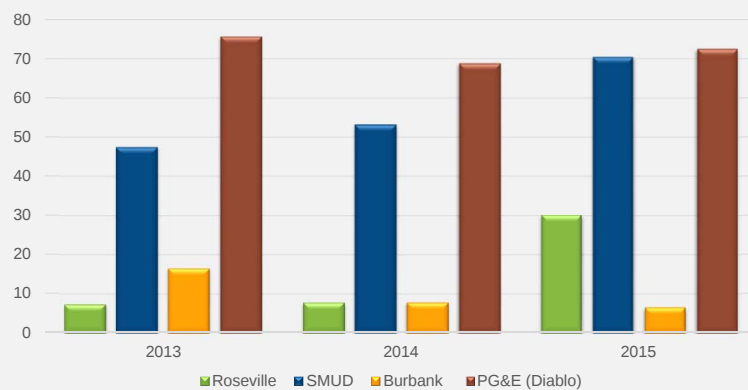
Target:

Roseville Electric strives to restore power in 15 minutes or less.

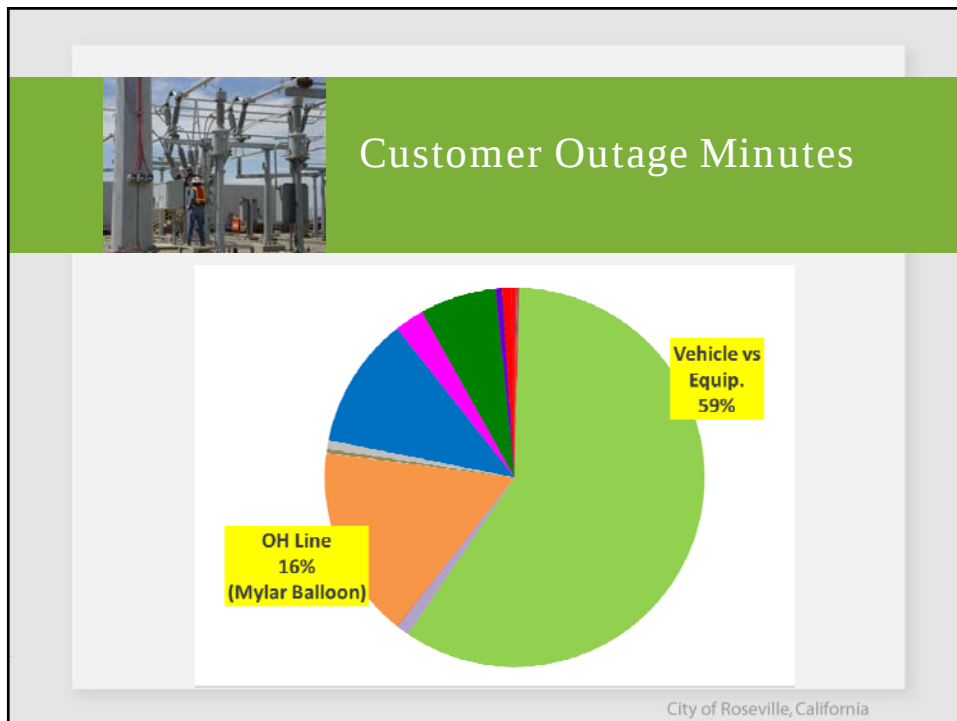
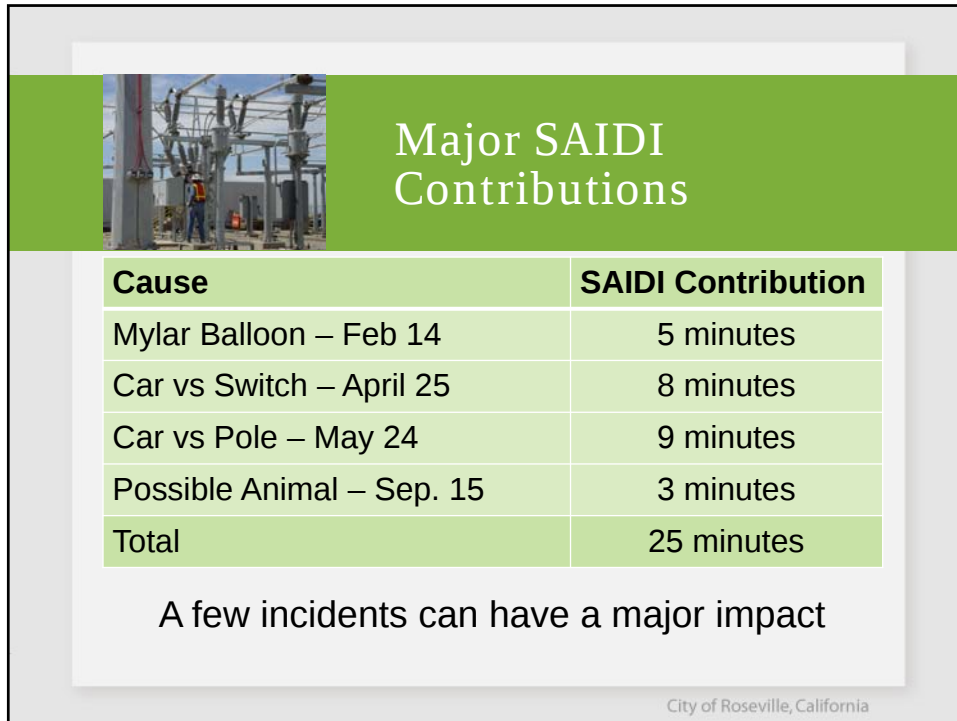
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'12-'15 Average Outage Duration Index (SAIDI)



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Vehicle vs Equipment



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Impacts of Mylar Balloon Contacts

- 100's of Mylar Balloon contact overhead lines annually (U.S.)
- Results in momentary & sustained power outages to customers
- Can cause lines and equipment damage

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Major SAIDI Contribution Mitigation

Cause	SAIDI Contribution
Mylar Balloon – Feb 14	5 minutes
Car vs Switch – April 25	8 minutes
Car vs Pole – May 24	9 minutes
Possible Animal – Sep. 15	3 minutes
Total	25 minutes

A few incidents can have a major impact

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Outage Mitigation

- Regulatory Compliance
 - NERC Standards; CPUC G.O. 95/128/165
- Substation Maintenance & Inspection
- Tree Trimming
- Field equipment inspections
 - Poles
 - Connectors
 - Transformers
 - Circuit breakers

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Designing & Maintaining Our Infrastructure

- Design methodology 85% UG and 15% OH
- New installations design - underground lines with pad-mounted devices
- Minimal risk of failure due to natural causes
- Room for additional growth and flexibility
- Systematically replace equipment

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Questions?



City of Roseville, California



PUBLIC UTILITIES COMMISSION

Title: Roseville Electric Utility Power Management Services Agreement

Meeting Date: 5/24/2016

Item #: 4.6.

ATTACHMENTS:

Description

Power Management Services

Power Management Services Agreement

Roseville Public Utilities Commission
Todd White, Petra Wallace
May 24, 2016

City of Roseville, California

Power Management Services

- Front Office: scheduling and trading
- Middle Office: risk management
- Back Office: payables and data

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History

- ACES has been providing services for the last 10 years
- Issued a Request for Proposals for:
 - Price comparison
 - Service comparison
 - Add new services to existing scope

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Front Office

- Portfolio management for next day through real time
 - Dispatch power plants
 - Schedule natural gas for power plant
 - Trade in the energy markets
 - Coordinate with business partners
- Goal is to meet load at lowest price within constraints

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Middle Office

- Enforce risk policies
- Maintain systems of record
- Produce monthly risk reports
- Credit and contract management
- Dodd Frank reporting and tracking

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Back Office

- Making sure bills are correct
- Maintain data interfaces

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Proposals

- Abacus
- ACES
- NCPA
- Tenaska Power Services
- The Energy Authority
- Z- Global

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Selected ACES

- Proven track record
- Well developed Middle Office services
- Dedicated to adding services and improving existing services
- Best value

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Agreement

- Renewed service agreement
 - June 2016 through December 2023
 - Extensible by mutual consent
 - Replaces existing agreement
 - Total cost \$8,002,523
 - Long contract term due to set-up costs
- New services added:
 - Portfolio performance reporting
 - Portfolio strategy

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