AGENDA

September 26, 2017
VIDEO

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 AUGUST 22, 2017 MINUTES

3.1. August 22, 2017 Minutes

4. ORAL COMMUNICATIONS/PUBLIC COMMENTS

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 Wasteater Utility Overview

Presentation by Wastewater Utility Manager ken Glotzbach with an overview of Wastewater Utility operations, for information.

5.3. Roseville Electric Utility Monthly Update

Report by Electric Utility Director Michelle Bertolino summarizing monthly status of Electric Utility issues, for information.

5.4. Roseville Electric Utility Financial Update

Presentation by Assistant Electric Utility Director Philip McAvoy on the Electric Utility Financial Update, for information.

6. BOARD MEMBER / COMMISSIONER / STAFF REPORT

7. ADJOURNMENT

PUBLIC UTILITIES COMMISSION

Title: August 22, 2017 Minutes

Meeting Date: 9/26/2017
Item #: 3.1.

ATTACHMENTS:

Description

August 22, 2017 Draft Minutes

CITY OF ROSEVILLE CALIFORNIA

MINUTES
Public Utilities Commission
August 22, 2017
7:00 p.m.

Council Chambers
311 Vernon Street
Roseville, CA 95678

1. Roll Call

PUC Commissioners Present:	Blandon Granger Gretchen Hildebrand James McHan John Speight Jim Viele John Vertido
PUC Commissioners Absent:	None
Staff Present:	Dale Olson, Environmental Utilities Principal Engineer Rachel Tooker, Interpretive Services Supervisor Michelle Bertolino, Electric Utility Director Paul Cummings, Assistant Electric Utility Director Emily Isaacs, Electric Business Analyst David Bradford, Electric Customer Programs Supervisor Philip McAvoy, Assistant Electric Utility Director Todd White, Assistant Electric Utility Director Mark Riffey, Senior Energy Services Account Representative Julie Manfredi, Electric Compliance Analyst Larry Winter, Environmental Utilities Recycling and Organics Coordinator Joe Mandell, Senior Deputy City Attorney Karen Sainsbury, Recording Secretary

2. Pledge of Allegiance

3. Minutes of June 27, 2017

The minutes of June 27, 2017 were approved as presented.

4. Oral Comments/Public Comment

None.

5. New Business

a. Election of Chair and Vice Chair
In conformance with Section II-B of the Public Utilities Commission Meeting Procedures, election to be held for Chair and Vice Chair. Elected officers shall assume their positions at the regular meeting in September.

MOTION: Commissioner Hildebrand made a nomination, which was seconded by Commissioner McHan, to appoint Commissioner Viele as Chair of the Roseville Public Utilities Commission.

Ayes: Granger, Hildebrand, McHan, Speight, Vertido, Viele
Noes: None
Absent: None

MOTION: Commissioner Viele made a nomination, which was seconded by Commissioner Granger, to appoint Commissioner Vertido as Vice Chair of the Roseville Public Utilities Commission.

Ayes: Granger, Hildebrand, McHan, Speight, Vertido, Viele
Noes: None
Absent: None

b. Environmental Utilities Monthly Update
Report by Environmental Utilities Director Richard Plecker summarizing monthly status of Environmental Utilities issues, for information.

Dale Olson presented the monthly update in Richard Plecker's absence.

Public Comment: None

c. Roseville Utility Exploration Center Program Update
Presentation by Interpretive Services Supervisor Rachel Tooker with an overview of Center operations, for information.

Commissioner McHan suggested an exhibit demonstrating Net Zero Energy and Advanced Metering.

Public Comment: None

d. Roseville Electric Utility Monthly Update
Report by Electric Utility Director Michelle Bertolino summarizing monthly status of Electric issues, for information.

Public Comment: None

e. Roseville Electric Utility LED Streetlights Update
Presentation by Assistant Electric Utility Director Paul Cummings and Electric Business Analyst Emily Isaacs on LED Streetlights, for information.

Public Comment: None

f. Roseville Electric Utility Community Solar Project

Presentation by Senior Energy Services Account Representative Mark Riffey on the Community Solar Project, for information.

David Bradford presented this item.

Commissioner McHan expressed an interest in a project schedule as soon as one is available.

Public Comment: None

6. Reports – Commission/Staff

Commissioner Viele reported he and Commissioner McHan attended the August 17th South Placer Wastewater Authority board meeting where funding for the Pleasant Grove Wastewater Treatment Plant expansion and energy recovery project was discussed and approved.

7. Proposed Future Agenda Items

Commissioner McHan suggested future presentations on Net Zero Energy for the Home, Advance Meeting Project, and Community Solar Customer Program.

8. Adjournment

Commissioner Vertido moved for adjournment of the August 17, 2017 Public Utilities Commission meeting. Commissioner McHan seconded the motion. The motion passed unanimously at 8:11 p.m.

John Speight
Chairperson

Karen Sainsbury
Recording Secretary

PUBLIC UTILITIES COMMISSION

Title: Environmental Utilities Wasteater Utility Overview

Meeting Date: 9/26/2017
Item #: 5.2.

ATTACHMENTS:

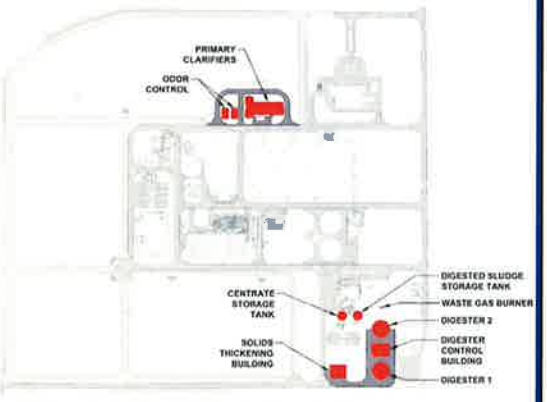
Description

Pleasant Grove Wastewater Treatment Plant Expansion Project Update

Pleasant Grove Wastewater Treatment Plant Expansion

Overview

- **Prepare for Regional Growth**
  - Current PGWWTP treatment capacity of 9.5 MGD projected to be exceeded 2025
  - Anticipated to increase treatment capacity to 12 MGD; accommodate growth through 2035/2040
- **Incorporate Energy Related Improvements**
  - Recover from solids
- **Maximize Solids Digestion Value**
  - Reduce quantity of solids & odors
  - Reduce solids disposal costs
  - Provide opportunities to explore disposal options
- **Simplify Operations**
  - Similar facilities as DCWWTP

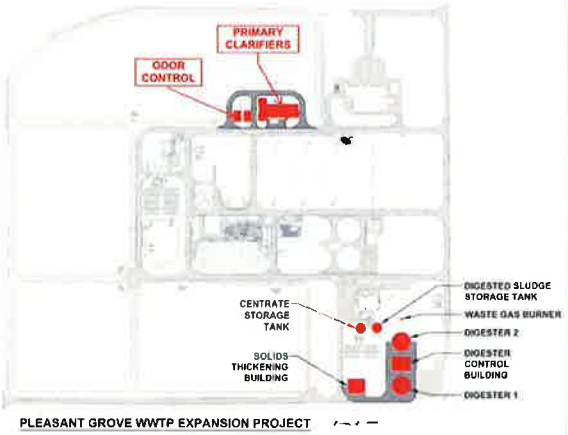


PLEASANT GROVE WWTP EXPANSION PROJECT

Pleasant Grove Wastewater Treatment Plant Expansion

Primary Treatment

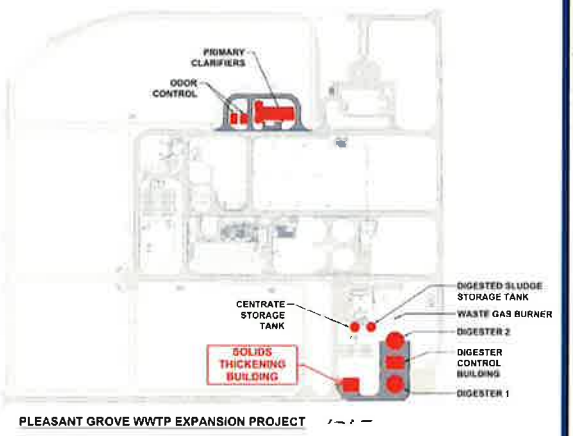
- Four rectangular basins equipped with odor control
  - Remove 60% of the influent solids using gravity
  - Similar to DCWWTP with improvements to aid operations
- Primary solids are easily digested to produce methane gas (energy)



Pleasant Grove Wastewater Treatment Plant Expansion

Solids Handling

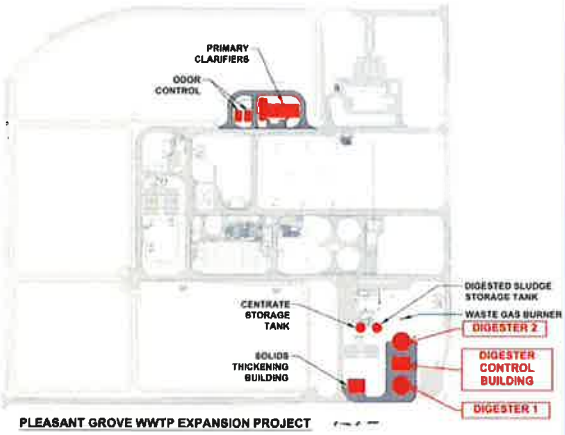
- Reduce water content prior to anaerobic digestion
  - Reduce digester construction cost
  - Reduce heating and mixing requirements



Pleasant Grove Wastewater Treatment Plant Expansion

Anaerobic Digestion

- Stabilizes solids & produces methane gas
  - Gas recovered as a fuel that provides opportunity for the Energy Recovery Project
  - Reduces biosolids odors
- Designed to handle "high strength waste" (FOG)
  - Maximize energy production with this capital investment



Roseville Public Utilities Commission Meeting

Pleasant Grove WWTP Energy Recovery Project

September 26, 2017

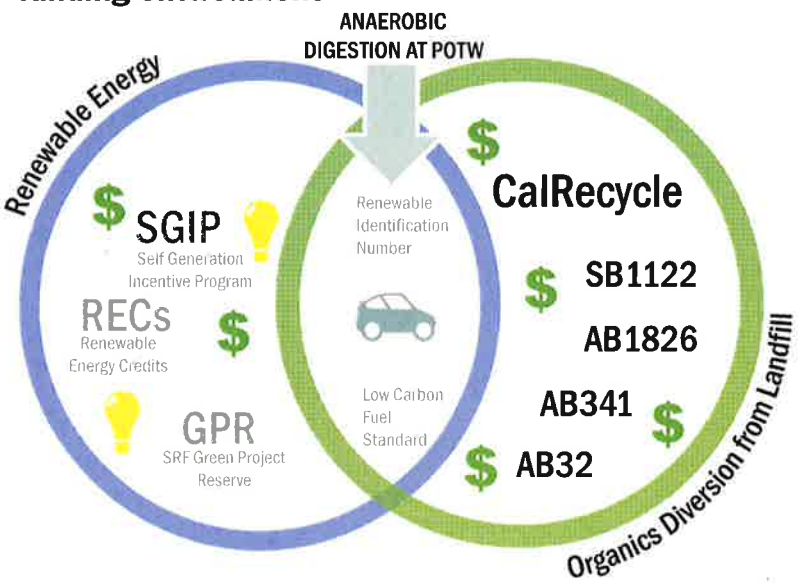
Basis for Project

- New anaerobic digesters at Pleasant Grove will generate digester gas – a renewable fuel similar to natural gas
- Digester gas can be used to power engines, turbines or vehicles
- New digesters at PG (constructed for growth, peak month flows) have capacity for accepting trucked organic waste for co-digestion with municipal solids
- Co-digestion of high strength waste increases gas production

Project Goals

- Make the best use of the digester gas
- Maximize the output of the installed digester gas utilization equipment by increasing gas production via co-digestion
- Mitigate GHG emissions (construction and increased energy use) from the Expansion Project

Digestion is at the nexus of two State initiatives, creating a groundswell of support and dynamic funding environment

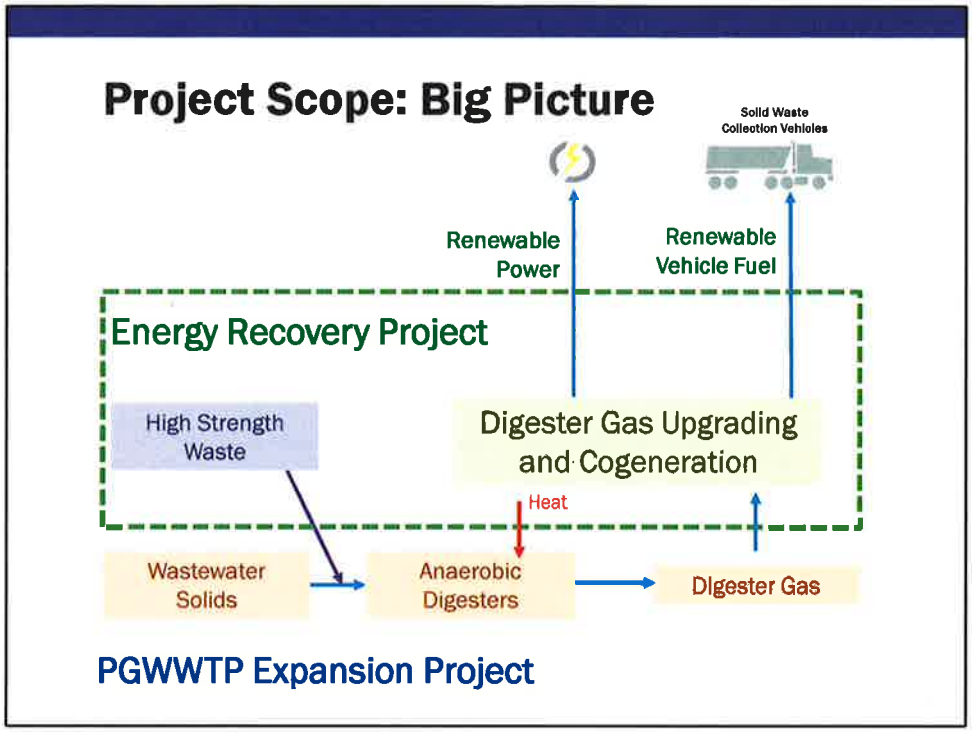


Alternatives Analysis

- Various options evaluated:
  - Internal Combustion Engines
  - Microturbines
  - Renewable compressed natural gas for use as vehicle fuel (rCNG)
  - Direct sale to Roseville Energy Park
  - "Hybrids" of the options above
- Each option evaluated with varying levels of co-digestion and resulting digester gas flows

Recommended Project Scope:

- High strength waste (FOG) receiving facility (truck offloading, screening and storage)
- Digester gas conditioning
- Digester gas separation (CO_2 removal)
- Renewable CNG compression, storage and fueling
- Microturbines for tail gas recovery (800 kW)


Project Scope: Big Picture
Solid Waste Collection Vehicles
Renewable Power
Renewable Vehicle Fuel
Energy Recovery Project
High Strength Waste
Digester Gas Upgrading and Cogeneration
Heat
Wastewater Solids
Anaerobic Digesters
Digester Gas
PGWWTP Expansion Project

PUBLIC UTILITIES COMMISSION

Title: Roseville Electric Utility Financial Update

Meeting Date: 9/26/2017
Item #: 5.4.

ATTACHMENTS:

Description

Roseville Electric Utility's Quarterly Business Progress Report

GENERAL INFORMATION MEMORANDUM

TO: Chair Speight and Members of the Roseville Public Utilities Commission

FROM: Michelle Bertolino, Electric Utility Director

PREPARED BY: Philip McAvoy, Assistant Electric Utility Director

DATE: August 10, 2017

SUBJECT: Roseville Electric Utility's Quarterly Business Progress Report

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Purpose

This memorandum includes Roseville Electric Utility's Business Progress Report which contains financial and performance data as of June 30, 2017. The goal of this report is to provide a concise summary of Roseville Electric's expected financial and operational performance for the fiscal year.

Summary

Attached to this memorandum is Roseville Electric Utility's Business Progress Report. This report is for the fourth quarter of fiscal year 2017 and contains financial and performance data through June 30, 2017. It shows expected financial performance for the fiscal year versus baseline budget. The report also contains a number of performance metrics that track our operations against internal and external benchmarks. By regularly communicating this information to the City Council and the Roseville Public Utilities Commission, Roseville Electric aims to increase transparency into our financial and operational performance.

Roseville Electric Utility
Business Progress Report
Quarter Ending 6/30/17

CITY OF ROSEVILLE
CALIFORNIA

We are pleased to present Roseville Electric Utility's Business Progress Report for the quarter ending June 30, 2017.

This has been an extraordinary year. After years of drought, record breaking snow and rainfall returned our hydroelectric resources to normal storage levels. A new system peak load was reached during an early summer heat wave. Due to our well designed and maintained distribution system, our customers experienced virtually no power outages during this time. Although our steam generator sustained damage earlier this year, our staff and contractors worked diligently to enable simple cycle generation that helped us through the heat wave and will keep the power plant available as the generator awaits replacement.

During the fiscal year, our higher rate long-term debt was refinanced to lower interest rates, we received credit rating upgrades from the three credit rating agencies, and our updated rate and financial policies were approved by the City Council.

We begin the 2018 fiscal year well positioned both operationally and financially to fulfill our mission to improve the quality of life of our community and customers with reliable electricity, competitive prices, exceptional service, and a culture of safety.

The financial results presented in this Business Progress Report include preliminary, unaudited results through June 2017, the end of the fiscal year.

As always, thanks to our staff who work hard to put this report together, and I welcome your comments and feedback.

Michelle Bertolino
Electric Utility Director

August 10, 2017

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Electric Utility Highlights - Quarter Ending 6/30/2017

Financial

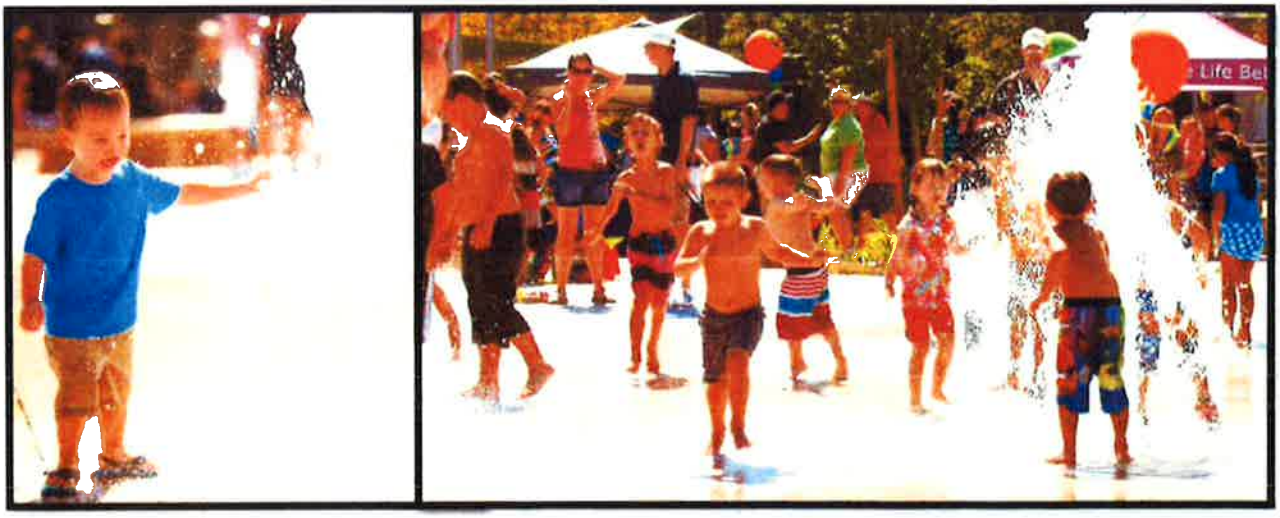
- Overall financial results are projected to be $14 million better than budget due to:
  - Higher operating revenues ($3.4 million), due to a combination of electricity sales revenue decrease and unbudgeted (increased) revenues from the greenhouse gas (GHG) allowance auctions.
  - Lower operating expenses ($9.2 million) largely due to decreased power supply costs, staffing vacancies, and costs for materials and services.
  - Higher non-operating revenues ($1.0 million) due to capital and interest revenues.
- Received bond ratings upgrade to A1 from Moody's Investors Service, Inc. Ratings from Fitch Ratings and S&P Global Ratings were upgraded earlier in the fiscal year.
- Completed several community meetings and presented Roseville Solar 2.0 to the PUC which unanimously recommended approval to City Council.

Power Supply Resources

- Reached a new all-time peak demand for power of 355 MW on June 20th during an early summer heat wave. The previous peak of 342 MW was in summer 2006.
- Power supply costs are anticipated to be below budget due to:
  - Effective hedging program that mitigated cost impact of heat wave
  - Increased deliveries from hydroelectric resources
  - Lower cost market purchases
- Coordinated with manufacturer and insurance company to investigate damage to the steam turbine generator and evaluated for either repair or replacement. Delivery of new generator estimated early next summer.
- Plant operated in simple cycle mode during the early summer heat and continues to operate as needed.

Legislative

- Monitored legislation that proposes to:
  - Allow third-party telecommunications equipment to be placed on utility poles without city permitting and approval.
  - Extend the state's Cap & Trade program, a program designed to reduce GHG emissions, from 2020 through 2030. This legislation passed in July.
  - Increase the amount of renewable energy provided by the utility to 100% by 2045.
  - Increase consumer disclosure requirements related to solar energy system purchase or lease.



Regulatory

- Completed the state 2017 Annual Storm Water Monitoring Reports.
- Completed annual hazardous material inspection and recertification process. Four physical locations were inspected by Roseville Fire and, for the first time, passed with no outstanding issues.
- Established new hazardous material procedures and completed related training. Roseville Fire recognized this effort.
- Submitted annual SF6 (Sulfur Hexafluoride) Emission and Inventory Report to the California Air Resource Board. This report is required due to chemicals in substation breakers.

Customer Relations and Public Benefits

- Reached 13.5 MW (3.8% of system peak) with 3,491 customers with solar systems. Over 98% of customers received a rebate.
- Submitted the 2016 Solar Program Public Power Status Report to the California Energy Commission.
- Completed the fiscal year 2017 commercial LED program achieving energy savings of almost 4 million kWh. Rebates totaled over $900,000.

Distribution

- Installed new control building for the Douglas Substation Rehabilitation project. The new $0.5 million building was ordered a year ago and arrived as scheduled (pictured below).
- Completed the Cirby/Douglas/Berry fiber communications and conductor upgrade. This project dramatically improves communication with the Douglas Substation and substantially increases the capacity of power lines along this route.
- Completed electrical designs for 4 road extension projects, 3 new subdivisions with a total of 161 lots, 1 300 unit apartment complex, and 1 new storage facility.
- Attended the Public Power Lineworkers Rodeo in San Antonio, Texas. Our team placed 7th overall out of 77 teams and scored 100, with no infractions.

Workforce

- Hired five new employees:
  - Paul Cummings, Assistant Electric Utility Director
  - Mason Hastings, Electric Apprentice Line Technician
  - James Padilla, Electric Utility Inspection Technician
  - Allen Varner, Electric Materials Technician I
  - James Wolter, Electric Apprentice Line Technician
- Promoted six employees:
  - Neil Blomquist, Electric System Dispatcher
  - Clinton Castle, Electric Utility Technician II
  - Michael Demello, Electric Apprentice Line Technician
  - Kevin Hicks, Jr, Electric Apprentice Line Technician
  - Todd White, Assistant Electric Utility Director
  - Brian Zard, Electric Resources Analyst II
- Ten recruitments were active as of June 30th.
- Six employees, with combined service of 122 years to Roseville retired during the fiscal year.

Awards

- Smart Electric Power Alliance (SEPA) ranked Roseville 9th nationally for having the most solar installations per customer in 2016. Roseville Electric Utility is the only community-owned electric power provider in the Sacramento region to be recognized by SEPA.
- Northwest Public Power Association ranked Roseville third among the safest community-owned utilities in the northwest in 2016.

Community Outreach and Involvement

- Provided information and interactive displays on safety, energy usage, solar, and rebate programs to over 5,000 people who attended the City's annual Earth Day event in April.
- Over 300 people attended the Get Energized event at the Utility Exploration Center in June. Participants built and raced solar vehicles, played energy related games, learned about energy efficiency, and joined the energy scavenger hunt.

Financial Statements

Pages 5 and 6 contain preliminary unaudited financial statements for Roseville Electric Utility as of June 30, 2017.

Statement of Net Position

The net asset position statement on page 5 shows total assets net of liabilities of $351 million.

Income/Expense Statement

The Income/Expense Statement on page 6 shows the projected net operating income and change in net position. The baseline column consists of the initial budget plus carryforwards from last fiscal year and projections for depreciation and amortization. The expected column reflects forecasted results through the end of the fiscal year. The key changes are:

- Net operating income is expected to be $20.3 million, which is $12.6 million higher than baseline.
- Total year-end change in net position has improved by $14 million to $16.5 million.
    - Electricity sales revenue is down slightly due to mild weather in the fall ($0.7 million decrease)
    - Other operating revenues are up $4.1 million from baseline, primarily due to unbudgeted revenue from the GHG allowance auctions.
    - Operating expenses are down $9.1 million from baseline due to anticipated savings in power supply costs ($3.7 million), reduced materials and services costs ($2.8 million), and reduced labor costs ($2.6 million) related to staff vacancies across the utility.

Statement of Net Position

City of Roseville
Electric Fund
Statement of Net Position
6/30/2017 - Preliminary

Assets	
Current Assets:	
Cash and investments in City Treasury	$ 136,801,797
Restricted cash and investments with fiscal agents	16,348,228
Receivables:	
Accounts	11,392,847
Accrued Interest	65,723
Prepaids	2,009,539
Inventories	10,203,565
Total Current Assets	176,821,699
Noncurrent Assets:	
Investment in NCPA reserves	3,409,325
Capital assets:	
Land & construction in progress	23,546,685
Capital assets being depreciated, net	414,412,064
Total Noncurrent Assets	441,368,074
Total Assets	618,189,773
Deferred Outflows	
Deferred outflow related to pension	3,884,489
Unamortized loss on sale of bonds	7,390,003
Total Deferred Outflows	11,274,492
Liabilities	
Current Liabilities	
Accounts payable	1,521,748
Accrued liabilities	1,512,304
Due to other government agencies	63,960
Current portion of compensated absences	1,399,717
Current portion of long-term debt	-
Deposits	2,557,154
Unearned revenue	1,987,529
Total Current Liabilities	9,042,412
Long-Term Liabilities	
Long-term debt, non-current portion	226,550,442
Compensated absences	2,370,816
Net pension liability	37,644,806
Total Long-Term Liabilities	266,566,064
Total Liabilities	275,608,476
Deferred Inflows	
Deferred Inflow-Actuarial	2,286,182
Total Deferred Inflows	2,286,182
Net Position	
Invested in capital assets net of related debt	211,408,307
Restricted for debt service	16,493,250
Restricted for CARB	6,589,267
Unrestricted	117,078,783
Total Net Position	$ 351,569,607

Income/Expense Statement

As of 6/30/2017 - Preliminary First Close

	Baseline (Initial Budget + Carryforward)[2]	Expected as of 6/30/17	Change from Baseline
Operating Revenues			
Electricity Sales Revenue	161,700,000	160,982,000	(718,000)
Other Operating Revenues	918,500	5,066,000	4,147,500
Total Operating Revenues	162,618,500	166,048,000	3,429,500
Operating Expenses			
Power Supply	87,343,055	82,489,387	(4,853,668)
Operations	24,658,448	21,660,510	(2,997,938)
Administration	6,117,110	4,870,724	(1,246,386)
Depreciation and Amortization[1]	20,495,166	20,495,166	0
Other Operating Expenses	1,338,629	1,284,767	(53,861)
Operating Transfers	14,933,682	14,933,682	0
Total Operating Expenses	154,886,090	145,734,237	(9,151,853)
Net Operating Income (Loss)	7,732,410	20,313,763	12,581,353
Non-Operating Revenues (Expenses)			
Interest and Rents Revenue	1,280,021	1,855,639	575,618
Interest and Fiscal Charges (Expenses)	(10,055,524)	(10,055,607)	(83)
Cost of Issuance		(348,651)	(348,651)
Net Non-Operating Revenues (Expenses)	(8,775,503)	(8,548,618)	226,885
Income (Loss) Before Contributions and Transfers	(1,043,093)	11,765,145	12,808,237
Capital Contributions and Transfers			
Capital Contributions - Connection/Impact Fees	1,741,756	2,582,456	840,700
Contributions in Aid of Construction	3,500,000	3,469,534	(30,466)
Other Non-Operating Transfers Out	1,726,346	1,301,756	(424,590)
Net Capital Contributions and Transfers	3,515,410	4,750,234	1,234,824
Change in Net Position	2,472,317	16,515,379	14,043,062

[1] Estimates of depreciation and amortization, while unbudgeted, are included for completeness.

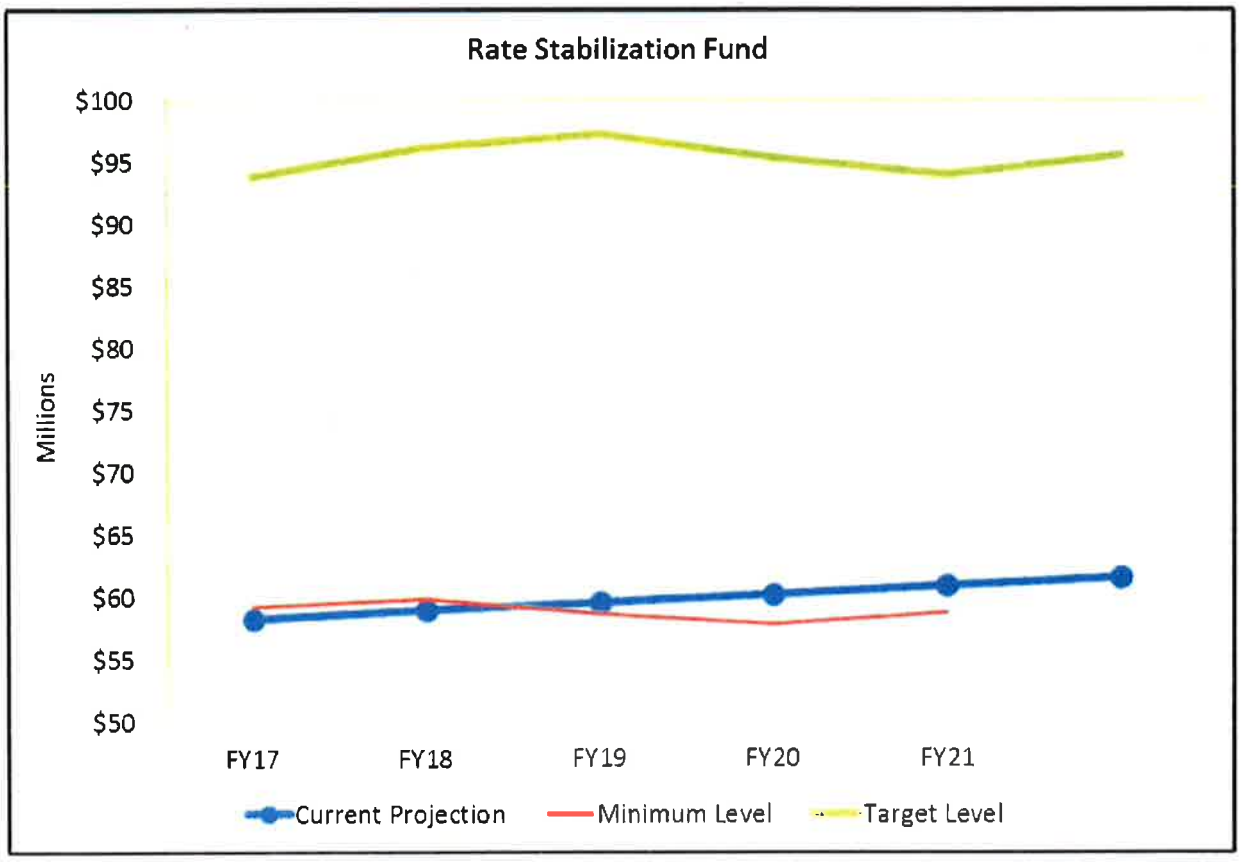
[2] Carryforward budget related to capital and operations are included, approved by Council in November.

Long Term Cash Balance Projections

The table below details the sources of the projected $126 million in unrestricted cash balances at the end of this fiscal year. Forecast does not include any future rate increases.

Cash Balance Forecast As of 6/30/2017 *Amounts in thousands*	FY17	FY18	FY19	FY20	FY21
Rate Stabilization Fund	59,000	59,600	60,300	61,000	61,700
Operations Fund	38,000	40,800	43,300	50,900	63,600
Construction Fund	25,800	27,200	28,200	27,900	27,600
Traffic Signals	2,300	2,700	2,600	2,600	2,600
NCPA - General Operating Reserve	1,500	1,500	1,500	1,500	1,500
Totals	**126,600**	**131,800**	**135,900**	**143,900**	**157,000**

The graph below compares the Rate Stabilization Fund target funding level (65% of annual operating expenses) and minimum funding level (40% of annual operating expenses) with the current projection just below minimum in FY17.



Current Load/Resource Balance

Roseville Electric Utility Portfolio Resources

The table below shows budgeted electricity load and resources versus actual through June 2017. Load is the total energy required to meet customer demand and the table shows the mix of generating assets and market purchases used to meet demand.

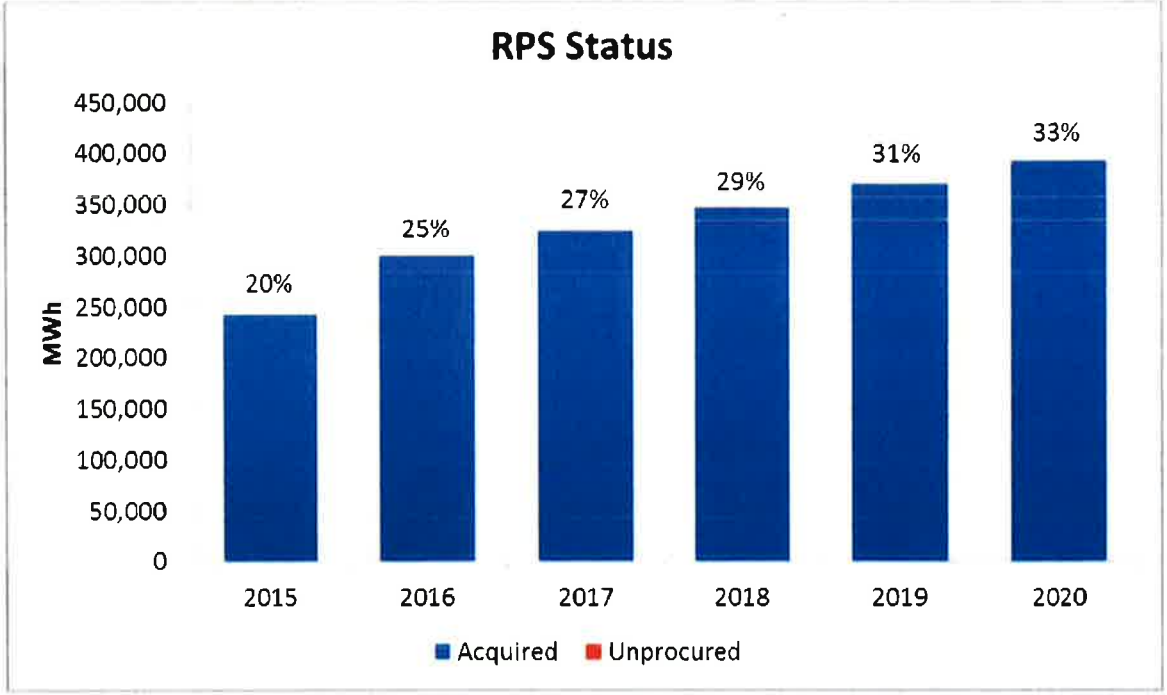
	Budget Fiscal Year to Date 6/30/17 (MWh)	Actuals Fiscal Year to Date 6/30/17 (MWh)	Variance %
Total Load	1,118,913	1,103,569	-1%
Resources			
Roseville Energy Park (REP)	668,738	218,136	-67%
Roseville Combustion Turbines (RPP2)	8,944	580	-94%
NCPA Geothermal (Geo)	58,050	58,885	1%
NCPA Hydroelectric (Calaveras)	49,103	98,895	101%
NCPA Steam Injected Gas Turbine Generator (STIG)	0	1,125	-
Western Base Resource Hydroelectric	104,771	183,280	75%
Renewable Power Purchases	270,938	245,798	-9%
Net Market Purchases	-41,632	296,870	813%
Total Resources	1,118,913	1,103,569	-1%

Key Points:

- REP and RPP2 generation decreased compared to budget due to unexpected increased PG&E gas pipeline charges, reduction in plant capability, and lower priced electricity from other sources, increasing Net Market Purchases.
- NCPA Hydroelectric (Calaveras) and Western Base Resource increases were due to higher than forecasted precipitation this water year.
- Renewable power purchases vary from budget due to flexibility in contract delivery dates.

Renewable Portfolio Procurement Update

The chart below illustrates compliance status with California's Renewable Portfolio Standard (RPS). Roseville has acquired the renewable energy needed to meet 33% RPS obligation through 2020. Senate Bill 350 mandates increased renewable procurement including 40% by 2024, 45% by 2027, and 50% by 2030. Roseville's RPS compliance is met through 2024.



Capital Improvement Project Plan

The utility's comprehensive 5-year capital improvement project plan supports accurate financial forecasting, clarifies resource requirements, and prioritizes future capital investment.

Capital Improvement Projects	Fiscal Year Budget	Fiscal Year Actual	Outstanding Contracts	Variance
New Construction Projects	8,067,653	3,622,347	73,173	4,372,133
Rehabilitation Projects	15,276,592	9,215,486	1,983,890	4,077,030
Technology Projects	4,278,973	2,511,141	465,046	1,302,855
Total	**27,623,217**	**15,348,974**	**2,522,109**	**9,752,017**

- New Construction Projects vary from budget primarily due to timing differences between development activity and the budget process and the extended procurement process for Sierra Vista Substation. It is expected that much of this funding will be spent in the next fiscal year.

- Rehabilitation Projects vary from budget due to timing differences between procurement activity and recording of expenditures for several rehabilitation projects including Douglas Substation Rehabilitation and Park Substation Transformer Replacement.
- Technology Projects vary from budget due to ongoing multi-year projects, continuing beyond the end of the fiscal year including the Advanced Metering Infrastructure project and the City's new utility billing system.

Select Projects

New Projects

- **New Services**, paid for by development, includes the design, inspection, and installation of electric infrastructure improvements in support of residential and commercial development. The fiscal year 2017 budget is $3.5 million.
- **Sierra Vista Substation** will support new development in the Sierra Vista and Westbrook specific plans. Construction is expected to take approximately two years, with the substation ready for service in 2019. Project continues in the procurement phase. Fiscal year 2017 budget is $2.5 million. Total project budget is $8.9 million.

Rehabilitation Projects

- **Douglas Substation Rehabilitation** Phase two of this project consists of transformer replacement and 60kV switchyard replacement and will be completed in fiscal year 2018. Control building was installed this quarter. Fiscal year 2017 budget is approximately $4.7 million. Total project budget is $8.4 million.
- **Park Substation Transformer Replacement** replaces an underperforming transformer at Park Substation to support load. Park Substation serves a large concentration of commercial customers, including the Galleria Mall. Transformer procured and manufacturing in process. Completion expected in fiscal year 2018. Fiscal year 2017 budget (total project) is $1.7 million.
- **REP Controls Upgrade** replaces obsolete control systems for the steam and gas turbines to maintain system reliability. Fiscal year 2017 budget is approximately $3.2 million. Total project budget is $4.1 million.

Technology Projects

- **Enterprise Resource Planning System** will upgrade the City's finance, budget, human resources, payroll, and procurement functions. Project officially kicked off in June with an implementation goal of July 2018. Fiscal year 2017 budget for Electric is $500,000. Total project budget for Electric is $2 million, citywide total project budget is $11 million.
- **Advanced Metering Infrastructure (AMI)** This project will provide two way meter communications for remote reads and greater interaction with customers. Customers can be provided with a detailed view of electricity usage which allows them to more efficiently use electricity. Project continues in the procurement phase. Total project budget for Electric is $13 million, citywide total project budget is $22 million.

Electric Department Performance Metrics

Roseville Electric Utility's mission statement is "We improve the quality of life of our community and customers with reliable electricity, competitive prices, exceptional service, and a culture of safety." The metrics below measure performance against these objectives.

Finances

Financial targets for Rate Stabilization Fund balance, debt service coverage ratio, days cash on hand, bond rating, and risk management policy compliance are shown on the table below with current performance.

Financial Performance Measurement	Fiscal Year 2017 Expected	Target
Year End Rate Stabilization Fund Balance	$59,000,000	$59,200,000 (min)
Rate Stabilization Fund Balance as a Percentage of Operating Expenses	39.8%	40.0%
Debt Service Coverage Ratio	2.83	2.0
Days Cash on Hand	362	>250
Bond Rating	AA-	A+
Compliance with Risk Management Policies	100%	100%

Utility Bills

Roseville Electric Utility provides competitively priced electricity services to the residents and businesses of Roseville. The table below compares average monthly utility bills in three customer classes with the bills of neighboring utilities.

Customer Class	Roseville Electric Utility[1]	SMUD w/o 7.5% UUT[2]	SMUD w/ 7.5% UUT[2]	PG&E[3]
Residential	$118	$116	$124	$188
Medium Business	$3,372	$3,381	$3,635	$4,825
Large Business	$30,544	$32,745	$35,201	$47,875

1. Roseville's average monthly bill considers residential and commercial charges effective January 1, 2017.
2. SMUD's average monthly bills are based on electric charges on schedules RSGH, GSS_T, and GUS_M effective January 1, 2017. Column 3 does not include Utility Users Tax (UUT) of 7.5% that SMUD collects on behalf the City of Sacramento. Column 4 does.
3. PG&E's average monthly bills reflect electric charges on schedules E1, A10, and E19 effective March 1, 2017. It does not include any local UUTs.

- ***Roseville Electric Utility customers save <u>more</u> than $64* million per year*** compared to what they would pay in PG&E service territory.

*PG&E Advice Letter 5011-E-A

Utility Operations

Providing safe and reliable power to customers and responding quickly in the event of an unplanned outage are two operational priorities. The three metrics below measure how many minutes the average customer is without power in a year, how many times the average customer is without power in a year (numbers less than one mean less than one outage per customer per year), and how quickly crews respond to an outage.

Reliability Performance Measurements	12 Months Ending 6/30/2017	Target	SMUD 2016	PG&E[1] 2016
Average Outage Length (minutes per customer, per year)	18.74	< 30	81.3	65.5
Average Number of Outages (per customer, per year)	0.28	< 0.35	1.38	0.81
Average Response Time (minutes)	24	< 30	N/A	N/A

1. The PG&E Diablo District was chosen as the best comparator to Roseville's distribution system since it is primarily an urban/suburban district with a relatively high percentage of underground lines.

- Average outage length increased slightly this quarter as multiple vehicle versus equipment accidents damaged equipment. Three accidents caused substantial damage and power was restored with redirected circuits.

Generation

The generation performance metrics below evaluate the REP against industry averages. The metrics measure its availability, how often it goes out of service, and how reliably it starts up when called.

Roseville Energy Park Performance Measurements	Quarter Ending 6/30/2017	Fiscal Year to Date	Target	5 Year Industry Average
Availability	19%	59.5%	> 90%	89.1%
Forced Outage Rate	96.85%	41.2%	< 4%	5.1%
Start Reliability	100%	95.8%	> 95%	98.9%

- Damage to the steam turbine generator kept the REP offline as combined cycle most of the quarter. A replacement generator has been ordered with delivery expected next summer. Gas turbines CT1 and CT2 are both available as simple cycle during the interim period.

Safety

Our safety slogan is "Build safety into everything you do." The safety performance metrics below include OSHA recordable incidents for lost time, modified duty, and other recordable cases. The metrics also include vehicle accidents.

Incidents	Quarter Ending 6/30/2017	Calendar Year 2017	Target	APPA Annual Average 2016[2]	CY 2016 Recordable Injury Rate[1]	APPA CY 2016 Recordable Injury Rate[2]
OSHA Lost Time Cases	0	0	0	1.27	2.37	4.75
OSHA Modified Duty Cases	0	0	0	0.98		
OSHA Other Recordable Cases	0	0	0	1.73		
Vehicle Accidents	0	0	0	N/A	N/A	N/A

1. Calculation identifies the number of recordable incidents that a company experiences per 100 full-time employees.
2. 2016 APPA data received in March 2017.

Customer Programs - Public Benefits

Public benefit programs help customers reduce their electric energy consumption, lower peak demand, invest in local renewable energy, and support low income electric rate assistance. By California law, 2.85% of electric sales revenue is set aside for Public Benefit programs. The table below tracks fiscal year spending and how much energy customers will save due to these programs when installations are completed. The energy efficiency programs assist in both customer retention and attracting new businesses to Roseville with equipment purchase rebates. These rebates decrease the cost for initial equipment or equipment replacement and reduce monthly electric bills.

Performance Measurement	Fiscal Year to Date	Fiscal Year Target	Percent of Target
Low income, load control, electric vehicle, energy efficiency and solar rebates[1]	$4,679,600[2]	$4,740,106	99%
Estimated energy savings (kWh)	12,575,213	8,007,000	157%

1. Rebates, incentives, and rate assistance program expenses only, no administrative expenses included.
2. Includes actual expenditures and encumbrances committed to vendors and customers.

- Energy savings exceeded target due to the popularity of the commercial outdoor LED lighting program.

Regulatory Compliance

The Compliance Division provides oversight for regulatory compliance across the organization, ensures the appropriate separation of responsibilities exist for meeting federal, state, and county compliance requirements, and serves as the primary liaison for engaging with regulatory agencies. The metrics below measure progress toward annual targets for mandatory reporting and represents number of reports submitted.

Performance Measurement	Quarter Ending 6/30/2017	Fiscal Year to Date	Fiscal Year Target
Federal Compliance – Energy Information Administration	4	15	15
State Compliance – CEC/CARB/SWRCB	2	14	14
Regional Compliance – NERC/WECC	2	15[1]	25
Local Compliance – Placer County/Roseville Fire/Environmental Health	22	27[2]	24

1. Regional Compliance reporting requirements from NERC have been reduced. Fiscal year targets were set before reporting requirements were reduced.
2. Most Local Compliance reporting occurred in the 4th quarter and exceeded target due to additional reporting requirements.

Strategic Plan

The Five Year Strategic Plan identifies the initiatives that are core to overall utility operations. This vital document provides high-level direction and sets the framework for focusing work efforts and resources, strengthening business operations, and working toward common goals to serve the community.

It is critical to be positioned to adapt and respond to evolving customer expectations, new technologies, economic challenges, and market uncertainties. Through the implementation of the Strategic Plan, the utility is equipped with the necessary resources, personnel, and technology needed to meet the community's needs in a fiscally responsible and cost-effective manner.

The plan is focused on four strategic initiatives:

- **Customer** - Enhancing customer satisfaction and confidence
- **Financial** - Maintaining fiscal health through financial stability and competitive rates
- **Operations** - Improving business efficiency and operations
- **Workforce** - Creating an inspired and valued workforce

Multiple projects are highlighted in support of the strategic initiatives:

Customer

- **10 Year Energy Efficiency Goals** – Develop new annual efficiency goals covering a ten year period. Required to be performed by AB 2021 every four years; the previous set was developed in 2013. The 2017 update is complete.
- **Plug In Electric Vehicle Plan** – Evaluate business impacts on the utility from growing customer demand for plug-in electric vehicle charging.

- **Utility Exploration Center Interpretive Plan and Exhibit Refresh** – Improve interior exhibit to align messaging with current strategic objectives of the city's utilities, as well as to update exhibits to match current educational programs. This project returned to the "Not Started" category as objectives of the exhibit refresh are reassessed prior to moving forward.
- **Community Solar Project** – Provide customers the option to invest in a portion of a centrally located solar project sponsored by the utility, as an alternative to rooftop installations. A longer than anticipated contract negotiation phase led to the "Behind Schedule" notation.

Financial

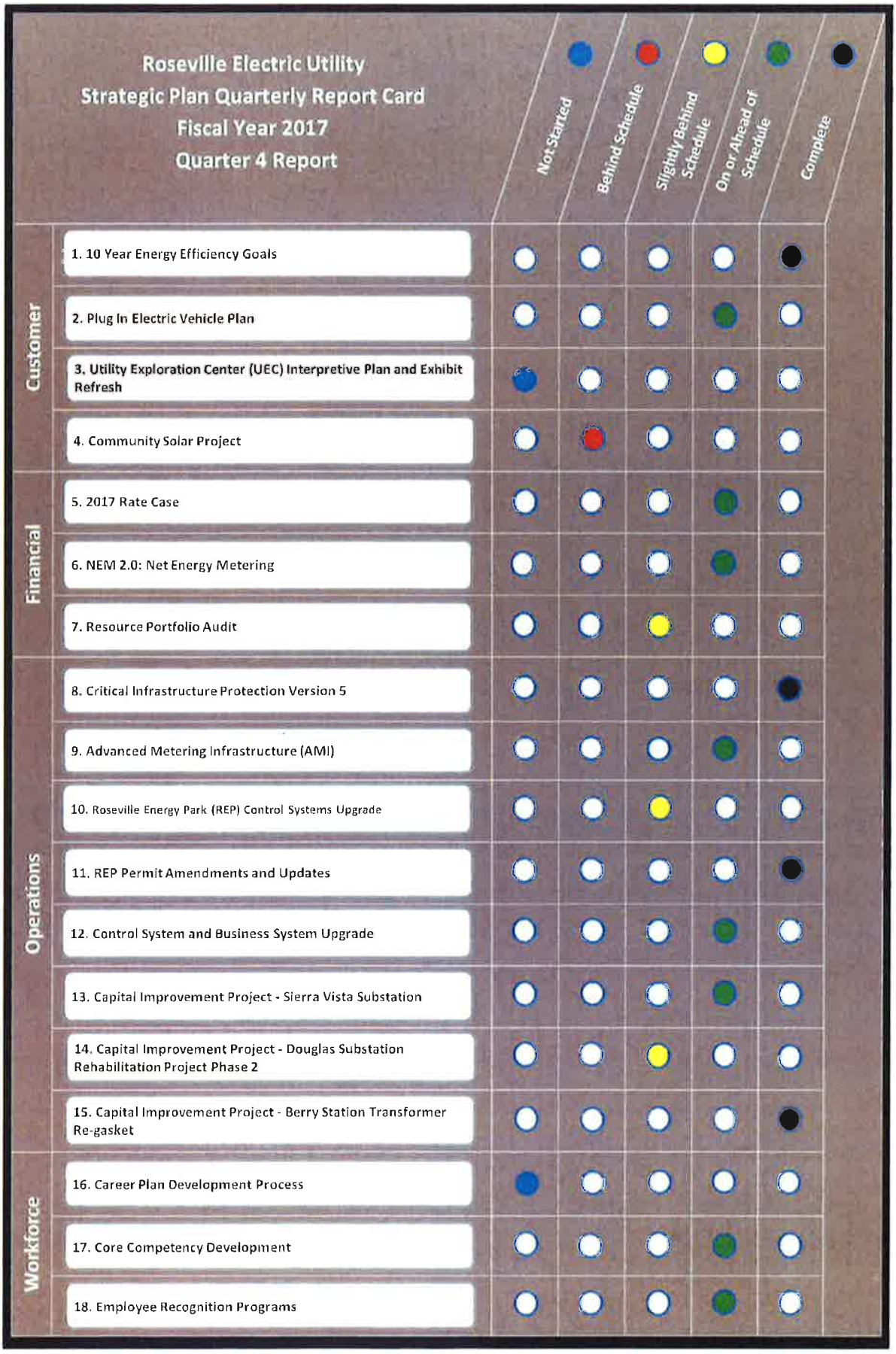
- **2017 Rate Case** – Review electric rates to better align charges with the cost of providing electric service. Includes conducting public outreach, communicating with Roseville Public Utilities Commission, and seeking City Council approval.
- **NEM 2.0: Net Energy Metering** – Develop a net metering successor program for future implementation. State law allows for alternative programs when the current cap is reached.
- **Resource Portfolio Audit** – Audit the resource portfolio to assess utilization, market opportunities, and market risks under multiple future scenarios. The Request for Proposal evaluation process and expanded scope led to the "Slightly Behind Schedule" notation.

Operations

- **Critical Infrastructure Protection Version 5 Implementation** – Implement compliance policies and procedures to meet newly approved cyber security and physical security standards. This project is complete.
- **Advanced Metering Infrastructure** – *Highlighted in CIP section*
- **Roseville Energy Park (REP) Control Systems Upgrade** – *Highlighted in CIP section.* Unanticipated scheduling delays with the contractor led to the "Slightly Behind Schedule" notation. The project is expected to be back on schedule in the near future.
- **REP Permit Amendments and Updates** – Update permits through the California Energy Commission allowing for more operational flexibility. This project is complete.
- **Control System and Business System Upgrade** – Implement best practice system policies to maintain a modern computer infrastructure.
- **Capital Improvement Projects** – Replace or upgrade key substation elements to improve reliability or functionality. Projects include installation of new **Sierra Vista Substation, Douglas Substation Rehabilitation Project Phase 2,** and **Berry Substation Transformer Re-gasket.** The Douglas project is "Slightly Behind Schedule" due to delays with the bidding process. The Berry project is complete.

Workforce

- **Career Plan Development Process** – Create customized career plans for staff positions.
- **Core Competency Development** – Develop of a set of core attributes and competencies for various roles and positions within the utility.
- **Employee Recognition Programs** – Implement programs to recognize employees who have provided exceptional service.


Roseville Electric Utility
Strategic Plan Quarterly Report Card
Fiscal Year 2017
Quarter 4 Report
Not Started
Behind Schedule
Slightly Behind Schedule
On or Ahead of Schedule
Complete
Customer
1. 10 Year Energy Efficiency Goals
2. Plug In Electric Vehicle Plan
3. Utility Exploration Center (UEC) Interpretive Plan and Exhibit Refresh
4. Community Solar Project
Financial
5. 2017 Rate Case
6. NEM 2.0: Net Energy Metering
7. Resource Portfolio Audit
Operations
8. Critical Infrastructure Protection Version 5
9. Advanced Metering Infrastructure (AMI)
10. Roseville Energy Park (REP) Control Systems Upgrade
11. REP Permit Amendments and Updates
12. Control System and Business System Upgrade
13. Capital Improvement Project - Sierra Vista Substation
14. Capital Improvement Project - Douglas Substation Rehabilitation Project Phase 2
15. Capital Improvement Project - Berry Station Transformer Re-gasket
Workforce
16. Career Plan Development Process
17. Core Competency Development
18. Employee Recognition Programs