

Riverside Public Utilities

Board Policy Guide Table of Contents

A. UTILITY BUSINESS POLICIES

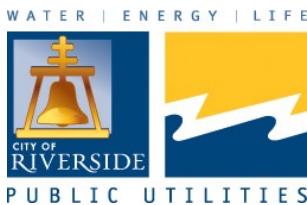
1. Standing Rules
2. Mission Statement
3. Annual Goal Setting Process
4. Performance Measure Evaluation
5. Property Ownership
6. Energy Delivery System
7. Water Delivery System
8. Electric Resources: Maintain Obligation to Serve Customers
9. Water Resources: Rights, Protection & Development
10. Customer Care
11. Fiscal Policies

B. BOARD SPECIFIC POLICIES

1. Role of the Chair for Public Meetings
2. Board Committee Structure
3. Communication and Support of Board
4. Board Training/Education Policy

C. CUSTOMER RELATIONS/FINANCE

1. Board Interaction with the General Manager and Staff
2. Pricing of Products and Services



RIVERSIDE PUBLIC UTILITIES

Board Policy

Title: **Standing Rules**

Date Last Approved: June 2014

Category: **Utility Business Policies**

Date of Next Review: June 2016

Review Committee: Customer Relations/Finance Policy No: **A-1**

Riverside Public Utilities (RPU) exists to build value for its citizen owners by providing electric and water services in a safe, reliable and competitive manner. In pursuit of this purpose, RPU will work to build a reputation for operational effectiveness, customer loyalty, and competitive RPU products and services by:

1. Operating all functions efficiently, cost-effectively, and reliably;
2. Ensuring the financial strength to meet diverse customer needs and maximize owner value;
3. Attracting, retaining and developing a diverse, quality workforce with the skills necessary to succeed in a competitive marketplace;
4. Ensuring the continued best value for citizen owners through effective succession planning;
5. Enhancing customer loyalty by identifying and exceeding customer expectations during customer contact; providing competitive pricing for products and services; providing value added products and services that attract and retain customers; incorporating community input and values in decision making; fulfilling our role as a good corporate citizen; and communicating the value of RPU to its owners and customers; and
6. Exercising the highest practical degree of care in meeting applicable public and employee environmental, health and safety standards.
7. Contributing positively to the local community with participation in special events through sponsorships, and memberships in local community groups.
8. Maintaining sustainable practices and environmental stewardship in compliance with state law.

The Board of Riverside Public Utilities adopts and follows a set of Standing Rules in accordance with the City Charter. A copy of those rules is attached.

Attachment: Standing Rules

STANDING RULES OF THE BOARD OF PUBLIC UTILITIES OF THE CITY OF RIVERSIDE

Pursuant to Section 804 of the Riverside City Charter (Charter), the Board of Public Utilities (RPU Board) hereby prescribes its standing rules, copies of which shall be kept on file in the office of the City Clerk where they shall be available for public inspection and on the City's website.

1. POWERS, DUTIES AND FUNCTIONS (Charter sections 1200 through 1205)

There shall be a RPU Board which shall have the power and duty to:

- A. Consider the annual budget for the Riverside Public Utilities (RPU) during the process of its preparation and make recommendations with respect thereto to the City Council and the City Manager. (Charter Section 1202(a).)
- B. Authorize, and let public works contracts in compliance with Charter Section 1109, within the limits of the budget of RPU, any purchase of equipment, materials, supplies, goods or services, or any acquisition, construction, improvement, extension, enlargement, diminution, or curtailment of all or any part of any public utility system when the amount exceeds \$50,000, and authorize the City Manager, or his designee, to execute contracts or issue purchase orders for the same. This amount may be increased in \$1,000 increments by ordinance to account for inflation whenever the cumulative increase in the consumer price index exceeds \$2,000 from the last increase. No such purchase, or acquisition, construction, improvement, extension, enlargement, diminution or curtailment shall be made without such prior authorization.

Notwithstanding the above, such a purchase, or acquisition, construction, extension, enlargement, diminution or curtailment may be made without prior approval (1) for work done at the request of and at the expense of a customer, pursuant to rules established by the RPU Board and approved by the City Council, or (2) if there is an urgent necessity to preserve life, health or property (i) as determined by the RPU General Manager or, (ii) if the amount exceeds \$100,000 by the RPU General Manager and the City Manager. As soon as practicable thereafter, the RPU General Manager shall take the matter under Charter section 1202(b)(2) to the RPU Board for ratification. (Charter Section 1202(b).)

- C. Within the limits of the budget of the RPU, make appropriations from the contingency reserve fund for capital expenditures directly related to the appropriate utility function. (Charter Section 1202(c).)

- D. Require of the City Manager monthly reports of receipts and expenditures of RPU, segregated as to each separate utility and monthly statements of the general condition of the department and its facilities. (Charter Section 1202(d).) This information may be conveyed by RPU in any manner as directed by the Board, including (i) periodic summaries and (ii) a mid-year and annual comprehensive financial review.
- E. Establish rates for all utility operations as provided under Charter section 1200 including but not limited to water and electrical revenue producing utilities owned, controlled or operated by the City, but subject to the approval of the City Council. (Charter Section 1202(e).)
- F. Authorize the RPU General Manager to negotiate and execute contracts with individual retail customers for water, electric and any other utility service as provided under Charter section 1200, consistent with rates for such individualized service established pursuant to Charter section 1202(e). (Charter Section 202(f).)
- G. Approve or disapprove the appointment of the RPU General Manager, who shall be the department head. (Charter Section 1202(g).)
- H. Designate its own secretary. (Charter Section 1202(h).)
- I. Make such reports and recommendations in writing to the City Council regarding RPU as the City Council shall deem advisable. (Charter Section 1202(i).)
- J. Exercise such other powers and perform such other duties as may be prescribed by ordinance not inconsistent with any of the provisions of this Charter. (Charter Section 12020).)

2. MEMBERS (RMC section 2.10.010)

- A. The RPU Board shall be comprised of nine members appointed by the Mayor and City Council. (RMC section 2.10.010.)
- B. Appointments to fill unexpired terms on the board shall be filled in the same manner as original appointments. (Charter section 805.)
- C. Each member must be a qualified elector of the City at the time of the appointment and throughout his/her service on the RPU Board. (Charter section 802.)
- D. Members who fail to maintain qualified elector status must resign from the RPU Board or be removed in accordance with Charter section 802. (Charter section 802.)

E. The RPU Board shall have at least one member from each Council ward. (Charter section 802.)

3. TERM OF OFFICE (Charter Section 802)

- A. The term of office shall be four (4) years. No member shall serve more than two consecutive full terms. (Charter section 803.) Service of less than one year of an unexpired term shall not be counted as service of one term. (City Council policy.)
- B. In the event that a successor has not been appointed when the term of office of an incumbent member expires, the incumbent member may continue to serve until a successor is appointed. (Charter section 802.)
- C. Members shall be subject to removal by the Mayor and City Council by a motion adopted by five affirmative votes with the mayor entitled to vote. (Charter section 802.)
- D. Members shall be subject to all codes of ethics adopted by City Council resolution and all applicable local, state and federal laws.
- E. Any member may resign from the RPU Board by submitting their written resignation to the Mayor and City Council, as well as to the RPU Board Chair.

4. COMPENSATION; VACANCIES (Charter Section 805)

- A. Members shall serve without compensation for their services on the RPU Board but may receive reimbursement for necessary traveling and other expenses incurred on official duty when such expenditures have received authorization by the City Council. (Charter section 805.)
- B. The City's Code of Ethics sets forth a set of core values that constitute the guiding principles for the establishment of the code. These core values are expressed in a series of aspirations, one of which is to ensure that members of appointed boards, commissions, and committees make a diligent effort to attend all regularly scheduled meetings of their board, commission, or committee. (City Code of Ethics, Section II.C.9.) The RPU Board Chair is responsible to intervene and provide appropriate guidance to members and, if need be, communicate concerns to the City Council. (City Code of Ethics, Section III.A.5.)

- C. Any vacancies, from whatever cause arising, shall be filled by the Mayor and City Council with the Mayor entitled to vote on any such appointment. Upon vacancy occurring leaving an unexpired portion of a term, any appointment to fill such a vacancy shall be for the unexpired portion of such term. If a position on the RPU Board has remained vacant for sixty (60) days, the Mayor shall appoint a person to fill the vacancy in accordance with Charter section 803. (Charter section 803.)
- D. As approved by the City Council on May 6, 2014, board members shall make every effort to notify the Chairperson or his/her designee no later than 24 hours prior to any regular meeting of his/her intent not to attend said meeting. A member's inability to provide 24 hours advance notice shall not preclude the Board from exercising its discretion to excuse said absence as outlined in Section 805 of the City Charter.

The term of any member of the Board shall expire and the position vacated subject to either of the following conditions:

1. He/she is absent unexcused from three consecutive regular meetings of the board, or
2. He/she is absent, whether excused or unexcused, from more than one-third of the regularly scheduled meetings in any calendar year.

5. OFFICERS (Charter Section 804)

- A. The RPU Board shall have at least two officers, Chair (Charter section 804) and Vice-Chair, and such other officers as it deems necessary.
- B. The Chair shall preside over all meetings of the RPU Board and shall have the same rights as other members (Charter section 805), including the right to make or second a motion. The Chair shall have the right to vote on all matters. The Chair shall sign all documents on behalf of the RPU Board after such documents have been approved by the RPU Board, shall appoint the membership of each committee and the committee chair, shall enforce these standing rules, shall serve on or appoint a member to serve on any ad hoc committees as requested by the City Council, shall consult with Board members that are absent at standing committee meetings and shall perform other such duties and delegated responsibilities as may be imposed upon the Chair by the RPU Board. The Chair may also be chosen, on a random basis, to serve as a member of an adjudicating body considering a complaint from members of the public regarding elected or appointed officials that the City's Code of Ethics has been violated. The Chair shall submit a request to the City Manager that a Board member participate in the search process and sit on any interview panel when hiring a new RPU General Manager. The Chair or a Board designee may represent the Board on an issue before the City Council.

- C. In the absence of the Chair, the Vice-Chair shall assume all the duties and powers of the Chair. In the absence of the Chair, all actions taken by the Vice-Chair shall have the same force and effect as if taken by the Chair.
- D. The election of officers shall be conducted annually at the first meeting in March. (Charter section 804.)
- E. All officers shall be elected by the members for a term of one year. A member may serve no more than two successive years in the same office.
- F. Election of officers shall be conducted in the following manner:
 - 1. The outgoing chair shall call for nominations. Any member may make a nomination for officers, and such nomination does not need to be seconded by another member.
 - 2. Nominations will be closed only by motion of a member, and seconded by another member.
 - 3. The Board shall then vote for the officer by a hand vote.
 - 4. In the event of a tie, the two members that received the most votes shall have a run-off election, conducted in the same manner.
 - 5. In the event of another tie, the officer shall be selected by a coin toss.
- G. In the event of the resignation or removal of the Chair during the year, the Vice-Chair shall become the Chair and a new election shall be held for Vice-Chair. In the event of the resignation or removal of any other officer, a new election shall be held to fill the vacant office.
- H. If the Chair and Vice-Chair are both absent at any meeting of the RPU Board, the RPU Board shall elect a Chair Pro Tem which shall perform all duties of the Chair.

6. MEETINGS

- A. Regular meetings of the RPU Board shall be held on the second and fourth Monday of each month at 6:30 p.m., at a location as designated by RPU. Committee meeting times will be annually determined by the committee members, at a mutually convenient time.
- B. A special meeting may be called by the Chair or any five members of the RPU Board. Members shall be given at least twenty-four hours' notice before any special meeting. The notice and agenda for any special meeting will be distributed in accordance with the Brown Act, Section 54950 *et seq.* of the California Government Code.

- C. All meetings of the RPU Board and its standing Committees shall be open to the public. (Charter section 804.) Notice shall be given to the public prior to convening any meeting in accordance with the Brown Act.
- D. A majority of all members of the RPU Board shall constitute a quorum for the transaction of business. A motion shall carry upon the affirmative vote of the majority of the members present at the meeting.
- E. The RPU Board meeting may be cancelled, continued or adjourned by the Chair, or the Public Utilities General Manager or his designee, due to a lack of a quorum or lack of sufficient agenda items.
- F. The RPU Board has designated the Public Utilities General Manager to act as secretary for the recording of minutes of the RPU Board and for any other duties as delegated by the RPU Board. The minutes shall be kept on file in the Public Utilities Department, City Hall, and shall be available for public inspection.
- G. The RPU Board may promulgate such rules, regulations, policies and procedures for its conduct, as it deems necessary.

All adopted rules, regulations, policies, and procedures shall be promptly filed with the City Clerk (Charter section 804), and shall bear the signature of the Chair and the date they were adopted.

7. CONDUCT OF MEETINGS

A. Order of Discussion

The order of discussion after introduction of an item by the presiding Officer will be as follows:

- 1. Generally
 - Staff presentation, information and reports
 - Public comments
 - RPU Board members, including questions, discussion, motion and action
- 2. Public Hearings
 - Opening of public hearing
 - Staff presentation, information and reports
 - Public comments
 - Closure of public hearing
 - RPU Board members, including questions, discussion, motion and action

3. Appeals

- Staff presentation, information and reports
- Appellant presentation, comments and information
- Public comments
- Closing statements by appellant
- Closure of public testimony
- RPU Board members, including questions, discussion, motion and action

Once the agenda item is placed before the RPU Board for questions, discussion, motion and action, no member of the public shall be allowed to address the RPU Board without the consent of the RPU Board

B. Oral Communications from the Audience

A portion of each agenda of a regular meeting of the RPU Board shall provide an opportunity to members of the public to address the RPU Board on any issue concerning Riverside Public Utilities business, including consent calendar items, or item of interest that is within the subject matter jurisdiction of the RPU Board ("Citizens Participation").

The RPU General Manager and members of the Board of Public Utilities may:

1. Briefly respond to statements made or questions posed by members of the public.
2. Ask questions for clarification.
3. Provide a reference to staff or other resources for factual information.
4. Request staff to report back to the Board at a subsequent meeting on any matter.
5. Take action to direct staff to place a matter of business on a future agenda.

Each person desiring to address the RPU Board during Citizens Participation, Board Discussion Items, Workshops, or Public Hearings shall fill out and file a form provided by the RPU Board Secretary. Requests to be heard must be submitted to the RPU Board Secretary any time prior to the conclusion of public comment on the agenda item. Each person speaking shall limit his/her remarks to three (3) minutes. For each and every public speaker, the RPU Board Secretary shall be required to utilize the timing system which provides the speakers with notice of their remaining time to complete their presentations.

The RPU Board retains the right, by majority vote, to alter the time allotted for public remarks.

C. Time Limitation for Public Testimony at Public Hearings and Public Discussion

The RPU Board reserves the right to determine the total amount of time for testimony on any particular hearing matter and/or for each individual speaker.

For each and every public speaker, the RPU Board Secretary shall be required to utilize the timing system which provides the public with notice of their remaining time to complete their presentations. In the further interest of time, speakers may be asked to limit their comments to new materials and not repeat what a prior speaker said. Organized groups may choose a single spokesperson who may speak for the group. Speakers may not concede any part of their time to another speaker.

D. Decorum and Enforcement of Decorum

The RPU Board hereby incorporates by reference the sections related to decorum and enforcement of decorum as set forth in the City Council Rules of Procedure and Order, as amended from time to time.

8. COMMITTEES

- A. The RPU Board has established the following three standing committees: Customer Relations/Finance, Electric, and Water. Appointments to the committees shall be made annually by the Board Chair, upon consultation with the individual members, concurrent with the election of officers by the first meeting in April. The exception is the Customer Relations/Finance Committee, which shall be composed of at least the Board Chair, the Vice-Chair and the chairs of the remaining two committees.
- B. Each committee shall consist of four members, with a Chair appointed by the Board Chair, except for the Customer Relations/Finance Committee, whose chair shall be the Board Chair. Three members of each committee shall constitute a quorum for the transaction of business. Normally, each committee will meet on a monthly basis.
- C. The RPU Board or the Board Chair may appoint an ad hoc committee as needed. Each ad hoc committee shall consist of an appointed Chairperson and at least two other RPU Board members. Ad hoc committees serve a limited or single purpose, are not perpetual, and are dissolved once their specific task is completed.

9. APPOINTMENT TO COMMITTEES OF OUTSIDE ORGANIZATIONS

When openings arise on committees for outside organizations (including but not limited to trade organizations, governmental associations and other outside organizations), the RPU General Manager will agendize the item on the next scheduled board meeting. Prior to the meeting, the RPU Board will be provided an outline of the duties and responsibilities of the position and be requested to indicate their interest in serving on the committee. At the scheduled board meeting, the RPU Board will request that the City Council nominate a member.

10. REPORT TO THE CITY

The RPU Board shall present an annual report of its activities for the past year to the Mayor and City Council, at the direction of the Mayor and City Council.

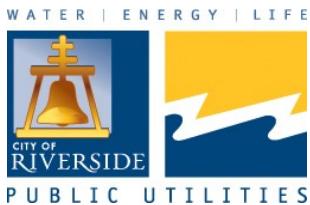
11. AMENDMENT OF STANDING RULES

The standing rules may be amended at any regular meeting of the RPU Board by majority vote of the RPU Board, provided that notice of such amendment was provided in accordance the Brown Act.

Respectfully Submitted,

Board Chair
David Austin

Date Approved



RIVERSIDE PUBLIC UTILITIES

Board Policy

Title: **Mission Statement**

Date Last Approved: June 2014

Category: **Utility Business Policies**

Date of Next Review: June 2016

Review Committee: Customer Relations/Finance Policy No: **A-2**

Riverside Public Utilities Mission Statement

Riverside Public Utilities is committed to the highest quality water and electric services at the lowest possible rates to benefit the community.

Mission, Vision, Core Values, and Goals are established through a strategic planning process. A copy of the current Board adopted Strategic Plan is attached.

Attachment: Mission, Vision, Core Values, and Strategic Plan

Utility 2.0

Strategic Plan: 2017-2021



Riverside Public Utilities

January 2017

Version 1.1



CITY COUNCIL

Mike Gardner | Ward 1
Andy Melendrez | Ward 2
Mike Soubirous | Ward 3
Paul Davis | Ward 4
Chris Mac Arthur | Ward 5
Jim Perry | Ward 6
John Burnard | Ward 7
Rusty Bailey | Mayor

BOARD OF PUBLIC UTILITIES

Jennifer O'Farrell | Ward 1
Kevin Foust | Ward 2
Elizabeth Sanchez-Monville | Ward 3
Dave Austin | Ward 4
Andrew Walcker | Ward 5
Vacant | Ward 6
Ronald Cole | Ward 7
Justin Scott-Coe | Citywide 1
David Crohn | Citywide 1

EXECUTIVE MANAGEMENT

John A. Russo | City Manager
Girish Balachandran | Utilities General Manager
Kevin S. Milligan | Deputy General Manager
Michael J. Bacich | Assistant General Manager - Customer Relations/Marketing
Laura M. Chavez-Nomura | Assistant General Manager - Finance/Administration
Daniel E. Garcia | Assistant General Manager - Resources
George R. Hanson | Assistant General Manager - Energy Delivery
Todd L. Jorgenson | Assistant General Manager – Water
Mujib U. Lodhi | Assistant General Manager – Operational Technology

Table of Contents

General Manager's Message	1
Strategic Plan Overview	3
Planning and Implementation	4
Goals	6
Customer Experience.....	7
Reliability & Resiliency	11
Affordability	16
Sustainability	20
Operations Excellence	23
Strong Workforce.....	29
Appendix A – Organizational Profile	32
Administration/General Manager's Office	33
Customer Relations / Marketing.....	33
Energy Delivery.....	34
Finance	35
Operational Technology.....	35
Resources	36
Water.....	37
Appendix B – Division Vision Statements	39
Office of the General Manager	40
Customer Relations.....	41
Energy Delivery.....	43
Finance	44
Operational Technology.....	45
Resources	47
Water.....	48
Appendix C – Biennial KPI Targets.....	49
Call Center	49
Counter/Develop Center	49
Billing & Rebates.....	49
Satisfaction Ratings.....	49
System Reliability.....	50

Asset Replacement and Renewal	50
Cyber and Physical Security	50
Generation Resiliency.....	50
Financial Strength.....	51
Affordability & Competitiveness.....	51
Additional Revenue.....	51
Supply Portfolio.....	52
Conservation and Efficiency.....	52
Utility Operations.....	52
Capital Projects	53
Forecasting	53
Regulatory Compliance.....	53
Supply	53
Operations	53
Safety.....	54
Training	54
Recruitment & Retention.....	54
Appendix D – Supporting Documents.....	55
Appendix E – Riverside 2.0 Update.....	56

General Manager's Message



To ensure future stability and growth we – City Council, RPU Board and staff - developed the Utility 2.0 plan. It sets a direction for the next ten years, concentrating on accelerated infrastructure replacement and implementing new technology projects. We outline four options to replace our crumbling utility infrastructure, embed smart and innovative technology, lay out policies that will keep us financially strong and develop a vision for a workforce that is skilled, committed, safe and engaged; all aimed at improving the customer experience.

Just as we assured reliability with large infrastructure improvements over the past decade, these next ten years require us to shift focus toward the poles, wires, and pipes that were put in during the post-World War II period in the 1950s. The need for reliable and affordable utilities for Riverside is not negotiable. Our electric and water delivery infrastructure, most of which was built decades ago, is deteriorating and must be renewed and replaced. Without a change in our current path, we will miss opportunities and take on more risk. Sinkholes and rupturing pipelines will occur at greater frequency as the miles and miles of old pipelines fail. Without rapidly increasing our electric system infrastructure renewal, electric outages will be more frequent, take longer to fix and be more widespread. By accelerating infrastructure replacement, we will not only reduce the unthinkable risk of erratic service delivery, we will innovate using modern technology and improved processes.

Today our lives are more digital and more connected compared to 10 years ago. Do you remember that it was only 10 years ago that the Apple iPhone was announced? The same global

changes that have driven disruptive technologies like smart phones, Google Maps, and self-driving cars is influencing the way we deliver reliable and affordable delivery of electricity and water to our community.

As we replace our infrastructure we will embed modern technology and cyber-security measures into all of our investments so that customer satisfaction is increased. Today, we don't know when your lights are out or when you have a water leak, until you call us. System sensors combined with interconnected data collectors will help us know more about our system and become more responsive to customer's needs. We will look at larger opportunities to expand our fiber optic infrastructure and enable higher bandwidth and encourage economic development.

Renewables are here to stay and grow. Just as the internet created an information highway, our current grid needs to be transformed to an energy highway that is renewables-friendly. Not only will we rebuild the physical infrastructure of the grid to be renewables-ready but we will change our relationship with customers. They are not only consumers of our product, but thousands of them are producers of electricity. We will ensure that our grid is resilient enough to serve all our customers' electric needs in the future, whether they need us as their primary source of power or for us to be there as a backup.

We are blessed to have a resilient source of water in the Bunker Hill Basin. We have remained water independent since 2008 and delivered only local sources of water. We will continue to maximize the value of every drop of water. We have water to use, not to waste. California is just coming out of a 6-year historic drought that damaged the state's agricultural economy and brought a keen understanding of the value of water to all of us. Our water efficiency programs to help our customers use water more effectively will continue to be improved. We will develop new sources of supply to ensure our community growth.

Success of the Utility 2.0 plan is dependent on effective implementation. This strategic plan is not an immovable sign post; it outlines the actions we will take to start the implementation of the Utility 2.0 vision. As our industry changes, we will be flexible and adapt quickly to change our plan. Winston Churchill said, "Plans are of little importance, but planning is essential." Each year we will report our progress on achieving the goals outlined in this document to the Board, City Council and community. We are on an exciting and innovative path. This path of innovation will preserve and add value to the entire community. I look forward to our journey and thank you for partnering with us to keep RPU a continuing and growing asset to Riverside.



Girish Balachandran
General Manager

Strategic Plan Overview

This Strategic Plan incorporates RPU's Mission and Vision with broader goals and aspirations from the City-wide Riverside 2.0 planning framework. It identifies goals, strategies, objectives and key performance indicators for implementation of RPU's Utility 2.0 strategy. The plan is intended to guide staff, management, the Board of Public Utilities and the City Council in the allocation of resources and management of our assets.

Our **mission** is to provide the highest quality water and electric service at the lowest possible rates to benefit the community.

Our **vision** is to be recognized as a unique community asset with a global reputation for innovation, sustainability and an enhanced quality of life.

Our **core values** define our approach to our work: Safety | Honesty and Integrity | Teamwork | Professionalism | Quality Service | Creativity and Innovation | Inclusiveness and Mutual Respect | Community Involvement | Environmental Stewardship.

Six **Focus Areas** provide the foundation of the Strategic Plan and form the basis of our business approach. These Focus Areas are derived from the Utility 2.0 Strategic Plan and are an outgrowth of the Three-year and Ten-year goals from our prior strategic planning efforts. Our focus areas are:

- Customer Experience
- Reliability & Resiliency
- Affordability
- Sustainability
- Operational Excellence
- Strong Workforce

Our **goals** define what RPU wants to achieve; they explain 'what' not 'how' and tell where we are going rather than how we will get there. **Strategies** define which actions to take to achieve success in our focus areas, and may take years to achieve. **Objectives** reflect what we need to accomplish in the near term; they are specific, measurable, attainable, relevant and timely actions to move the needle. **Key Performance Indicators (KPIs)** measure how well we are doing in achieving success.

Planning and Implementation

Our fundamental purpose in developing a strategic plan is to define the actions we will take over the next ten years to implement our Utility 2.0 vision. The process was designed to assess where we've been, where we need to go and respond to near and long term challenges. The General Manager led the development of our plan with participation by the community, Board of Public Utilities, Mayor and City Council. Implementation of the Strategic Plan is a Utility wide effort and will be led by the General Manager and senior management team.

Our strategic planning process kicked off in January 2015 with public workshops hosted by the Board. Those workshops reviewed literature on the current and future state of our industry and publications by thought-leaders. Utility specific long-range plans, ranging from workforce development and technology to resource and infrastructure were reviewed for adequacy and relevance. During these early workshops, the concept of Utility 2.0 was introduced and refined. Early Board workshops were then expanded to include joint workshops with the Mayor and City Council to further refine the roles of governance and ensure alignment between the City Council and RPU goals.



Throughout early 2015, senior management staff developed and refined Utility 2.0 roadmaps, working with cross-functional teams to consider input from various sources such as **infrastructure master plans**, which optimize capital project investments; **integrated resource plans**, which define our long range water and power supply strategies; **workforce development plans**, which identify our current and future required competencies and our strategies to achieve them; a long range **financial proforma**, which identifies affordability and constraints; **new initiatives** and **employee and customer feedback** to define and update the focus areas; and strategies, objectives and key performance indicators.

In August 2015, the resulting roadmaps were presented in public workshops to the Board and City Council for feedback and refinement. Infrastructure and resource investment options were presented ranging from status quo spending (falling further behind) to industry leading (referred to as Option 4). Ultimately, the Board and Council conceptually adopted Option 3, an accelerated infrastructure renewal plan, subject to considerations of affordability.



Through a series of meetings in 2016 with senior staff, managers and supervisors we further refined **Division Specific Visions** for Utility 2.0 (See Appendix B), identified Key Performance

Indicators and began the process of “mapping” our current practices to improve efficiency and service quality.

The Strategic Plan is adopted by the Board of Public Utilities. The plan is far reaching and includes all components to implement the Utility 2.0 Option 3 roadmaps considered by the Board and City Council. As such, implementation of certain aspects are subject to and dependent upon funding. The Strategic Plan provides an overall high-level direction to prioritize resources to achieve future success; it does not describe all of the specific actions. By developing actions that are linked to the Strategic Plan, we can ensure focus and allocation of resources on the highest priorities.

The Strategic Plan guides the development of our biennial budget and the five- and ten-year capital improvement program to ensure that necessary resources are provided to implement the strategies and objectives.



Throughout the document, the icon symbolizes objectives which are in part or fully dependent on additional funding as identified in the Utility 2.0 roadmaps.

The plan includes a series of KPIs that are measurable, comprehensive and reflect the various strategies contained within the six focus areas. Biennial **KPI Targets** are identified in Appendix C. **KPI results** are measured against our targets to enable us to evaluate our progress. KPI reports will be presented to the Board quarterly.

Goals

Customer Experience

Provide world-class customer-centered service in every encounter, every day.

Reliability & Resiliency

Renew, replace, upgrade, modernize and extend the water and electric system infrastructure to ensure reliability is maintained or improved and that resilience to extreme events is maintained or improved.

Affordability

Keep water and electricity prices affordable and comply with Fiscal Policy.

Sustainability

Meet all city goals and state and federal compliance targets related to efficient use of water and electricity, renewable resources, greenhouse gas emissions.

Operational Excellence

Instill, maintain and grow a culture of learning, innovation and continuous improvement in all internal processes achieving excellence in all our operations.

Strong Workforce

Attract, retain, train, educate and promote employees ensuring that a high level of employee performance, productivity and engagement is achieved.

Customer Experience

Goal: Provide world-class customer-centered service in every encounter, every day.

Key Performance Indicators

Call Center

- a) Customer Service Center answered call rate, monthly
- b) 311 answered call rate, monthly
- c) Call resolution - first call, monthly

Counter/Development Center

- d) Plan checks completed in City specified timeframe
- e) Customer design projects completed within timeframe
- f) Solar PV meter installations completed within 3 days
- g) Happy or Not customer rating, monthly

Billing and Rebates

- h) Customer billing accuracy
- i) Rebates completed within timeframe

Satisfaction Ratings

- j) Key Customer Visitations satisfaction rating
- k) RKS Customer Satisfaction rating, annual

Strategy 1

Consistently deliver exceptional customer transaction experiences to maintain results to meet or surpass applicable objectives and KPI measures.

Objectives:

- 1) Implement and maintain appropriate staffing levels, policies and training to answer 95% of incoming calls at the RPU Call Center on an ongoing basis.
 - i) Mike Bacich
- 2) Implement and maintain appropriate staffing levels, policies and training to answer 95% of incoming calls at the 311 Call Center on an ongoing basis.
 - i) Mike Bacich
- 3) Implement two alternative payment methods for retail customer billing by July 1, 2017
 - i) Mike Bacich
- 4) Develop policies and programs for Board of Public Utilities and City Council consideration to increase the number of customers enrolled in E-bill by 20% year over year by December 31, 2018.
 - i) Mike Bacich
- 5) Implement and staff "one-stop-shop" to streamline City development and building permits process by May 1, 2017.
 - i) Kevin Milligan
 - ii) George Hanson
 - iii) Todd Jorgenson
 - iv) Mike Bacich
- 6) Implement and maintain appropriate staffing levels, policies and training to complete all small solar residential PV Plan checks within 72 hours
 - i) George Hanson
- 7) Implement and maintain appropriate staffing levels, policies and training to complete all development permit plan checks within City specified time frames
 - i) George Hanson
 - ii) Todd Jorgenson
- 8) Complete documentation of three current and future state customer-facing business processes related to development permitting and processing by March 31, 2017
 - i) George Hanson
 - ii) Todd Jorgenson
- 9) Update contacts of commercial and industrial customers quarterly and record results in Salesforce database by March 31, 2017 and quarterly thereafter.
 - i) Mike Bacich
- 10) Develop a visitation plan for commercial and industrial customers that include Key Account quarterly and all non-residential customers eventually (dates to be developed in plan) by July 31, 2017.
 - i) Mike Bacich
- 11) Evaluate the feasibility of installing a news ticker on the 311 app that advises of ongoing operational activity that may impact traffic, parking, etc. by December 31, 2017.

- i) Mike Bacich
- ii) Mujib Lodhi

Strategy 2

Non-Transactional contacts – Implement and maintain customer contact strategies to meet or surpass applicable objects and KPI measures.

Objectives:

- 1) Develop a yearly marketing plan that addresses the uses of marketing resources for the following year (# of impressions reduced to increase direct mail, etc) by December 31, 2017 and annually thereafter.
 - i) Mike Bacich
- 2) Develop a marketing plan that addresses operationalizing marketing and specifically calls out major upcoming projects and all related communications, education, outreach, internal and external resources for each project by December 31, 2017.
 - i) Mike Bacich
- 3) Implement and maintain appropriate staff policies and training to increase use of Salesforce internally. Develop a plan to integrate Salesforce into Enuesta so account managers will have more precise customer information in the field by December 31, 2017.
 - i) Mike Bacich
- 4) Develop a plan for the mobile use of Salesforce either by phone or tablet after CIS integrations is complete by December 31, 2017.
 - i) Mike Bacich
- 5) Implement and maintain appropriate staff policies and training to maintain 100% accuracy of Key Accounts contact database by December 31, 2017.
 - i) Mike Bacich

Strategy 3

Maintain quality service in all aspects of service operations that meets or surpasses our customers' expectations.

Objectives:

- 1) Implement and maintain appropriate staff policies and training to maintain domestic water that meets or exceeds all state and federal drinking water standards.
 - i) Todd Jorgenson
- 2) Implement and maintain appropriate staff policies and training respond to street light service requests within 72 hours.
 - i) George Hanson

- 3) Implement and maintain appropriate staff policies and training to provide applicants with plan check comments within approved time frame.
 - i) George Hanson
 - ii) Todd Jorgenson
- 4) Implement and maintain appropriate staff policies and training to respond to power quality complaints within 21 business days of date of complaint.
 - i) George Hanson

Prioritize budget requests to conduct RKS customer satisfaction survey each alternate year for residential and commercial customers by August 31, 2017.

- ii) Mike Bacich

Reliability & Resiliency

Goal: Renew, replace, upgrade, modernize and extend the water and electric system infrastructure to ensure reliability is maintained or improved and that resilience to extreme events is maintained or improved.

Key Performance Indicators

System Reliability

- a) Average duration of an electric outage – system wide lens (SAIDI)
- b) Average number of electric outages – system wide lens (SAIFI)
- c) Average electric outage customer restoration time – impacted customer lens (CAIDI)
- d) Average number of momentary (<5 minutes) electric outages – system wide lens (MAIFI)
- e) Water system leakage and loss (Infrastructure Leakage Index)

Asset Replacement and Renewal

- f) Miles of Pipeline Replacement annually
- g) Number of Poles replaced annually
- h) Substation Relay replacements annually

Cyber and Physical Security

- i) Cyber security projects completed annually
- j) Physical security projects completed annually

Generation Resiliency

- k) RERC and Springs Black Start Availability

Strategy 1

Develop and maintain electric and water supply facilities to fully implement our integrated resource plans.

Objectives:

- 1) Maintain an ongoing 5-year equipment replacement plan for the RERC to ensure black start capability and compliance with state and federal regulations.
 - i) Daniel Garcia
- 2) Maintain an ongoing 5-year equipment replacement plan for the Springs Generation Facility to ensure black start capability and compliance with state and federal regulations.
 - i) Daniel Garcia
- 3) Design and construct the Phase 1 Jackson Street pipeline to extend the recycled water system by November 30 2017.
 - i) Todd Jorgenson
- 4) Design and construct the Phase 2 Jackson Street pipeline to extend the recycled water system by June 30, 2018.
 - i) Todd Jorgenson
- 5) Initiate five well rehabilitation or replacement projects by March 31, 2017.
 - i) Todd Jorgenson
- 6) Coordinate with San Bernardino Valley Municipal Water District and other agencies to ensure construction of the Seven Oaks Dam enhanced recharge project by June 2021.
 - i) Todd Jorgenson
- 7) Coordinate with San Bernardino Valley Municipal Water District and other agencies to ensure construction of the San Bernardino foothills active recharge project by June 2025.
 - i) Todd Jorgenson
- 8) Design and construct the Riverside North Aquifer Storage and Recovery project (Santa Ana River rubber dam and related recharge basins) by June 2025.
 - i) Todd Jorgenson
- 9) Conduct ongoing pro-active maintenance and membrane replacement at John W. North Water Treatment Plant to maintain capacity at 6 MGD or better.
 - i) Todd Jorgenson
- 10) Conduct ongoing pro-active groundwater basin monitoring to address risk of rising perchlorate levels and/or lower contaminant action levels.
 - i) Todd Jorgenson
- 11) Conduct ongoing pro-active maintenance at RERC and Springs to meet 90% or better generation availability (including forced and planned outages) annually.
 - i) Daniel Garcia
- 12) Conduct ongoing pro-active maintenance at RERC and Springs to reduce forced outage rate by 1% year over year.
 - i) Daniel Garcia
- 13) Procure adequate forward power and/or natural gas to meet approved power hedge percentages for the 5-year forward period.
 - i) Daniel Garcia

- 14) Procure adequate power and/or natural gas to maintain 100% compliance with the system and flexible resource adequacy requirements.
 - i) Daniel Garcia

Strategy 2

Develop and maintain electric and water transmission facilities to fully implement our infrastructure master plans.

Objectives:

- 1) Secure property rights to begin construction of the RTRP 69kV RERC-Harvey Lynn and RERC-Freeman sub-transmission facilities by October 31, 2017.
 - i) George Hanson
- 2) Design and construct the RTRP 69kV RERC-Harvey Lynn and RERC-Freeman sub-transmission facilities by 2020.
 - i) George Hanson
- 3) Coordinate with Southern California Edison to ensure SCE construction of the RTRP 230 kV transmission facilities to Wildlife Substation by 2023.
 - i) George Hanson
- 4) Design and construct upgrades to ten substation 12kV switchgear by July 31, 2017.
 - i) George Hanson
- 5) Design and construct the Arlanza Substation and related sub-transmission improvements by June 2027.
 - i) George Hanson
- 6) Design and construct seven substation transformer replacements by June 2027. Establish interim time goals for each of project phase by June 30, 2017.
 - i) George Hanson
- 7) Conduct ongoing GO-165 inspections of electric distribution facilities to meet compliance schedule.
 - i) George Hanson
- 8) Conduct ongoing GO-174 inspections of substation equipment to meet compliance schedule.
 - i) George Hanson
- 9) Complete the replacement of all sub-transmission electro-mechanical relays to digital relays by 2023. Establish interim time goals for each of project phase by June 30, 2017.
 - i) George Hanson

Strategy 3

Develop and maintain electric distribution and grid edge and water distribution and network edge facilities to fully implement our infrastructure master plans.

Objectives:

- 1) Develop and deploy an advanced metering program for all commercial, industrial and institutional water and electric customers by June 30, 2018.
 - i) Mujib Lodhi
- 2) Develop and deploy an advanced metering program for all residential water and electric customers by 2020.
 - i) Mujib Lodhi
- 3) Evaluate the potential and implement, if cost-effective, a Demand Response program by June 30, 2018.
 - i) Mike Bacich and Daniel Garcia
- 4) Complete design of the Phase 1 LED streetlight conversion program by April 30, 2017.
 - i) George Hanson
- 5) Complete construction of the LED streetlight conversion program by 2020. Establish interim time goals for each of Phase 2 through Phase 5 projects by June 30, 2017.
 - i) George Hanson
- 6) Increase pipeline replacement to achieve 100 year replacement cycle (from 5 miles per year to 8.5 miles per year) by 2020.
 - i) Todd Jorgenson
- 7) Complete conversion of six 4kV circuits to 12kV by December 31, 2017.
 - i) George Hanson
- 8) Complete Physical Security high priority findings from 2016 Vulnerability Assessment by September 30, 2017.
 - i) Mujib Lodhi
- 9) Complete Physical Security medium-priority findings from 2016 Vulnerability Assessment by February 28, 2018.
 - i) Mujib Lodhi
- 10) Complete Cyber Security high priority findings from 2016 Vulnerability Assessment by July 31, 2017.
 - i) Mujib Lodhi
- 11) Complete Cyber Security medium-priority findings from 2016 Vulnerability Assessment by December 31, 2017.
 - i) Mujib Lodhi
- 12) Develop and implement on-going proactive program to ensure 100% compliance with required cyber-security training annually by June 30, 2017.
 - i) Kevin Milligan
 - ii) Mujib Lodhi
- 13) Conduct ongoing maintenance of water system valves to meet five-year maintenance cycle.
 - i) Todd Jorgenson

- 14) Conduct ongoing maintenance of water system fire hydrants to meet five-year maintenance cycle.
 - i) Todd Jorgenson
- 15) Complete vegetation maintenance and line clearance work to meet annual maintenance cycle.
 - i) George Hanson

Strategy 4

Develop and maintain an active Emergency Preparedness Program to plan for and manage Utility functions during extreme events and allow for efficient and effective recovery following extreme events.

Objectives:

- 1) Update and maintain a comprehensive Emergency Response Plan by September 30, 2017 and annually thereafter.
 - i) Kevin Milligan
- 2) Develop and maintain a Business Continuity Plan in consultation with the City Finance Department and Emergency Operations staff, by December 31, 2017 and annually thereafter.
 - i) Laura Nomura
- 3) Conduct tabletop emergency exercise in coordination with City EOC to test DOC readiness and capabilities by November 30, 2017 and annually thereafter.
 - i) Kevin Milligan

Affordability

Goal: Keep water and electricity prices affordable and comply with Fiscal Policy.

Key Performance Indicators

Financial Strength

- a) Debt Service Coverage
- b) Undesignated Cash Reserve level
- c) Bond Ratings

Affordability and Competitiveness

- d) Weighted Average Rates

Additional Revenue

- e) Customer Collection Rates
- f) Monetized Passive Assets

Strategy 1

Develop and implement revenues, rates, and rate structure to meet Utility 2.0 objectives through 2025.

Objectives:

- 1) Develop and prepare recommendations for Board of Public Utilities and City Council consideration to implement electric and water rate increases to meet 5 year revenue target for Utility 2.0 Option 3 projects by June 30, 2017.
 - i) Laura Nomura
- 2) Develop and prepare recommendations for Board of Public Utilities and City Council consideration to implement time of use rates for all customer classes by 2022.
 - i) Laura Nomura

-  3) Develop and prepare recommendations for Board of Public Utilities and City Council consideration to implement allocation-based water rates (also called “budget-based rates) by 2020.
 - i) Laura Nomura
- 4) Develop and prepare recommendations for Board of Public Utilities and City Council consideration to implement successor rate tariff for solar net-energy-metering customers by March 31, 2018.
 - i) Laura Nomura
-  5) Develop and prepare recommendations for Board of Public Utilities and City Council consideration to implement an electric vehicle charging rate tariff for residential, commercial and public access, including DC fast charge, by December 31, 2017.
 - i) Laura Nomura
 - ii) George Hanson
 - iii) Mike Bacich
- 6) Develop and implement a pro-active monitoring plan to maintain annual retail revenues within 98% of budgeted level by June 30, 2017.
 - i) Laura Nomura

Strategy 2

Maintain financial reserves and debt obligations in accordance with Fiscal Policy and 10-year financial pro-forma.

Objectives:

- 1) Develop and implement a pro-active monitoring plan to maintain debt service coverage (DSC) ratio above 1.75 by March 31, 2017.
 - i) Laura Nomura
- 2) Develop and implement a pro-active monitoring plan to maintain undesignated cash reserve levels for water and electric utilities within the levels designated in the adopted Reserve Policy by March 31, 2017.
 - i) Laura Nomura

Strategy 3

Actively manage expenditures and exercise cash control to maintain targets in Fiscal and Reserve Policies and adopted biennial budget and capital improvement program.

Objectives:

- 1) Develop and implement a pro-active monitoring plan to maintain annual operating expenditures within the adopted budget amount by March 31, 2017.
 - i) Laura Nomura

- 2) Develop and implement a pro-active monitoring plan to decrease write off rate by 20% year over year by March 31, 2017 and annually thereafter.
 - i) Mike Bacich

Strategy 4

Competitiveness – Manage all aspects of our financial operations to maintain competitive rates across all classes of water and electric service.

Objectives:

- 1) Develop and maintain a long range financial pro-forma to ensure residential and commercial rates are competitive with weighted average rates of neighboring agencies, based on average electric and water bill amounts by June 30, 2017.
 - i) Laura Nomura

Strategy 5

Additional Revenues - Monetize passive assets to continue existing revenue streams and add new revenue streams to make up for losses from lower commodity use and other financial impacts.

Objectives:

- 1) Develop property marketing strategy for consideration by the Board of Public Utilities and City Council by March 31, 2017.
 - i) Kevin Milligan
- 2) Document internal lease procedures in conjunction with City policy to speed projects to market by March 1, 2017.
 - i) Kevin Milligan
- 3) Select and procure a property inventory and lease management software application by March 1, 2017.
 - i) Kevin Milligan
- 4) Complete negotiations with Hillwood for lease of the Waterman Golf Course property by February 28, 2017.
 - i) Kevin Milligan
- 5) Complete negotiations with WMWD for a long term wheeling agreement by March 31, 2017.
 - i) Todd Jorgenson
- 6) Complete negotiations with WMWD and other water agencies for sales of excess/wholesale water deliveries by June 30, 2017.
 - i) Todd Jorgenson

- 7) Engage actively in the Northside vision process regarding the Ab Brown, Pellissier Ranch and former Riverside Golf Course properties to facilitate completion of visioning process by July 31, 2018.
 - i) Kevin Milligan
- 8) Develop a master plan for Mission Square Garage automation and electric vehicle charging by July 31, 2017.
 - i) Kevin Milligan
- 9) Develop standardized agreements and rate tariffs for lease of dark fiber infrastructure for consideration by Board of Public Utilities and City Council by April 30, 2017.
 - i) Kevin Milligan
 - ii) Mujib Lodhi
- 10) Develop strategy to monetize excess Compliance Period 2-PCC1 renewable energy credits by April 30, 2017.
 - i) Daniel Garcia

Sustainability

Goal: Meet all city goals and state and federal compliance targets related to efficient use of water and electricity, renewable resources, greenhouse gas (GHG) emissions.

Key Performance Indicators

Supply Portfolio

- a) GHG Emission level
- b) Renewable Portfolio (% renewables)
- c) Recycled water deliveries

Conservation and Efficiency

- d) Annual kWh savings from conservation efforts
- e) Water conservation against SBx7-7 target
- f) Solar rooftop PV progress against SB1 target

Utility Operations

- g) E-bill adoption rate

Strategy 1

Manage utility operations to meet compliance targets and City goals.

Objectives:

- 1) Conduct ongoing pro-active maintenance at RERC and Springs to maintain NOx levels below air district permitted levels.
 - i) Daniel Garcia
- 2) Procure adequate and appropriate power supplies to reduce GHG emissions to 1990 levels to meet Assembly Bill 32 2020 compliance deadline.
 - i) Daniel Garcia
- 3) Procure adequate and appropriate power supplies to reduce GHG emissions to 40% below 1990 levels to meet Senate Bill 32 2030 compliance deadline.
 - i) Daniel Garcia



-  4) Procure adequate and appropriate power supplies to reduce GHG emissions to 80% below 1990 levels to meet Executive Order S-3-05 2050 compliance deadline.
 - i) Daniel Garcia
- 5) Develop policy and program recommendations for Board of Public Utilities and City Council consideration to enable 4-star community designation by June 30, 2018.
 - i) Mike Bacich
- 6) Complete Greenhouse Gas inventory and report to WRCOG by December 31, 2017.
 - i) Mike Bacich

Strategy 2

Develop and implement resource conservation and efficiency programs to meet compliance targets.

Objectives:

- 1) Prepare a revised water conservation plan, incorporating current best practices, for inclusion in the Water Efficient Landscape Ordinance (WELO) by December 31, 2017.
 - i) Mike Bacich
 - ii) Todd Jorgenson
- 2) Complete for Board of Public Utilities and City Council consideration a plan to reduce environmental commitment of recycled water from 10,000 acre feet annually (afa) to 5,000 afa by December 31, 2017.
 - i) Todd Jorgenson
- 3) Complete for Board of Public Utilities and City Council consideration an agreement with San Bernardino Habitat Conservation Plan participants for adoption of the HCP by December 31, 2017.
 - i) Todd Jorgenson
- 4) Complete for Board of Public Utilities and City Council consideration an agreement with San Bernardino Habitat Conservation Plan participants to complete mitigation projects using recycled water by December 31, 2017.
 - i) Todd Jorgenson
- 5) Develop policies and programs for Board of Public Utilities and City Council consideration to meet and exceed the SBx7-7 water conservation goal of per capita water use 20% less than base year by the year 2020 as well as to establish efficient water use as a way of life in Riverside by June 30, 2018.
 - i) Todd Jorgenson
 - ii) Mike Bacich
- 6) Develop policies and programs for Board of Public Utilities and City Council consideration to implement energy efficiency of 1% per year and at a cost less than 7 cents/kWh by December 31, 2017.
 - i) Mike Bacich
- 7) Acquire and implement customer engagement programs and customer-facing applications to communicate individual energy use and facilitate energy efficiency by July 31, 2017.
 - i) Mike Bacich

- 8) Acquire and implement customer engagement programs and customer-facing applications to communicate individual water use and facilitate water efficiency by July 31, 2017.
 - i) Mike Bacich

Strategy 3

Develop and maintain renewable water and power resources to meet compliance targets and fully implement our integrated resource plans.

Objectives:

- 2) Complete negotiations for a solar PPA provider for RPU water facilities with RPU electric service territory by September 30, 2017.
 - i) Todd Jorgenson
 - ii) Daniel Garcia
- 3) Engage a consulting firm to determine recharge opportunities for the Riverside North and Riverside South groundwater basins by March 31, 2017.
 - i) Todd Jorgenson
- 4) Complete for Board and City Council consideration a program for to convert customers to recycled water service by December 31, 2017
 - i) Todd Jorgenson
- 5) Procure adequate and appropriate power to meet SB350 Renewable Portfolio Standard targets; 33% by 2020 and 50% by 2030.
 - i) Daniel Garcia
- 6) Develop feasibility report for energy storage at Tequesquite solar project by July 31, 2017
 - i) Daniel Garcia
- 7) Develop a plan for review by the General Manager to achieve 5% energy efficiency savings per year through 2030 by December 31, 2017
 - i) Daniel Garcia
 - ii) Mike Bacich

Operations Excellence

Goal: Instill, maintain and grow a culture of learning, innovation and continuous improvement in all internal processes achieving excellence in all our operations.

Key Performance Indicators

Capital Projects

- b) Energy Delivery CIP complete on budget on time
- c) Water CIP complete on budget on time
- d) OTO projects completed on budget on time

Forecasting

- e) Annual Power Forecast accuracy
- f) Annual Water Forecast Accuracy

Regulatory Compliance

- g) Water Quality compliance
- h) NERC/WECC report compliance

Supply

- i) Generation availability
- j) Water Supply Independence (local resources)
- k) Annual % system water loss

Operations

- l) Street light repair cycle time
- m) Water leak repair cycle time

Governance

- n) Legislative advocacy
- o) Alignment with Riverside 2.0

Strategy 1

Implement legislative and regulatory advocacy and intervention actions to positively impact legislation and regulations at all levels of government.

Objectives:

- 1) Develop, in coordination with City Intergovernmental affairs officer, for consideration by the Board of Public Utilities and City Council a two year legislative platform for use in advocacy and communication by December 31, 2017.
 - i) Kevin Milligan
- 2) Prepare all necessary collateral material for ongoing use at CMUA, SCPPA, APPA, AMWA and ACWA advocacy meetings in Sacramento and DC by January 15, 2017 and annually thereafter.
 - i) Kevin Milligan
- 3) Prepare and calendar updates to Board on Legislative and Regulatory issues by February 28, 2017 and bi-annually thereafter.
 - i) Kevin Milligan

Strategy 2

Maximize the use of technology to improve utility operations across the enterprise.

Objectives:

-  1) Develop and implement Operational Technology Office staffing plan (Stage 1) by June 30, 2017.
 - i) Mujib Lodhi
 - ii) Kevin Milligan
- 2) Complete the replacement of all land mobile radios by June 30, 2017.
 - i) George Hanson
 - ii) Mujib Lodhi
-  3) Prepare policy, programs and staffing plan to replace and maintain the GIS application and data for the entire City enterprise by December 31, 2017.
 - i) Mujib Lodhi
- 4) Complete the Operations Data Management System implementation and the associated conversion of 20 manual and disparate processes with associated dashboards by June 30, 2018.
 - i) Mujib Lodhi
-  5) Complete the Phase 1 Asset Management System implementation for electric and water by December 31, 2018.
 - i) Mujib Lodhi



- 6) Develop a staffing plan and program (Stage 2-Critical Positions) for implementation and maintenance of the nineteen projects identified in the Strategic Technology Plan by December 31, 2017.
 - i) Mujib Lodhi
- 7) Prepare use case and business objective recommendations and communicate with City Chief Financial Officer for the acquisition of an Enterprise Resource Planning (ERP) system by July 31, 2017.
 - i) Mujib Lodhi
 - ii) Laura Nomura
- 8) Develop a policy for the use of the Enterprise Asset Management System including identification of service levels for various asset classes by December 31, 2017.
 - i) Mujib Lodhi
 - ii) Todd Jorgenson
 - iii) George Hanson
 - iv) Daniel Garcia
 - v) Laura Nomura

Strategy 3

Develop and implement process improvements to enhance effective and efficient operations across the enterprise.

Objectives:

- 1) Implement all the performance audit recommendations from the 2016 Baker Tilly Audit and the Hometown Connections Organization Review. Update on progress and completion twice per year, March 2017 and September 2017, and bi-annually thereafter.
 - i) Kevin Milligan
 - a. Performance Audit – 8 items
 - b. Hometown Connections – 27 items
 - i) Laura Nomura
 - a. Financial Audit – 10 items
 - b. Performance Audit – 16 items
 - c. Hometown Connections – 17 items
 - i) Daniel Garcia
 - a. Hometown Connections – 9 items
 - i) Mike Bacich
 - a. Performance Audit – 1 item
 - b. Hometown Connections – 12 items
 - i) George Hanson
 - a. Performance Audit – 9 items
 - b. Hometown Connections – 12 items
 - i) Todd Jorgenson
 - a. Performance Audit – 10 items
 - b. Hometown Connections – 3 items

- i) Mujib Lodhi
 - a. Performance Audit –16 items
 - b. Hometown Connections - 12 items
- 2) Complete Dennis Snow video training and reading by January 31, 2017; identify processes and develop improvement plans by April 30, 2017; complete implementations by December 31, 2017.
 - i) All AGMs
- 3) Coordinate one training per year for divisions on analytical techniques and methodologies applicable to the Utility by December 31, 2017 and annually thereafter.
 - i) Daniel Garcia
- 4) Coordinate and facilitate quarterly meetings of analysts to network, share knowledge and distribute analytical techniques across the organization by June 30, 2017 and quarterly thereafter.
 - i) Daniel Garcia
- 5) Create Data Analytics Group (including a position for emerging technologies) staffing plan by June 30, 2017 and complete hiring by December 31, 2017.
 - i) Kevin Milligan
 - ii) Daniel Garcia
- 6) Institute root-cause-analysis (RCA) training and implementation RCA framework and reporting for all significant process errors by March 31, 2017.
 - i) All AGMs

Strategy 4

Develop and maintain regulatory and risk management programs to maintain compliance targets and internal policy requirements.

Objectives:

- 1) Develop, in consultation with the City Chief Innovation Officer, Information Security Officer and City Risk Manager, a cyber-security communication and response plan and establish subsequent time goals for implementation of plan objectives by December 31, 2017.
 - i) Mujib Lodhi
- 2) Create Technology Security Group (including a position for cyber-security) staffing plan by June 30, 2017 and complete hiring by December 31, 2017.
 - i) Mujib Lodhi
 - ii) Kevin Milligan
- 3) Complete applicable staff activities and reporting to maintain compliance with Internal Compliance Program (ICP) for NERC/WECC requirements on an ongoing basis.
 - i) LeeAnne Uhler
- 4) Retain consulting services to ensure 100% counter-part risk financial review annually by January 31, 2017 and continuing thereafter.
 - i) LeeAnne Uhler

- 5) Complete annual review and, if warranted, Board and City Council adoption of revisions to the internal compliance and energy risk management policies by March 31, 2017 and annually thereafter.
 - i) LeeAnne Uhler
 - ii) Daniel Garcia
 - iii) Risk Management Committee
- 6) Implement and maintain appropriate staffing levels, policies and training to ensure 100% compliance with applicable provisions of the Power Resources Risk Management Policy.
 - i) LeeAnne Uhler
 - ii) Daniel Garcia
- 7) Implement and maintain appropriate staffing levels, policies and training to ensure 100% compliance with all applicable water quality regulations.
 - i) Todd Jorgenson

Strategy 5

Implement and maintain meter-to-cash activities to meet or surpass our customers' expectations.

Objectives:

- 1) Implement and maintain appropriate staffing levels, policies and training to ensure 99.6% or better meter reading completion and accuracy.
 - i) Mike Bacich
- 2) Implement and maintain appropriate staffing levels, policies and training to ensure 100% completion rate for all service orders monthly.
 - i) Mike Bacich
- 3) Implement and maintain appropriate staffing levels, policies and training to reduce billing adjustments by 10% annually year over year
 - i) Mike Bacich
 - ii) Laura Nomura
- 4) Implement and maintain appropriate staffing levels, policies and training to ensure 98% or better accuracy on first pass customer billing annually.
 - i) Mike Bacich
 - ii) Mujib Lodhi

Strategy 6

Implement leading practices in system operations and maintenance to deliver excellence in all aspects of utility operations.

Objectives:

- 1) Implement and maintain appropriate staffing levels, policies and training to ensure response to all Priority 9 (Emergency) and Priority 7 (immediate, pending Digalert) within 72 hours of first report by January 31, 2017.
 - i) Todd Jorgenson
- 2) Implement and maintain appropriate staffing levels, policies and training to ensure that the annual Infrastructure Leakage Index is at or below 2.5 and that the Water Loss Audit will be completed in conformance to SB 555 by October 1, 2017.
 - i) Todd Jorgenson

Strong Workforce

Goal: Attract, retain, train, educate and promote employees ensuring that a high level of employee safety, performance, productivity and engagement is achieved.

Key Performance Indicators

Safety

- b) OSHA Reportable Incident Rate
- c) Vehicle Incident Rate
- d) Claims Cost Paid (Workers Comp)

Training

- e) Training \$'s per employee
- f) % of employees with formal development plan
- g) % of employees with U2.0 competency assessment

Recruitment and Retention

- h) Vacancy Rate
- i) Turn-over Rate within 1st 12 months
- j) Recruitment Cycle Time
- k) Internal Promotion Frequency (% positions filled internally)

Strategy 1

Safety – Provide tools, training and programs to ensure our employees have the necessary knowledge, skills and support to work safely.

Objectives:

- 1) Implement and maintain appropriate staffing levels, policies and training to ensure OSHA Reportable Incident Rate at or below KPI measure.
 - i) Kevin Milligan

- 2) Implement and maintain appropriate staffing levels, policies and training to ensure Vehicle Incident Rate at or below KPI measure
 - i) Kevin Milligan
- 3) Implement and maintain appropriate staffing levels, policies and training to reduce reportable injuries by 20% year over year by March 31, 2017 and ongoing thereafter.
 - i) Kevin Milligan
- 4) Develop a staffing plan and program to complete at least 10 job site inspections monthly by July 31, 2017.
 - i) Kevin Milligan
- 5) Develop a staffing plan, program and policies to increase level of safety training participation by 20% year over year by July 31, 2017.
 - i) Kevin Milligan
- 6) Implement and maintain appropriate staffing levels, policies and training to achieve and maintain incident reporting accuracy at 100% by July 31, 2017.
 - i) Kevin Milligan
- 7) Hire and onboard a Utilities Safety Manager by March 31, 2017
 - i) Kevin Milligan

Strategy 2

Training – Provide training and educational opportunities that promote continuous learning within the organization.

Objectives:

- 1) Coordinate two trainings per year for divisions on cyber-security techniques and methodologies applicable to the Utility by July 31, 2017 and bi-annually thereafter.
 - i) Kevin Milligan
 - ii) Mujib Lodhi
- 2) Coordinate one training per year for divisions on physical security techniques and methodologies applicable to the Utility by December 31, 2017 and annually thereafter.
 - i) Kevin Milligan
- 3) Implement and maintain appropriate staffing levels, policies and training to achieve implement Workforce Development Plan by June 30, 2017.
 - i) Kevin Milligan
- 4) Prepare analysis and recommendations for Board of Public Utilities and City Council consideration to implement Education Sponsorship Program by March 31, 2017.
 - i) Kevin Milligan
- 5) Complete training for all supervisory and management employees for preparation of employee development plans by March 31, 2017.
 - i) Kevin Milligan
- 6) Complete employee development plan for all management and supervisory staff with July 2017 Performance Appraisals and annually thereafter.
 - i) All AGMS and Managers

- 7) Complete employee development plan for all non-management and non-supervisory staff with July 2018 Performance Appraisals and annually thereafter.
 - i) All AGMS, Managers and Supervisors
- 8) Develop and implement Competency Assessments for Executive and Senior Management staff using the WestMonroe/IIT SmartGrid Heat Map as adapted by May 30, 2017.
 - i) Kevin Milligan

Strategy 3

Organization – Develop and implement programs and practices that promote a culture of employee engagement, performance and productivity.

Objectives:

- 1) Develop and administer employee engagement survey for all RPU employees in September 2017 and biennially thereafter.
 - i) Daniel Garcia
- 2) Implement policies and practices to maintain or improve overall Employee Engagement Survey score from overall agreement score of 0.639 in 2015 beginning with September 2017 Employee Engagement survey and biennially thereafter.
 - i) All AGMs
- 3) Complete Phase 1 of Class Comp Study by June 30, 2017
 - i) Kevin Milligan
- 4) Implement policies and practices to decrease Vacancy Rate to 10% by December 31, 2017; 5% by December 31, 2018 and maintain at 5% thereafter.
 - i) Kevin Milligan
- 5) Prepare RFP, solicit proposals and prepare recommendations to Board of Public Utilities and City Council to implement the Phase 1 Talent Management System by December 31, 2017.
 - i) Mujib Lodhi
 - ii) Kevin Milligan
- 6) Complete on-boarding of Workforce Development team by March 31, 2017
 - i) Kevin Milligan
- 7) Institute “design-thinking” training and implement framework for one significant process per division by December 31, 2017.
 - i) Kevin Milligan
 - ii) All AGMs
- 8) Implement training, practices and guidance to ensure completion of all performance appraisals on time beginning July 31, 2017 and annually thereafter.
 - i) All AGMs and Managers and Supervisors

Appendix A – Organizational Profile

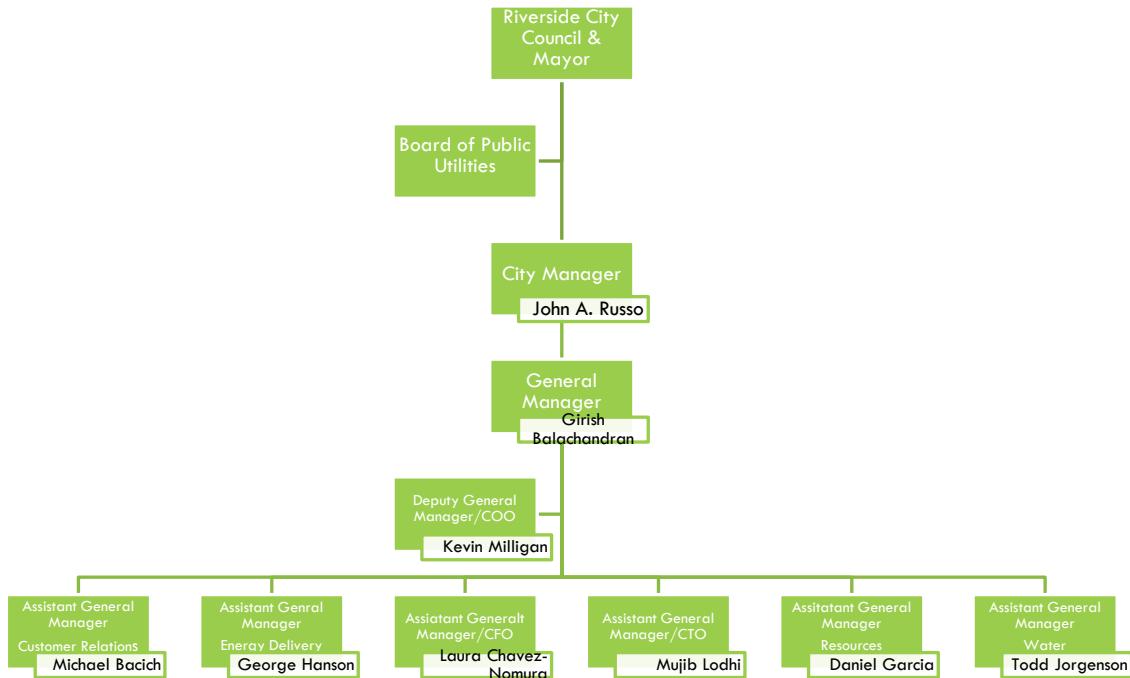
Established in 1895, Riverside Public Utilities (RPU) is a customer owned water and electric utility governed by a board of nine community volunteers, and the City Council of Riverside, that provides high-quality, reliable services to more than 106,000 centered electric customers and over 64,000 metered water customers (serving a population of more than 300,000) in and around the City of Riverside.

We have more than 600 employees dedicated to providing reliable energy and water delivery services, and exceptional engineering, marketing and customer relations, and customer services.

Riverside is one of more than 2,000 cities in the United States that light up homes and businesses with “public power” – electricity that comes from a community-owned and operated utility. Additionally, we maintain local water resources that allow us to meet our customers’ demands while being 100% independent from imported water sources.

RPU is also committed to increasing the use of renewable energy resources and sustainable living practices that help reduce environmental impacts within the City of Riverside and the state of California.

Riverside Public Utilities operates through the coordination of many different divisions as depicted in the following **Organizational Chart**:



Administration/General Manager's Office

The General Manager provides overall strategic direction and is the chief executive of the organization. The GM is accountable to the City Manager for the overall administrative, fiscal and operational aspects of the organization; intra- and inter-agency coordination; and the overall customer experience.

Under the management of the Deputy General Manager, the following activities serve multiple divisions of the Utility:

Safety – Responsible for organizational safety, training, compliance and reporting.

Workforce Development – A workforce development task force was formed to address immediate and long term needs of the Utility in the areas of training, development, on-boarding and succession planning.

Labor Relations – Responsible for leading the RPU team as required in concert with the Human Resources Department in labor negotiations, labor management committees, and grievance/disciplinary hearings.

Risk Management - RPU's power transaction risks are identified, measured, and limited to ensure sound financial methods and practices. The Financial Risk Management Policy creates the framework which governs Power Resources' wholesale power trading activities. Purchased power, which is well over \$100 million each year, represents a significant percentage of the electric Utilities' budget. RPU's primary objective is to reduce the cost of power to its customers while maintaining reliability, efficiency, and safety of electric operations.

Legislative Affairs – Responsible for coordination of RPU's legislative agenda as adopted by the City Council and coordination with state and national trade groups and contract lobbyists.

Real Property Resources - Responsible for the utilities' interest in over 100 parcels of property. Many of these parcels are currently unused, but their use is anticipated due to future plans for annexation and expansion of the utility infrastructure.

Customer Relations / Marketing

The Customer Relations / Marketing Division is responsible for all aspects of RPU's marketing, communication, media and public relations, and promotions, as well as: the creation and administration of public benefits programs and rebates; business customer services; Customer Service; Field Services and meter reading.

Customer Relations (also known as Programs & Services or Public Benefits) – Is responsible for providing support to residential and commercial customers. They perform on-site inspections and provide free energy surveys. Staff helps customers use available public benefits programs to make their homes and businesses more energy and water efficient. They are responsible for all aspects of receipt and approval of submitted rebate applications, including authorization of payment, and scheduling of inspections. This group also facilitates utilities planning and funding of renewable energy projects.

Marketing – Is responsible for creating internal and external marketing and advertising materials, including public awareness campaigns for water and energy utilities as well as citywide “Green” initiatives program. They create and distribute informative materials to customers about Utilities’ projects, rates, updates, and public benefit rebate programs. They also prepare a variety of internal and external presentations and annual reports, and manage and update the Web and intranet sites for content. This group also administers employee loyalty programs, sponsorships, special events, promotions, Back of Bill newsletter and bill insertions, annual bottled water distribution to schools and non-profit organizations, and school education programs.

Customer Service - Provides the first point of contact for residential customers in Riverside. They handle approximately 347,000 calls and 224,000 walk-in customers annually. Customer service supports requests for electric, water, sewer, and sanitation services as well as credit and collections, write offs, UTILICARE (medical assistance), SHARE and HEAP (low-income assistance), as well as payment option programs such as the Level Pay Program. They also take calls for street light repairs, dispatch emergency calls, and oversee the City’s 311 call center for non-emergency calls and emergency referrals. Customer Service operates out of the Utilities Plaza at Orange and Fifth Streets (in the process of relocating to Ninth and Orange) as well as the Customer Resource Center on Madison five days a week.

Field Services / Metering - Responsible for the physical initiation of services, reading of electrical and water meters, investigation of diversion of services, and delivery of 48-hour shut off notices for non-payment. Each fiscal year, this group conducts over 1.9 million meter readings, processes over 95,000 service orders for service initiation or termination and delivers an average of 100,000 48-hour notices.

Energy Delivery

The Energy Delivery Division is made up of three groups: Energy Delivery Engineering; Substation Construction, Maintenance, and Energy Control; and Transmission / Distribution Construction and Maintenance.

Energy Delivery Engineering – This group is divided into four parts: System Planning/Communications, Major Projects, Customer Engineering, and Substation Engineering. The Energy Delivery Engineering team is responsible for planning adequate transmission and distribution capacity to supply the needs of all electric customers. The reliability of service at a system level is reviewed and recommendations are made for improvements, which is eventually made into the Capital Improvement Program for Transmission and Distribution Projects. The Energy Delivery Engineering team provides engineering, design, and project coordination services for new electric services and upgrading of existing services, as well as mapping of utility electric facilities. Customer Engineering staff designs the necessary electric utility facilities and coordinates with other departments in completing an applicant’s project. After construction, facilities are mapped electronically into a GIS database to serve as a master reference for operations, engineering, and facilities management.

Substation Construction Maintenance and Energy Control - Consists of construction teams that build additions to existing substations, maintain substation equipment (such as transformers and circuit breakers), and provide inspection services for substation projects by outside contractors. Another team within the group tests and maintains additions to substations, manages installation and maintenance of all electric meters, distribution transformers, and other distribution equipment

within the city. Utility dispatch is also part of this group. Dispatch monitors and controls the energy delivery system, responds to customer calls, and dispatches field crews. This center runs 24-hours a day, 365 days each year.

Transmission Distribution Construction and Maintenance – This group is primarily tasked with system construction and maintenance of the overhead and underground transmission and distribution electric lines that serve the city. This group also provides electrical emergency response, outage response, and maintenance of the city's street light system.

Finance

The Finance Division is primarily responsible for the financial stability of Riverside Public Utilities. The division is comprised of three primary groups: Finance/Rates/Budget; Utility Billing and Facilities Management. In addition this team coordinates and serves as the primary liaison between Riverside Public Utilities and the Finance, Human Resources, Information Technology and General Services Departments

Finance / Rates / Budget - Responsible for preparing and analyzing financial information, including budget and debt management, to ensure the overall fiscal health of RPU. The group is also instrumental in long-term financial planning as well as long range resource planning. They provide periodic financial reports and critical financial data for Board and City Council review and approval. This group also develops annual revenue requirements taking into account all anticipated activities planned by executive management. They ensure appropriate rate structures for revenue requirements, determine the five year capital improvement program budgets, as well as internal overhead and cost allocation plans. They participate as an active member of finance/fiscal and audit committees for joint agency projects such as Intermountain Power Project, Southern California Public Power Association and San Onofre Nuclear Generating Station.

Utility Billing – Responsible for the daily processing, quality control and issue resolution for over 100,000 bills produced monthly, generating greater than \$300 million in annual revenue.

Facilities Management - Responsible for maintaining and improving eight office space locations which house 650 Utility employees to effectively meet the RPU goals for office space planning which include: enhancing service to the public; providing a suitable workplace for employees; providing certainty in office space; obtaining the best value/return on investment; and providing a centralized location for employees.

Operational Technology

Operational Technology (OT)- Responsible for planning, implementing and maintaining a Riverside Public Utilities' (RPU) Operational Technology (OT) infrastructure. OT's objective is to ensure that its infrastructure is modern, secure, architecturally flexible and cost effective. OT also provides daily operations of core systems portfolio supporting every aspect of RPU business processes.

Responsible for providing quality and timely customer support to RPU users with a that meets/exceeds agreed upon SLAs and performance metrics.

In partnership with the business divisions, OT is responsible for evaluating, developing and supporting quality, cost-effective applications and operational technology solutions that directly support RPU business operations.

OT plays a strategic and catalytic role by proactively partnering with its functional counterparts to identify new opportunities where technology can drive greater business effectiveness and efficiency.

OT is a strategic partner to RPU's business divisions. We provide fully-integrated solutions that help our functional counterparts use operational technology more effectively and efficiently and have a positive effect on reducing RPU's overall operating costs and improving customer satisfaction.

OT works with business division to modernize business processes and improve infrastructure management practices by executing on the intelligent deployment of operational technologies.

Implementation Office (IO)-Responsible for project delivery within the OT. IO has end-to-end responsibility (from System-Planning to Deployment) for enterprise Operational Technology (OT) projects.

Technology and Mobility Office (TMO) - Responsible for ensuring that Utilities business priorities, technology strategy, and service delivery functions are orchestrated in an integrative manner. The TMO develops executes, maintains RPU's Mobile, Innovation/Advanced Analytics, and Geographic Information System (GIS), Customer Self-service strategies and systems.

Information Security (ISO) - Responsible for implementing strategic initiatives for Utilities Operational Technology Security (Cyber Security) Program and Compliance (Information Management, Cyber Security, Software Licenses, Change/Configuration management) activities, and the Disaster Recovery and Incident Response processes.

Systems & Operations Office (SOO) - Responsible for providing day-to-day oversight and management of all OT systems (Industrial Control/Business), maintenance and support. Responsible for planning, managing, and operating complex information systems to ensure system function, availability, performance, and support, including Help Desk (OT Solution Center) operations.

Creativity/ User Experience (UX) Design- Responsible for assessing existing systems communication methods and application User Interfaces (UI) for usefulness, usability, visual design integrity. Responsible for designing visually compelling representations of application's high-level interaction and navigation and collaborating with technical staff in implementing highly intuitive UIs.

Resources

The Resources Division is responsible for procuring maintaining and managing the utilities' wholesale and renewable power. The Resources Division also participates in joint action services and projects through the Southern California Public Power Authority (SCPPA). To manage these responsibilities, the division has five groups: Power Planning / Power Marketing; Power Projects /

Contracts / Settlement; Power Resources; Power Scheduling / Operations; and Generation. By Q3 2017, RPU expects to establish an additional function of data analytics to be housed in the Resources Division.

Power Planning / Power Marketing - Responsible for assessing both the short and long term power needs of the utility. The Planning/Marketing group is also responsible for coordinating Riverside's commitment to being recognized as a "green city."

Power Projects / Contracts / Settlement - Responsible for the management of RPU's generation and transmission projects as well as negotiating and administering the utilities' power-supply related contracts and tariffs. They also actively participate in all federal regulatory, legal, and electric market redesign activities affecting RPU's power supply interests. The Projects group is responsible for managing RPU's interest in interstate transmission facilities as well as its joint participation with other agencies in generation assets. The Contracts group negotiates and implements long-term resource agreements and administers over two hundred existing power supply related contracts and tariffs. The Settlement group reviews all power supply transactions after-the-fact in order for payment or invoicing to occur.

Power Resources - Responsible for procuring, developing, managing, and marketing the utilities' wholesale power and interstate transmission resources to serve Riverside's citizens with reliable electricity.

Power Scheduling / Operations - In order for RPU to receive the power provided by the resources in its portfolio, the energy output from those sources must be reported to or "scheduled" with the Independent System Operator (ISO) and any other entities affected within the boundaries of the Western Electricity Coordinating Council (WECC). They are responsible for the scheduling of RPU's power supply resources to meet the needs of utility customers. This group also provides the Settlements group information necessary for billing or payments to occur.

Generation Facilities Group - Oversees the Springs, Riverside Energy Resource Center (RERC), and Clearwater Cogeneration electric power plants. The Generation Group is responsible for the operation and maintenance of all sites.

Data Analytics – Will be responsible for utility wide coordination of data analytics and will serve as subject matter experts for the other utility divisions.

Water

The Water Division is made up of four groups: Engineering; Water Resources; Water Field Operations; Water System Operations.

Engineering - Responsible for all long-range facility planning, budgeting, grant writing, design, construction, management, and mapping/archiving of construction-related documents. Also handles coordination of all development-related activity and infrastructure.

Water Resources - Responsible for estimating future water demands, developing cost effective water supply alternatives, preparing environmental documents for the new supply sources, managing, and safeguarding the quality and quantity of the City's water resources. This includes collecting, analyzing and maintaining groundwater information from the entire watershed.

Water System Operations - Responsible for production and distribution of domestic, irrigation, and recycled water to meet the daily demand of the water system. The section maintains all the assets necessary to effectively and efficiently produce and deliver water to the City's customers. This includes ensuring optimal water supply management and storage for maximum day and emergency demands. The Section is managed through four Units: Operations; Water Quality and Record Keeping; SCADA; and Maintenance.

Water Field Operations - Responsible for the construction and maintenance of water transmission and distribution systems. The Administration section of this group is responsible for the coordination of daily planning, supervision, and general administration for construction and maintenance. The System Construction section is responsible for water main replacements, system connections, fire hydrant installations, and installations of new and replacement water services. While the Maintenance section maintains the existing transmission, distribution, and irrigation/canal systems. The Meter Shop installs, replaces and maintains water meters, as well as tests new and existing meters for accuracy.

Appendix B – Division Vision Statements

Office of the General Manager

Over the next decade, RPU will transform its workforce and technology resources to address the challenges associated with our industry's transformation. By leveraging both technology and changes in our workforce synergistically, we will advance RPU's capabilities and efficiency to deliver the highest quality services in all aspects of our organization. RPU 2.0 will operate in a collaborative manner, with cross-organizational teams being the norm, not the exception.

Tomorrow's RPU will maximize the opportunity and value of current and future vacancies to transform the utility workforce. Combining the latest intelligence in human capital management with technology, including a robust talent management system, tomorrow's workforce will be the most prepared workforce in our industry's history. Tomorrow's workforce will be built on the best each generation has to offer; leveraging the strength of Millennials as problem solvers, Generation X loyalty, Baby Boomer experience, and the yet to be discovered traits of future generations. From identification of the right skill sets for each job, reflected in targeted and data driven recruitments through on-boarding, orientation, and career-long training in partnership with local colleges and universities, our next generation workforce will be acutely aware of the big picture while focused on delivering world class customer service.

Safety of our employees, customers, clients and vendors will be at the heart of everything RPU does in the future. Through culture and climate, safety will be reflected as a true core value for RPU. Beginning with employee onboarding and continuing through career-long training, safety will be a top-of-mind issue for every member of the RPU team.

Current initiatives in workforce development that are in their infancy today will be mature by 2020, including programmatic use of Employee Development Plans, Career Ladder training, contract education, education sponsorship programs and 24x7 employee access to our Learning and Talent Management systems. Broader awareness of training outcomes from employee participation in local, regional and national conferences and seminars will be routine as we standup new knowledge sharing tools and Communities of Practice networks.

RPU's property management strategy and approach will be transformed from the present passive/reactive model to a proactive program that engages community-based real estate professionals to monetize passive real property assets. This transformation will be supported through enhanced policies that operationalize our portfolio management efforts and technology that provides up to date information about the performance of our real property assets.

Communities of Practice networks who are subject matter experts and interested employees, will support our legislative and regulatory risk management offices' ongoing efforts and long range goals to "impact positively legislation and regulations at all levels of government." These Communities of Practice networks will build on the good work already underway that support and enhance cross-division communication in the regulatory arena. Tomorrow's offices will seamlessly transition from legislative advocacy, supported by our outside consultants, trade organizations and joint powers agencies, through regulatory risk assessment to regulatory advocacy, monitoring and reporting.

Customer Relations

Customer Relations touches all other divisions and serves as the lens to which our customers and stakeholders see the work that's being done for the future. A new level of communications will be required to allow customers to benefit from the possibilities of tomorrow. How will electric transportation impact employers? How will real-time pricing and demand response programs help customers better manage their energy needs? Why is it an advantage to have a locally owned utility? Being customer centric means placing the customer at the center of everything we do. To use the analogy of a wheel, the customer is at the center, and customer relations is the wheel holding all the divisions, or spokes, together on behalf of our customer. Operationally, everything RPU does as an organization will touch the customer and the Customer Relations Division is now and will be an integral part of bridging our customers to our organization in a manner that engenders trust and value. In the future, communicating the value of a local asset and transforming the traditional utility relationship from passive to active will be critical to our core business plan.

During the past 100 years or more, the customer relationship with the utility was a passive one; they used services, and the utility delivered a bill. Today many customers have access to the same information as their utility. They understand more about their services than ever before and choose to passively engage with their service provider if they are able. The availability of information and the desire to see the relationship between the services they use and the bill drives their expectations. Although many utilities around the nation realize the future needs to be more customer focused, the work needs to begin today. In Riverside, we have identified that need to have the technology and services available in the future.

As customers become producers, their needs and expectations will change. We want to consider a different set of needs that encompass servicing and supporting generation, demand response, EVs, energy and ice storage, behavioral programs, and traditional energy efficiency. Mobile technologies demand increased expectations of convenience from the customer to perform functions that can control their energy use.. How we communicate and interact with them will enhance their customer experience and distinguish us from the many other service providers vying for their limited time and attention.

RPU currently provides traditional means of communication channels with their customers and will continue to do so. However, email, SMS, apps, and our mobile friendly website will work to provide our customers information the way they want to send and receive it, such as text, email, phone, social media, and the web. Fulfilling the customer's needs during moments that matter requires us to reimagine current business processes to make sure our interactions are effortless through the customer's eyes. Imagine a rebate app that allows you to take a picture of a receipt to apply online without requiring anything being mailed at all. Further, imagine if that app were able to suggest to a customer that they were only a few points away from a much bigger rebate, suggest what they should do next, allow them to order it, and still process the rebate with little effort on their part but also providing a better connection to RPU.

RPU needs to ensure availability of customer usage data on demand, information on savings, multiple payment options, and easy access to customer service via phone, chat, and email. New products and services will be developed and offered by RPU such as Demand Response, Time of

Use Rate Products for EV's, Solar PV customers services such as cleaning and routine maintenance. RPU overall will need to develop more customer-centric rules and rates.

In a utility 2.0 world, data and information that leads to an enhanced customer experience can only come from a robust customer information system. Our Operational Data Management System will need to be able to talk to our Customer Information System so it can impact outage response times and feed data to customers who choose to pay attention to their usage behavior. In turn, the Customer Relations staff will need to be prepared to help our customers in a broader context and with more complex expertise than ever. As customer choice expands so must the knowledge base of the staff that supports them.

Energy Delivery

As we modernize the grid, it will also become “smarter” through the interconnection of devices and applications made possible with technologies that didn’t exist just a few years ago. This smarter grid will **SENSE, COMMUNICATE, and CONTROL** key devices. The grid will optimize 2-way power flows resulting from distributed energy resources thereby enhancing the reliability of the system.

As we address these challenges, we must build a distribution system that is safe for customers, the public, and our employees. Improved work processes and tools must enhance an already strong safety culture. We must remain vigilant and secure our systems in an environment of growing concerns over potential cyber and physical attacks.

Reliability and resiliency are cornerstones of electric utility service. Our system must be modernized with new equipment, new technology, and improved system protection schemes to reduce both the frequency and duration of interruptions.

With the progressive departure of experienced staff, new employees will be added and trained in innovative programs. Energy Delivery employees must work with other divisions and city departments to optimize work processes to build on a history of great service.

RPU staff must actively evaluate and select new technologies as they emerge. We must leverage RPU’s existing fiber network for expanded uses. RPU must migrate from what has often been a reactive mode of operation to a more predictive and proactive approach.

The greatest transformation to the RPU electric system will be the completion of the Riverside Transmission Reliability Project (RTRP) to address both capacity and reliability for the future of Riverside. RTRP will position Riverside to meet strategic priorities well into the future.

Infrastructure replacement programs must be prioritized to ensure we address critical issues first. As substations are upgraded, 4kV to 12kV conversions will advance at a rapid pace in parallel with infrastructure replacement and the modernization of the grid. The City’s streetlight system will be completely converted to energy efficient LED lighting.

The information to operate and utilize the modern grid will come from many new sensors and meters that communicate continuously. Cyber and physical security considerations will be paramount as new devices and communication channels are evaluated and implemented. A smarter, modern grid empowers our customers with exciting new options and optimizes dynamic power flow improving resiliency, efficiency, and the reliability of the system.

Finance

Over the next decade, with new technologies emerging, RPU will need to change and improve current rate designs and revenue recovery practices to support customers' energy efficiency goals and develop distributed generation, renewable resources and other services and products for the benefit of the utility and its customers. Developing new rate structures, which is controversial but necessary-- to more equitably recover costs from customers that benefit from specific services will include charges for use of infrastructure, restructuring of time of use rates, and providing more service and rate options that customers now expect. This change will not be overnight, RPU must have a deliberate process to evaluate utility costs and operational issues to adequately and correctly determine the proper course of action. In this analysis on new rates and cost structures, RPU must take into consideration current industry trends relating to workforce, infrastructure, regulatory issues, new technologies and customer expectations. We must move towards pricing/rates that create value for our customers.

Our solid fiscal foundation will provide us with the level of investment to begin to move forward. With implementing a solid financial plan, we will continue to maintain the highest possible financial ratings and healthy reserves for both electric and water utilities while continuing to meet our customer-owners' expectations, as well as our service commitments.

From a workforce perspective, with these new emerging technologies, within the finance division there will be a need for more individuals with technical analytical and excellent communication skills to collaborate with other divisions sharing knowledge and promoting best-practices throughout the utility. Teamwork, collaboration, and robust communication across sections and divisions will be typical of a normal work day at "1RPU" where diverse employees intentionally function as one utility. In support of the City's goal of service, our tenacious attention to customer value will be punctuated with moments of "Wow" customer service that 1RPU employees consider a routine and enjoyable privilege.

By 2020, we will be fully automated in our financial reporting processes to improve efficiencies in our business practices and provide more timely information. Other modern tools should include the just-in-time information necessary for each job function. Advanced technology, mobile tools, and data analysis/visualization will advance to a level that may appear out of reach at the moment. The myriad of data about our system and customers will be integrated and conveniently available to those that need it in their service to RPU customers. In addition, improvements will continue to be made to RPU facilities to support our workforce with technology and work space that accommodates a cohesive and collaborative environment to provide excellent customer service.

Lastly with RPU implementing automated meter infrastructure (AMI) and other advanced technologies, the utility needs to begin looking at best practices of other utilities billing systems to begin anticipating our needs before the next billing system upgrade. It is apparent that the current EnQuesta system should not be utilized for the same duration as the previous system. Since the CIS system is integral to every aspect of customer contact, communication, and interaction, we should look to replace it somewhere between the seven to ten year marks. In a utility 2.0 world, data and information that leads to an enhanced customer experience can only come from a robust customer information system.

Operational Technology

Operational Technology (OT) was just recently established at the Riverside Public Utilities (RPU) with the goal of providing both strategic direction and operational oversight over the various information technology initiatives at the utility. RPU's 2015 Strategic Technology Plan recommended that the utility "create a new organizational structure, add new resources, and provide training for existing staff" to oversee the successful implementation and operation of its newly developed technology vision. Establishment of OT Department is a significant milestone for RPU's timeline to implement the strategic plan.

RPU's strategic technology vision recognizes the crucial role of technology in improving operational efficiency, reliability, and customer satisfaction as well as supporting the broader initiatives in the area of economic development and community service to of Riverside citizenry.

Twenty two advanced operational technology projects either underway or will be planned, launched, or completed in alignment with the adopted Strategic Technology Plan. Each of these major technology initiatives will significantly contribute to RPU's overall strategic goals.

Crucial to the implementation approach will be a careful consideration of business value, identification of specific and tangible business benefits, and emphasizing design and architecture over standalone performance to ensure that the sum of the parts add up to much greater value than the individual components. RPU's planned Advanced Metering Infrastructure (AMI) initiatives integrated with its Customer Information System (CIS), Outage Management System (OMS), Geographic Information System (GIS), Distribution Management System (DMS) is exemplary of how integrated technology components *together* will deliver outstanding benefits in the area of operational efficiency, customer service, and reliability of operations.

Deriving quality and efficiency benefits from streamlined and automated business processes is just one aspect of our technology vision. We have the opportunity to strategically leverage our operational systems with modern mobile technologies and truly transform ourselves into a real-time utility (Digital and Connected) – where critical information is available in real time for making dynamic and smart optimum operational decisions in the area of customer service, system maintenance, and demand management. Longitudinal analysis of the very same information through advanced analytics will drive new strategies in multiple operational areas.

The strategic positioning of Operational Technology will play a very significant role in the context of RPU's overall value delivery model. Precisely because of our strong record of delivering high-quality utility services to our customers they tend to take their high expectations of this service for granted and we blissfully remain "out of sight and out of mind." But this passive interaction with consumers is fast changing, and RPU will likely face greater attention and scrutiny from customers and other stakeholders with expected rate increases and environmental consciousness. In addition to safe and reliable water and electricity, customers are seeking the kind of control, flexibility, transparency, and self-service options they have become accustomed to receiving from other services providers. They demand first-rate customer service, they demand transparency of communications, they want up-to-the-minute information, when and how they want it, and they turn to online and mobile channels to access information, communicate proactively, access support, provide feedback, and carry out transactions. This technology-mediated deep engagement

process matched with equally impressive operational performance will propel RPU to become the model utility that we have boldly envisioned.

Operational Technology will play a strategic and catalytic role by proactively partnering with our functional counterparts to identify new opportunities where technology can drive not only improved operational performance but also enable the Utility as a whole to embrace new technologies and serve and engage the customers in new and innovative ways.

We are committed to the idea that business process improvements that are carefully designed and implemented can be a source of tremendous value to our functional organizations. We will partner with our internal customers and support them streamline and automate the day-to-day business processes to ensure that there is sustained value in all that we do.

Operational Technology also envisions itself as a collaborative partner in the City's plan to streamline, rationalize, and develop effective governance structures for various information technology programs and assets (Geographic Information System, Dark fiber network, etc.).

It should not surprise anyone that Operational Technology (OT) has become the *soft* infrastructure in Riverside Public Utilities (RPU), providing the connectivity and harnessing the data-derived intelligence to benefit its customers and citizens. It is therefore useful to approach OT investments in a similar manner as we approach investments in physical infrastructure – essential and continuous.

It is also important to recognize that Operational Technology also has the potential to become the soft underbelly of our utility considering the myriad of IT security challenges that critical infrastructure organizations face. Vigorous defense strategies against cyber-attacks, thoughtful contingency planning, and constant, aggressive, and relentless monitoring of our systems will have to be one of the top priorities of our new OT organization.

Resources

The electric industry is undergoing transformative change more rapidly than any other time in its 100+ year history. The transformation is largely driven by:

- Technological Advances Climate
- Change & Environmental Concerns
- Increased Customer Expectations

In the future, RPU services will be more customer centric, with RPU maintaining its obligation to serve—although the services provided will be vastly different than today. Applications will allow customers to monitor energy usage and power prices, and when prices are high, discharge (e.g., sell) energy from their electric vehicles or storage devices or remotely reduce power consumption (thereby costs) through their home energy management devices, or when prices are low—charge their devices (e.g., buy energy), or adjust power usage at their home remotely through their phone or other devices. Introduction of more applications will escalate for connected customers to choose what technologies to employ. The convenience offered through smart devices—gather information, purchase products, contact customer service, pay bills, book travel, price compare, control thermostats, sprinklers, video monitoring, etc., is unprecedented. RPU must facilitate the “convenience” wave that is coming.

Riverside's power resource mix will be more sustainable, predominantly renewable using a variety of technologies, with more locally-sourced distributed energy resources (DERs)--some behind the customer meter for those customers that choose to self-provide and more demand response resources to help facilitate the effects of the proliferation of distributed energy resources on the distribution grid. The balance of resources will include some nuclear and large hydro, along with the flexibility of natural gas to balance the integration of the intermittency of renewables as well as insuring local reliability to backstop high voltage grid issues. The shift away from large station, fossil-fueled generation is necessary to reduce greenhouse gases as mandated at both the state and federal levels. This shift will simultaneously have a profound impact on our rate structures and (if not properly managed) our ability to ensure equitable rate recovery across our customer base.

The changes in the industry are already occurring, with much work still to be done--during a time of retirements of our most experienced personnel. The change necessary to move RPU toward Utility 2.0 are not without impacts. At times, these changes/mandates result in new risks that arise requiring mitigation through new/additional rules and/or new equipment or products

RPU must position itself to be flexible, adaptable, and resilient. This industry is very complex and becoming more so. City (City Manager, other departments, Public Utilities Board and City Council), and as importantly--community support, is critical to determining a successful RPU business continuity model. This is no easy task for a 100+ year old department, with a significant amount of static, institutional policies and procedures in place and legacy infrastructure built for yesterday's technology, but not robust enough for a customer-centric Utility/Riverside 2.0 experience. The amount of change necessary that is known today is immense, with more unknown changes likely required for Utility 2.0 and Riverside 2.0.

Water

The Riverside Public Utilities Water Division (Water Division) is a steward over a water system with an estimated value of \$2 Billion which provides domestic and non-potable water to its customers. Inheriting water supplies that were secured by early leaders and benefitting from the forward thinking of the “Safe WATER plan” in 2006, the Water Division will continue to protect and enhance water supplies, operate efficiently, and manage infrastructure to provide high quality water and the lowest reasonable cost while enhancing the long-term value of the water utility. Moreover, the Water Division will learn from and emulate organizations that provide a high level of customer service in order to improve its customers’ experiences and improve their pride in the water utility. The end result will be water customers who use water to enhance their quality of life in an efficient and cost effective manner.

The Water Division will embrace technology to provide a greater level of service at a lower cost to the customer. Field personnel will use mobile solutions to work smartly and operate the system more efficiently. Professional staff will use database and analytic tools to stretch capital expenditures as far as possible. Everyone will use data to help the customers use water to enhance their quality of life at the lowest possible cost.

The Water Division relies on groundwater and will protect and enhance this resource by capturing storm water, recharging groundwater supplies, and expanding recycled water service. Projects such as the Riverside North Aquifer Storage and Recovery (Rubber Dam) project will slow down storm flows and redirect it to nearby recharge basins. Additional recharge basins in Grand Terrace and North Riverside will help maintain groundwater levels and store excess water.

Recycled water is a drought proof supply and is very inexpensive relative to imported water. Currently available only around the treatment plant, recycled water service will expand to several parks, schools and other businesses with the construction of the Jackson Street project. Moreover, Riverside’s recycled water will create habitat for endangered fish as part of the Upper Santa Ana River Habitat Conservation Plan (HCP). This HCP will also provide opportunities to expand recycled water use along the City’s northwestern edge.

Along with enhancing water supplies, the Water Division will work to preserve and enhance the Gage Canal, which is one of Riverside’s greatest treasures. Gage’s well fields and delivery system will be modernized to improve reliability and expand service to all Gage territory customers, including micro-farmers.

In the end, the Water Division will provide high quality water at an exceptional cost along with world class customer service.

Appendix C – Biennial KPI Targets

Key Performance Indicator	FY17 Target	FY 18 Target
Call Center		
Customer Service Center answered call rate, monthly	95%	95%
311 answered call rate, monthly	95%	95%
Customer Service Center call resolution - first call, monthly	80%	90%
311 call resolution - first call, monthly	80%	90%
Counter/Develop Center		
Plan checks completed in City specified timeframe	100%	100%
Customer design projects completed within timeframe	100%	100%
Solar PV meter installations completed within 3 days	100%	100%
Happy or Not customer rating, monthly	80%	80%
Billing & Rebates		
Customer billing accuracy	98%	98%
Rebates completed within timeframe	100%	100%
Satisfaction Ratings		
Key Customer Visitations satisfaction rating	90%	95%
RKS Customer Satisfaction rating, annual	90%	90%

Key Performance Indicator	FY17 Target	FY 18 Target
System Reliability		
SAIDI – System Average Interruption Duration Index	50	50
SAIFI – System Average Interruption Frequency Index	1.15	1.15
CAIDI – Circuit Average Interruption Duration Index	43.5	43.5
MAIFI – Momentary Average Interruption Frequency Index	1.0	1.0
Asset Replacement and Renewal		
Miles of Pipeline Replaced Annually	5.5	5.5
Number of Poles Replaced Annually	200	200
Substation Relay replacements annually	19	40
Cyber and Physical Security		
Cyber Security Projects completed annually	77	33
Physical Security Projects completed annually	38	14
Generation Resiliency		
RERC Black Start Availability	100%	100%
Springs Black Start Availability	100%	100%

Key Performance Indicator	FY17 Target	FY 18 Target
Financial Strength		
Debt Service Coverage – Electric Fund	Not less than 1.75	Not less than 1.75
Debt Service Coverage – Water Fund	Not less than 1.75	Not less than 1.75
Undesignated Cash Reserve – Electric Fund	\$125M - \$198M	\$130M - \$206M
Undesignated Cash Reserve – Water	\$28M - \$43M	\$32M - \$50M
Bond Rating – Electric Obligations	S&P AA-	S&P AA-
Bond Rating – Water Obligations	S&P AAA	S&P AAA
Affordability & Competitiveness		
Weighted Average Rates - Electric	Less than SCE	Less than SCE
Weighted Average Rates – Water	Less than neighboring utilities	Less than neighboring utilities
Additional Revenue		
Collection Rate	\$147,000	\$146,000
New Revenue – Water Fund	\$3,000,000	\$3,200,000
New Revenue – Electric Fund	\$6,700,000	\$5,100,000

Key Performance Indicator	FY17 Target	FY 18 Target
Supply Portfolio		
Greenhouse Gas Emission level	<1,200,000 allowances	<1,200,000 allowances
Percent Renewables in portfolio	27% (CY 2017)	29% (CY 2018)
Recycled Water Deliveries	200	500
Conservation and Efficiency		
Water Conservation – SBx7-7 Target Compliance (gpcd)	229	223
Rooftop Solar Photovoltaic – SB1 Target Compliance	\$2,500,000	\$2,500,000
Energy Efficiency Annual kWh savings	19,000,000	20,000,000
Utility Operations		
E-bill adoption rate	15%	15%

Key Performance Indicator	FY17 Target	FY 18 Target
Capital Projects		
Energy Delivery CIP complete on budget on time	80%	90%
Water CIP complete on budget on time	80%	90%
Operational Technology projects completed on budget on time	80%	90%
Forecasting		
Annual Power Forecast accuracy	85%	85%
Annual Water Forecast accuracy	85%	85%
Regulatory Compliance		
Water Quality compliance	100%	100%
NERC/WECC report compliance	100%	100%
Supply		
Generation availability	95%	100%
Water Supply Independence (local resources)	100%	100%
Operations		
Street light repair cycle-time (days)	3	3
Water leak repair cycle time – Medium criticality and higher (days)	10	10

Key Performance Indicator	FY17 Target	FY 18 Target
Safety		
OSHA Reportable Incident Rate	11.25	10.00
Vehicle Incident Rate	21	19
Claims Cost Paid (Workers Comp)	\$140,000	\$135,000
Training		
Training \$'s per employee	\$650	\$700
% of employees with formal development plan	40%	60%
% of employees with U2.0 competency assessment	10%	20%
Recruitment & Retention		
Vacancy Rate	15%	10%
Turn Over Rate within 1 st 12 months	3%	2%
Recruitment Cycle Time (days)	150	120
Internal Promotion Frequency (% positions filled internally)	50%	50%

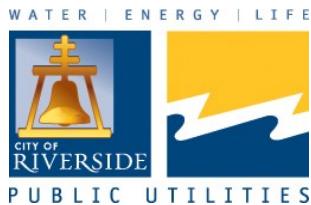
Appendix D – Supporting Documents

This Strategic Plan is built upon and summarizes input from the Utility 2.0 Roadmaps that were approved by the Board of Public Utilities and City Council. A copy of the final Utility 2.0 Roadmap presentation is located [here](http://www.riversideca.gov/utilities/about-rpu/utility2.0.asp). (<http://www.riversideca.gov/utilities/about-rpu/utility2.0.asp>)

RPU's Finance 101 document and presentation to the City Council is located [here](http://aquarius.riversideca.gov/clerkdb/DocView.aspx?id=203238&dbid=0). (<http://aquarius.riversideca.gov/clerkdb/DocView.aspx?id=203238&dbid=0>)

Appendix E – Riverside 2.0 Update

RPU's updates to the City Council Strategic Plan is located [here](#).
<http://www.riversideca.gov/pdf/2015/StrategicPlan.pdf>



RIVERSIDE PUBLIC UTILITIES

Board Policy

Title: **Annual Goal Setting Process**

Date Last Approved: June 2014

Category: **Utility Business Policies**

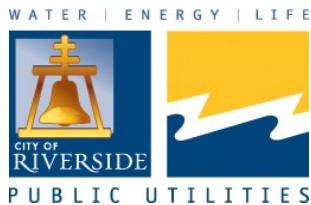
Date of Next Review: June 2016

Review Committee: Customer Relations/Finance Policy No: **A-3**

At least annually, the RPU Board shall formally evaluate efforts towards meeting goals and objectives for the upcoming year as conducted through a formal goal setting process by staff and/or board members. Goals and objectives may be multi-year in nature. Goals and objectives shall be set forth for specific sections and divisions of the utility and for the utility as a whole. Quantifiable measurements shall be designated to measure the attainment of the goals and objectives adopted. Goal setting will normally be performed as part of a strategic planning process and may utilize the services of a facilitator.

The incorporation of goals and objectives shall be included in the annual budgeting process as appropriate.

The General Manager shall be responsible for providing updates to the Board. Goals and objectives shall be open for review and adjustment by the General Manager as needed, but any changes after initial adoption by the Board shall be described and discussed at a Board meeting.



RIVERSIDE PUBLIC UTILITIES

Board Policy

Title: **Performance Measure Evaluation**

Date Last Approved: June 2014

Category: **Utility Business Policies**

Date of Next Review: June 2016

Review Committee: Customer Relations/Finance Policy No: **A-4**

It is important that customers are able to measure the success and quality of service by easy to understand performance measures. Riverside Public Utilities (RPU) shall set forth performance measures, also known as "benchmarks," wherever possible to evaluate comparison with other utilities and the achievement of goals and objectives. These performance measures shall be selected based upon available industry data. Where benchmarks do not already exist, staff will work to create performance measures by providing an evaluative process to the Board for its approval. This process shall also include participation rates and measured savings of public benefits and conservation related programs offered by RPU. Where possible, benchmarks will not require duplicate efforts. Reports that are prepared for local, state and federal reporting requirements shall be utilized by RPU as appropriate benchmarks wherever possible.

It is considered reasonable to purchase, through participation in industry surveys, etc., performance measure or benchmark information. Performance measures may be obtained annually, biannually, or on some other frequency as the Board deems necessary. Selected benchmarks shall be published in various publications as appropriate for customer communication and education.



RIVERSIDE PUBLIC UTILITIES

Board Policy

Title: **Property Ownership & Management** Date Last Approved: June 2014

Category: **Utility Business Policies** Date of Next Review: June 2016

Review Committee: Customer Relations/Finance Policy No: **A-5**

Riverside Public Utilities (RPU) owns a significant amount of property primarily through the acquisition of numerous private water companies over the past century. Property has also been acquired for operational purposes of RPU.

The electric and water utilities may be required to purchase and maintain property in the course of operations. It is intended that only property required to provide service to current or future customers shall be retained or purchased by RPU. Property may be kept for extended periods of time if there is any anticipation that the property may be required for operational purposes at any time in the future. Furthermore, if property owned by RPU is in an area where future property will be required, but its exact location not yet determined, it is appropriate to retain the existing property until such time as the sales proceeds can be utilized to purchase replacement property for operational needs.

Property shall periodically be reviewed by RPU and any property deemed surplus shall be sold when economically and practically feasible with the advice of the Board and approval of the City Council. Market conditions and number of parcels may require property disposition to occur over an extended period of time as approved by an ad hoc committee established by the Board.

The Board adopted Real Property Financial Management Policy is attached.

Attachment: Real Property Financial Management Policy

W A T E R | E N E R G Y | L I F E



Real Property Financial Management Policy

Approval by RPU Board on November 21, 2014

Revision #1 November 20, 2015
Next Review Date: November 2017

Table of Contents

1.	Introduction.....	1
2.	Purpose	2
3.	Board of Public Utilities Powers and Duties.....	3
4.	Classification of Real Property.....	5
	Required – In Use.....	5
	Required - Future	5
	Idle.....	5
5.	Evaluation and Assessment of Real Property	7
	Required - In Use	7
	Required - Future	7
	Idle.....	8
6.	Financial Valuation of Real Property	9
	Book Valuation	9
	Comparable Property Valuation.....	9
	Discounted Cash Flow Valuation.....	9
7.	Portfolio Management of Real Property.....	11
	Portfolio Management	11
	Commercial Operation of Mission Square Office Complex.....	11
	Hedging Future Real Property Needs.....	12
	Balancing Utility Assets with Customer Rates	12
	Criteria for Sale, Lease, Transfer and Acquisition	13
	Approach to Disposition and Sale of Real Property.....	13
8.	Legal Considerations.....	14
9.	Examples.....	16
	Example 1: John W. North WTP – Parcel No. 0275-191-56-0000	16
	Example 2: Vacant Emtman Reservoir - Parcel No. 243-040-064.....	17
	Example 3: Vacant Mt. Vernon Reservoir - Parcel No. 257-140-002.....	18
10.	Conclusion.....	19
11.	Appendix I – Classification Chart.....	20

1. Introduction

The City of Riverside (the “City”), through its Public Utilities Department (“RPU”), holds significant real property interests in San Bernardino and Riverside Counties, possessing 776 and 854 acres in each respectively. Although the City is the record title owner, the property was acquired through rate-payer funds and is managed by RPU as a steward (such properties are referred to herein as “the RPU real property assets”). The vast majority of RPU real property assets—over 400 parcels—were acquired over fifty years ago at very low cost and much of it remains vacant. However, the acquisition and long-term retention of these properties, with their associated water rights, have proven to be an invaluable asset of RPU.

This Real Property Financial Management policy shall serve as a guide to the Board of Public Utilities to assist when carrying out their Charter prescribed duties. Here are the guiding principles;

- Maximization of ratepayer value guides all decisions
- Stewardship, which includes both acquisition, use, and disposition, shall be done in conformance with California law

Given the strategic value of real property and the significant financial value of the real property portfolio, having an effective framework and policy for managing (including acquiring, transferring, leasing, selling, valuing, etc.) real property is a necessity to RPU.

RPU’s mission statement: “Riverside Public Utilities is committed to the highest quality water and electric services at the lowest possible rates to benefit the community” underscores the need for an effective real property management policy. In consideration of its mission statement, RPU has prepared this Real Property Financial Management Policy (“the Policy”) with the intent of establishing guidelines for RPU’s stewardship of real property assets for the benefit of RPU’s ratepayers.

The Policy contains eight sections: Purpose, Powers and Duties of the Board of Public Utilities, Classification, Evaluation and Assessment, Financial Valuation, Portfolio Management, Legal Considerations and Examples.

2. Purpose

The purpose of the Policy is to assist the Board of Public Utilities in their decision-making by providing a framework and set of guidelines for the classification, assessment and evaluation, financial valuation and portfolio management of the RPU real property assets. The Policy is a financial policy that only addresses management and financial considerations for real property holdings as assets.

The Policy establishes a framework based upon the assumption that the following are important considerations for real property asset assessment:

- Different classifications of property merit different considerations
- Each property should be classified, evaluated, and valued individually
- Properties should be evaluated in the context of the Policy as well as other RPU plans and policies (e.g. Integrated Resource Plans, infrastructure upgrades, reliability enhancements, etc.)
- Valuations should include assessment market benchmarks
- Financial tools can help more accurately value properties
- Financial and credit profile considerations can impact the decision of whether to retain or dispose of property
- Prudent management of properties may involve third party assessors, managers, and brokers who are more capable of extracting value from assets

The application of these assumptions suggests that real property assets should be evaluated in four steps which match the following four sections of the Policy:

1. Classify properties into three broad categories: Required – In Use, Required - Future and Idle, some of which contain subcategories;
2. Assess and evaluate each individual property by classification sub-categorization;
3. Value properties using various economic and financial considerations; and
4. Implement portfolio management practices to derive maximum value from idle assets.

3. Board of Public Utilities Powers and Duties

Under the provisions of the California Constitution and Article XII of the City Charter, the City owns and operates both electric and water utilities for its citizens. The City's Public Utilities Department exercises jurisdiction over the electric and water utilities owned, controlled and operated by the City. The Department is under the management and control of the City Manager, subject to the powers and duties vested in the Board of Public Utilities and in the City Council, and is supervised by the Public Utilities General Manager who is responsible for design, construction, maintenance and operation of the electric and water utilities.

Section 1202 of the City Charter provides that the Board has the following powers and duties, among others:

"Authorize the acquisition, construction, improvement, extension, enlargement, diminution or curtailment of all or any part of any public utility system when the amount exceeds \$50,000. . . . No such purchase, acquisition, construction, improvement, extension, enlargement, diminution or curtailment may be made without such authorization."

Under this authorization, the Board of Public Utilities must approve the actual acquisition or disposition of real property, including the transfer of the property to another City department, so long as the cost exceeds \$50,000. For other real estate transactions that are less than \$50,000, by City practice the Board serves as an advisory body to the City Council.

Section 419 of the City Charter provides that the City Council is the final decision maker regarding all contracts for the disposition, lease, licensing or other use of the RPU real property assets. This means that the Board approves expenditures in excess of \$50,000, but the City Council approves all contracts related to real property.

The City Manager, pursuant to his City Charter authority, has adopted Administrative Manual Section 08.003, entitled "Disposition and Sale of City Owned Real Property." The following is a summary of that process as it pertains to the RPU real property assets:

1. RPU, through its Board of Public Utilities, notifies the City's Real Property Services division of its desire to sell or otherwise dispose of real property and, if applicable, declares that property surplus to its needs.
2. The City's Real Property Services division determines if other City departments wish to acquire the property. If there is internal interest, the Board of Public Utilities would approve such disposition, including the transfer

value. If there is no internal interest, an initial offering price is determined. An appraisal may be obtained to determine such price.

3. If applicable, the City Council declares such property surplus. However, if the property is undevelopable, disposition does not require such surplus declaration. "Undevelopable" is limited in Administrative Manual Section 08.003 to very small properties to be sold to a contiguous owner. The sale would be subject to approval as listed in Section 7 below.

4. Prior to marketing the property and as required by Government Code section 54222 et seq., the City must contact other local agencies as to their interest in the property.

5. If no other public agencies express interest, the City then proceeds to market the property.

6. If the marketing does not generate sufficient interest in the property, the City (after discussion with RPU) has the discretion to do additional marketing or take the property off the market until better sales conditions exist.

7. The Purchase and Sale Agreement is submitted to both the Board of Public Utilities and the City Council for approval. If the amount is more than \$50,000, under the City Charter, the Board must approve the transaction.

8. Sales proceeds revert to RPU.

4. Classification of Real Property

Real property is defined as any interest in land, together with structures, fixtures, appurtenances, and improvements. The RPU real property assets can be separated into three general categories: Required - in use, Required - Future and Idle.

Required – In Use

“Required - In Use” properties are necessary for the production and delivery of water and power by RPU and/or associated with the operations and administration of RPU.

Exclusive

“Exclusive” properties are those used exclusively in current RPU operations and are owned by the City. Exclusive use is critical to ensuring continued operations. Examples of exclusive properties include power plant sites, water treatment facility sites, vacant land used to replenish groundwater basins, etc.

Multi-use

“Multi-use” properties are those properties which are City-owned and necessary for RPU operations but whose use does not exclude other operations from taking place (e.g., vacant lots with wells). These properties can be placed under review for further development or other considerations. Multi-use properties may include land that has attached water rights (that in all cases will be retained by RPU).

Environmental

“Environmental” properties are those properties which serve as or have the potential to offer environmental mitigation for any adverse impacts that RPU operations have or may have on the local environment.

Required - Future

“Required - Future” properties consist of any and all properties that may one day be used in the operations required of RPU by its mandate as a water and electric service provider or utilized in the fulfillment of RPU’s mission statement (e.g., properties with water rights or mineral rights). Required - Future properties may include properties that could become Required – In Use properties in the future. Required - Future properties may also be properties which have characteristics which may be valuable to RPU (e.g., prominent location) or that may have characteristics which are similar to other assets that RPU may wish to acquire.

Idle

“Idle” properties are all properties other than those characterized as Required - In Use or Required - Future. In general, Idle properties are properties that are not currently utilized in the core operations of RPU. Idle properties can be

separated into two categories: income properties and miscellaneous properties.

Income

“Income” properties are properties that do not fall into one of the aforementioned categories but which deliver lease or rent payments to RPU.

Miscellaneous

“Miscellaneous” properties are all other properties. Such properties may have the potential to be reclassified as income properties if the land could be leased or rented with or without investment in structures, fixtures, appurtenances, or improvements or could be declared surplus and sold.

5. Evaluation and Assessment of Real Property

Required - In Use

Required - In Use properties are by definition critical to RPU operations and should not be sold and thus need not be valued using financial valuation methodologies. These properties include but are not limited to:

- Critical office space, control centers
- Well sites
- Pumping stations
- Power plant sites
- Transmission and distribution sites
- Substation sites
- Treatment plant sites
- Percolation sites
- Sites with water rights
- Sites having security benefits

If these properties allow for other activities to take place on site, they will be put under review for further consideration as multi-use Required - In Use properties. For instance, vacant lots with only wells on site can be under consideration for the installation of photovoltaic panels.

If a property is not currently related to the core functions of RPU with respect to RPU's mission statement, it should be considered Required - Future or Idle property.

Required - Future

Properties that fall into the Idle category but hold some strategic value in relation to the core functions of RPU should be considered Required - Future properties. Such properties have the potential to one day be considered Required - In Use properties or have the potential to provide strategic value of another kind. These properties include but are not limited to:

- All properties which if developed would be considered Required - In Use
- Strategically located sites for future resources
- Sites which offer a financial hedge against future real property needs
- Sites which protect the operations of future Required - In Use assets
- Sites which offer environmental benefits

Required - Future properties should most likely be retained for future use; however, such assets could be sold under the right circumstances or at the right price if the loss of the property could be mitigated.

Idle

The real property assets which are not Required - Future are hereafter referred to as Idle assets of which there are two sub-categories:

Income

Income properties should be evaluated for further disposition using financial valuation methodologies.

Miscellaneous

Miscellaneous properties need to be reviewed for further disposition using financial valuation methodologies.

6. Financial Valuation of Real Property

As of Fiscal Year End (“FYE”) 2014, the 1,630 acres owned by RPU had a net book value of \$29 million. This total net book value grossly underestimates the total market value of the properties as many of the properties were purchased over 50 years ago.

Book Valuation

The current book value of the City’s real property assets is not an accurate assessment of the actual market value today. Although book value is important for accounting purposes, market value is necessary for effective and efficient real property asset management. In order to learn the true value, the techniques described below need to be employed.

Instead of using Book Valuation, RPU’s real property assets should have financial valuations done by examining comparable properties and/or by applying a discounted cash flow methodology.

Comparable Property Valuation

The use of appraisals will provide the most accurate and relevant information necessary for real property asset valuation. Assets within the Idle category should be broken into subgroups, each with distinct characteristics. Samples of properties within each subgroup should be appraised and then used to generate estimates (by methods described below) for the rest of the assets in each subgroup.

Sales Comparison

The Sales Comparison approach uses evaluation of criteria relevant to sales comparables, adjusting the values of the sales comparables on differences in criteria and calculating an average value of the sales comparables to derive a price estimate. This is the best method for estimating properties for which sales comparables are relatively easy to identify.

Income Capitalization Method

The direct capitalization method uses a current market capitalization rate and projected net operating income (gross annual incomes less annual operating expenses of similar properties) to determine the approximate market value of an improved property. Essentially, a capitalization rate is a rate of return on investment which is set by a real estate investor as a benchmark for determining how much they should pay for a property. This is the best method for income properties with suspected differences in income and/or operating expenses per square foot.

Discounted Cash Flow Valuation

In general, discount rates should represent the opportunity cost of the cash flow being discounted. That is, discount rates should reflect the next best alternative use of either the property or cash flow under consideration, or the

cost of the money borrowed if applicable. Various ranges of discount rates are justifiable depending upon the circumstances. Discount rates are critically important and have a significant impact on valuations. As such any discounted cash flow valuation should be done carefully with as much emphasis placed on the selection of an appropriate discount rate as the development of the proforma cash flow associated with the real property asset.

Short-term Rates

If property is sold and the proceeds held in cash, a justifiable discount rate might be the short-term cash reinvestment rate—currently about one to two percent. This rate represents the cost of borrowing an equivalent amount of money (in reference to the predicted cash flow) in the short term. Good proxies for such discount rates are 1-3 year Treasury rates.

Long-term Rates

The appropriate discount rate for properties under consideration for sale depends on the proposed use of sale proceeds. If the proposed use of sale proceeds is:

- To refund long term debt, the appropriate discount rate might be the long term cost of borrowing (currently 4-5%). Good proxies for such discount rates are 10-20 year AAA MMD GO index rates.
- To fund capital improvements or construction, the appropriate discount rate might be a proxy weighted average cost of capital for a utility enterprise (historically 7-12%). Good proxies for such discount rates are peer utility cost of capital estimates.

Historic Returns on Real Estate

Cash flow from future leases could be discounted at a rate equal to historical growth rate of real property assets, which for the United States has been between 3.5% and 4.5%. Appreciation rates have almost certainly been higher for San Bernardino and Riverside counties than similar appreciation rates in the United States. Any discount rate based upon historic appreciation rates would represent the expected appreciation in property value of the asset in question if left as is.

A combination of the above discount rates may be deemed appropriate based on the amount of time under consideration and the unique attributes of any given property.

7. Portfolio Management of Real Property

Portfolio Management

There are a variety of reasons for RPU to own real estate assets including but not limited to:

- Reasons associated with Required - In Use assets
- Reasons associated with Required - Future assets
- Strategic investment in retention of real property assets for future growth

Although there are a number of good reasons for RPU to hold real property assets, there are potential disadvantages to over-investing in real property.

Real returns to property values nationally have averaged between fifty and one hundred and fifty (50-150) basis points for the last one hundred years; which represent significantly lower real returns even in comparison to AAA rated securities over the same time frame. Further, these estimated returns fail to take under consideration the expenses required of maintaining property, which, even for vacant properties, will significantly reduce any realized returns. Real property returns for Riverside and San Bernardino counties have exceeded returns on a national level however the basic point is the same. Additionally, one of the more valuable characteristics of real property investment is the tax treatment and RPU is less likely to benefit from such tax preference than other holders would. City receives property tax for non-municipal owners.

It should further be acknowledged that although RPU is the ideal manager for Required - In Use and Required - Future real property, RPU may not be the ideal manager for all of the other real property holdings. To the extent that RPU determines that valuing, leasing or renting, selling, operating or administering a given real property asset might be better done by a third party whose core competency is doing just that, RPU should seriously consider using a third party manager or broker.

For Idle property, RPU has two feasible alternatives: selling Idle property or placing the property under a third party manager who would undertake all property related activities, including but not limited to managing leases and maintenance. Better management of real property assets will result in lower rates for customers, which is one of the long term strategic initiatives of RPU.

Commercial Operation of Mission Square Office Complex

On October 13, 2015, RPU closed escrow on the purchase of the Mission Square office building and parking structure (MS Complex). In developing the financial pro-forma for the purchase versus lease decision, staff relied on a

number of assumptions regarding the continued commercial operation of the building.

RPU will continue to operate the MS Complex as a commercial operation, in line with the financial pro-forma developed during the Board/Council deliberative process. Office space leases for non-RPU use shall be at market rates. RPU shall use a commercial broker to the extent possible to represent its interest during lease negotiations. RPU shall use a professional third-party property manager for commercial management and operation of the building. RPU shall set aside a sinking fund budget for maintenance and future major building upgrades, subject to Board and Council approval.

RPU shall continue to operate the parking structure to maximize the financial value of that asset for current and future ratepayers. RPU, or the property manager, shall use a professional management company to manage the parking structure. Daily and monthly parking rates shall be set at market rates and reviewed not less than annually in connection with the budget process.

Hedging Future Real Property Needs

There may be a cause for holding idle real estate in the San Bernardino and Riverside counties or use it as a means to diversify the financial portfolio of RPU. In other words, retention of real estate may hold some strategic value that is financially based rather than operational. This reasoning could justify the holding of Idle property. This hedging strategy only applies to property currently owned by the City (and was acquired through ratepayer funds) and does not mean that RPU would acquire any property for non-utility purposes or for purely speculative reasons.

Balancing Utility Assets with Customer Rates

The purpose of holding, disposing, or acquiring real property assets is ultimately for the benefit of RPU ratepayers. Therefore, portfolio management decisions for the individual properties should consider what RPU might be able to do with the proceeds of a sale. Best practices normally outline proceeds from the sale of property should not be used for ongoing operation needs, but rather replacement of a long term asset for another.

As it relates to Idle properties, RPU should consider selling properties if the proceeds of a sale could be used to acquire valuable real property assets or capital investments which could provide a greater present value benefit to RPU's ratepayers.

Criteria for Sale, Lease, Transfer and Acquisition

If the property falls into the income category, it should be considered for sale if the property's potential sale value exceeds the net present value of the expected cash flow from the property.

If the property falls into the miscellaneous category, investment opportunities should be considered. If the property is able to be leased, the necessary comparison of potential sale value to the net present value of expected cash flow should be made. If leases are not an option, the property should be considered for sale.

For income or miscellaneous property, if the property is leased, a third party should be considered to manage the property.

Allocation of Idle property, including vacant land for private use; should take place in exchange for RPU obtaining land/property market value paid monetary or in-kind.

Allocation of Idle property, including vacant land, or build-up property for private uses or contribution of such land/properties in public-private projects should take place only through competitive procedures (e.g. open auctions or requests for proposals) to bidders offering the highest price or in-kind equivalent. However, if the land is not independently developable and is exempt from declaring as surplus property, City policy provides that the land may be sold to the adjacent property owner without going through this competitive procedure.

The acquisition of real property assets by RPU should primarily take place if the property in question can be classified as Required - In Use, or Required - Future per the descriptions above.

Approach to Disposition and Sale of Real Property

If an assessment of a real property asset suggests that a particular asset should be sold, RPU would follow the existing Administrative Manual section entitled "Disposition and Sale of City Owned Real Property" as amended from time to time. This Real Property Financial Management policy is not meant to overlap or supplant existing City policies for disposition of real property.

Real Property Classification Listing

Staff will maintain a list of all RPU Real Property Assets, categorized according to this policy. Staff will amend this list from time to time to reflect future changes in property classification without Board of Public Utilities approval. This listing will be available for viewing on RPU's website.

8. Legal Considerations

Proposition 218

On November 5, 1996, California voters approved Proposition 218, the so-called “Right to Vote on Taxes Act.” Proposition 218 added Articles XIIIC and XIIID to the State Constitution. Proposition 218 changed, among other things, the procedure for the imposition of any new or increased property-related “fee” or “charge,” which is defined as “any levy other than an ad valorem tax, a special tax or an assessment, imposed by a (local government) upon a parcel or upon a person as an incident of property ownership, including user fees or charges for a property related service” (and referred to in this section as a “property-related fee or charge”). As of 2006, water rates are deemed to be a “property-related fee or charge” within the meaning of Prop. 218.

Under Article XIIID, revenues derived from a property-related fee or charge may not exceed the funds required to provide the “property-related service” and the entity may not use such fee or charge for any purpose other than that for which it imposed the fee or charge. The amount of a property-related fee or charge may not exceed the proportional cost of the service attributable to the parcel, and no property-related fee or charge may be imposed for a service unless that service is actually used by, or is immediately available to, the owner of the property in question.

Proposition 26

On November 2, 2010, the voters approved Proposition 26 and approved revising provisions of Articles XIIIIA and XIIIC of the California Constitution. Proposition 26 re-categorizes many State and local fees as taxes and specifies approval requirements for those taxes. In its “Findings and Declarations of Purpose” section, Proposition 26 states: “Fees couched as ‘regulatory’ but which exceed the reasonable costs of actual regulation or are simply imposed to raise revenue for a new program and are not part of any licensing or permitting programs are actually taxes and should be subject to the limitations applicable to the imposition of taxes.”

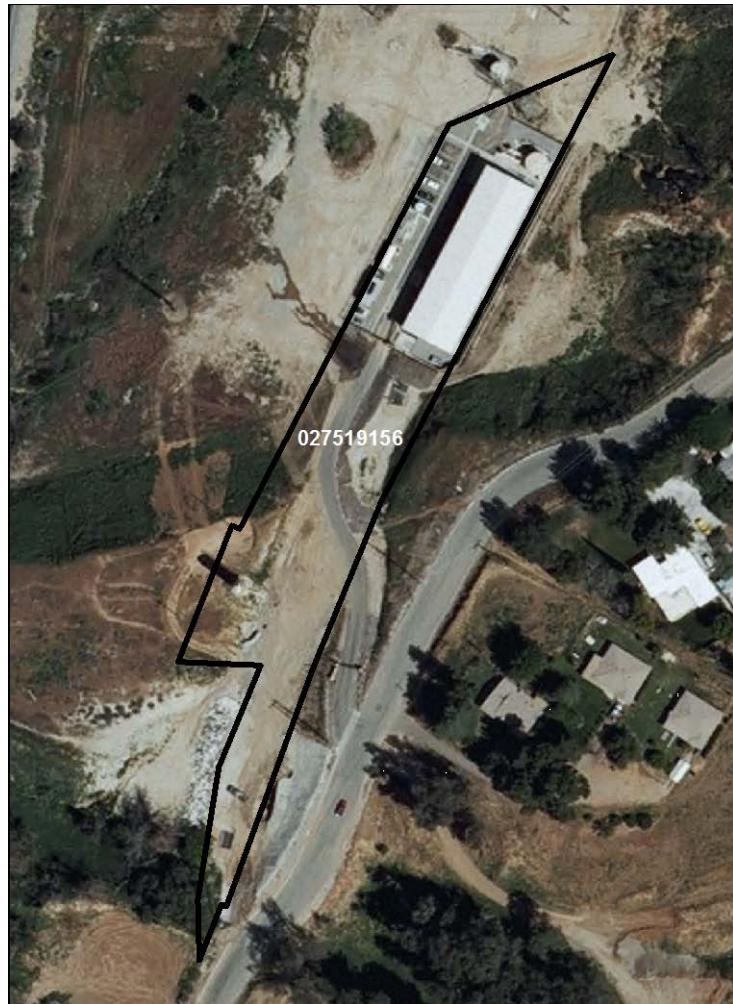
The City’s water service charges are property-related fees or charges that must comply with both Proposition 218 and Proposition 26. The City’s electric service charges are not subject to Prop. 218. In relation to the RPU real property assets, this means that the property cannot be disposed of or used for non-utility purposes unless RPU receives adequate compensation, either monetary or otherwise, for such use.

Further, when the City issues revenue bonds to finance water operations, certain representations are made to bondholders. One such covenant is that “No building or other real property of the Water System shall be furnished free to any such public agency or any private person or corporation but each of the

foregoing shall pay the reasonable rental value of any property so used." (See City Council Resolution No. 17664, as amended from time to time.)

9. Examples

Example 1: John W. North WTP – Parcel No. 0275-191-56-0000



Step 1: Evaluation and Assessment

The John W. North WTP is directly involved in the delivery of water by RPU. Further, the nature of the structure itself precludes it from other uses. For example, it is not possible for RPU to access the treatment capabilities of the water treatment plant and lease it to some third party concurrently. Therefore, John W. North WTP is a Required - In Use exclusive asset.

Required - In Use exclusive assets are not under consideration for sale or lease. Once a property is given the distinction as a Required - In Use exclusive asset, the only objective which RPU has with respect to the property is to maximize operational efficiency, which is outside the scope of the Policy.

Example 2: Vacant Emtman Reservoir - Parcel No. 243-040-064



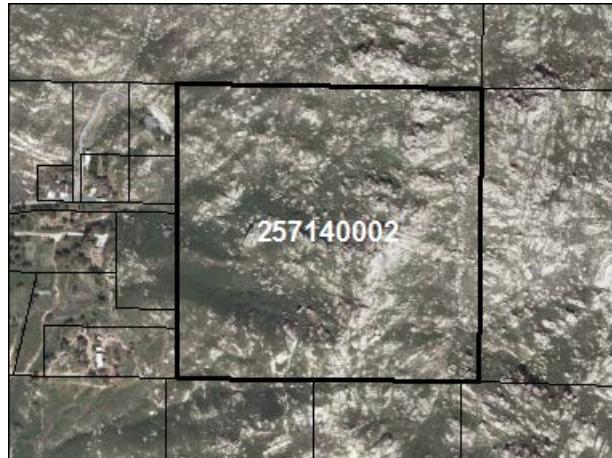
Step 1: Evaluation and Assessment

Parcel No. 243-040-064 has no existing structure built on it but it has been designated as a site for a proposed booster station or reservoir. Because Parcel No. 243-040-064 may one day be used in the operations required of RPU by its mandate as a water service provider or utilized in the fulfillment of RPU's mission statement, Parcel No. 243-040-064 is a Required - Future asset.

Required - Future assets are not under consideration for sale or lease (unless the term of the lease is short enough to allow RPU to regain control of the property prior to when necessary for RPU use). Once a property is given the distinction as a Required - Future asset, the only objective which RPU has with respect to the property is to maximize its Required - Future value and put the property to its highest and best use which is outside the scope of the Policy. As an undeveloped property it is possible that Parcel No. 243-040-064

may have multi-use potential (e.g. perhaps only part of the property is needed for the proposed booster station).

Example 3: Vacant Mt. Vernon Reservoir - Parcel No. 257-140-002



Step 1: Evaluation and Assessment

Parcel No. 257-140-002 has no existing structure built on it and has no water rights associated; therefore, it is not used in the core functions of RPU or the City and cannot be classified as a Required - In Use asset. The fact that this property has no Required - Future value associated with it and has no existing structures forces this property to be classified as Idle - Miscellaneous.

Step 2: Financial Evaluation

The only possible avenue to evaluate the financial value of a vacant, miscellaneous property is to have it appraised or use sales of recent comparable properties to provide an estimate of value. After the financial value is determined, the property should be put under consideration to determine if there is market demand to support leasing all or a portion of it.

After an open and competitive bidding process has been conducted for the lease of the property, the net present value of the highest lease amount offered will be compared to the previously determined financial value of the property. Because the property is currently vacant, the appropriate discount rate is the expected appreciation rate of the property, which historically has been approximately 4%.

Step 3: Portfolio Management

If the calculated net present value of lease payments exceeds the determined financial value of the property, the asset should be retained; however, a third party service should be utilized to manage property related activities such as

the lease and maintenance. If the determined financial value exceeds the net present value of lease payments, the property should be put under consideration to be sold.

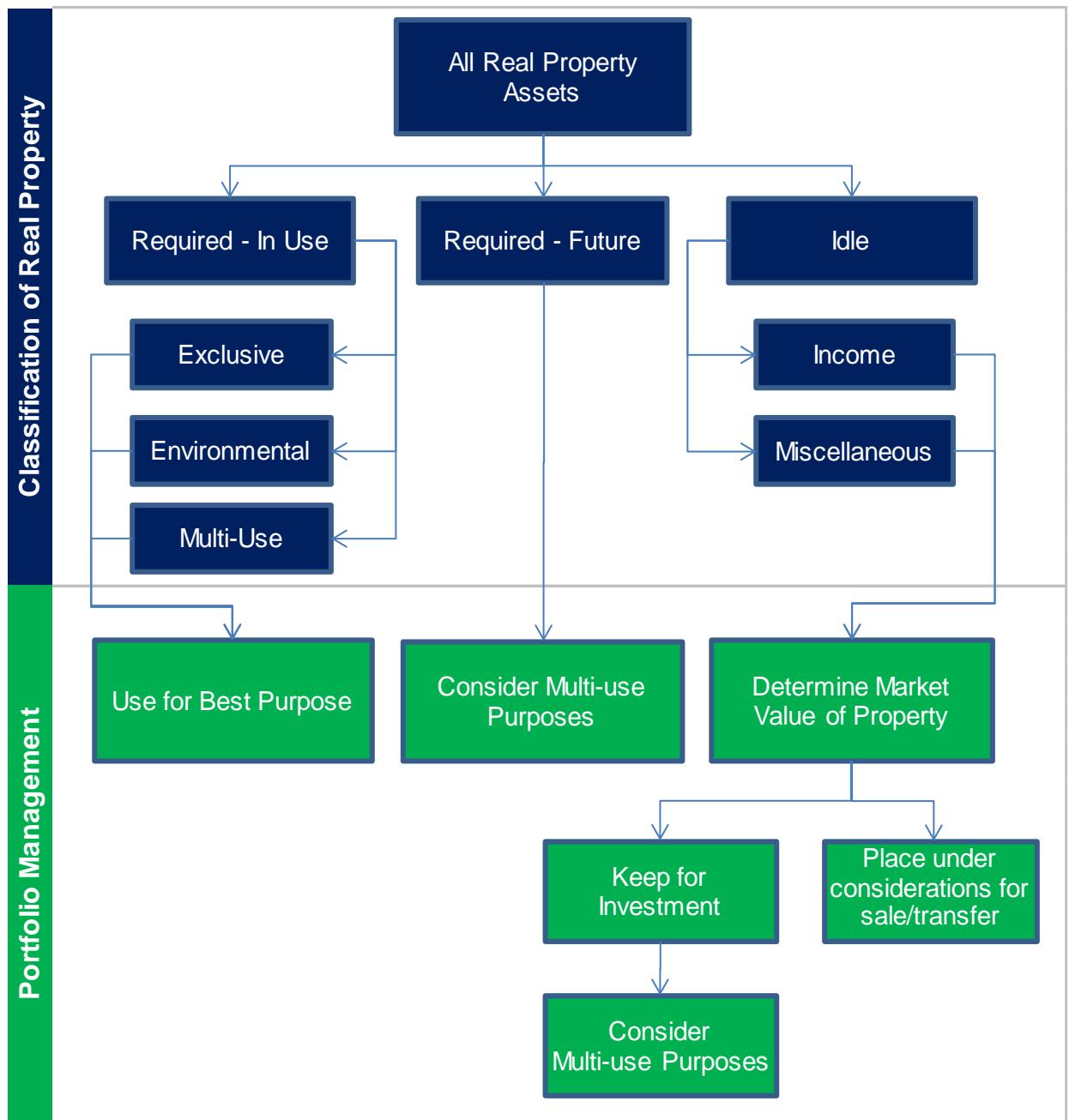
10. Conclusion

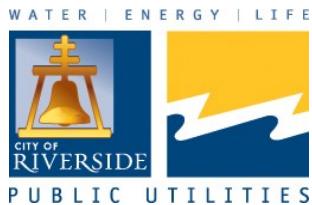
The Policy was first issued in November 2014. It is expected that the Policy will be updated every two years and the list and classification of real property assets will be updated more regularly.

Revision Log

<u>Revision</u>	<u>Subject</u>	<u>Adopted</u>
Revision 1	Mission Square Office Complex	November 20, 2015

11. Appendix I – Classification Chart





RIVERSIDE PUBLIC UTILITIES

Board Policy

Title: **Energy Delivery System**

Date Last Approved: June 2014

Category: **Utility Business Policies**

Date of Next Review: June 2016

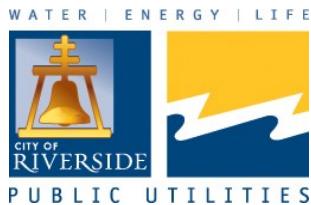
Review Committee: Electric

Policy No: **A-6**

Riverside Public Utilities (RPU) shall be responsible for the overall reliability of the energy delivery system. RPU will ensure that system additions, operations, maintenance, and replacement of assets follow the appropriate best practices, system planning criteria, and design standards for prudent utility practice.

Accordingly, RPU shall:

1. See that the energy delivery system is operated safely at all times within industry standards.
2. Ensure that the energy delivery system planning accounts for the growing demand for the City of Riverside.
3. See that repairs to the electric distribution system are made in a timely manner.
4. Oversee maintenance of the electric distribution system to minimize service interruptions.
5. Provide service to new customers that comply with RPU rules and rates.
6. Ensure RPU complies with the appropriate National Electric Regulatory Corporation (NERC) standards.
7. Ensure safe operational procedures are applied and followed when working in or around electrically energized parts or equipment.
8. Incorporate advancements in technology into the design, maintenance, and operation of energy delivery system to improve system reliability and performance.



RIVERSIDE PUBLIC UTILITIES

Board Policy

Title: **Water Delivery System**

Date Last Approved: June 2014

Category: **Utility Business Policies**

Date of Next Review: June 2016

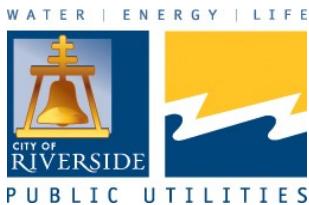
Review Committee: Water

Policy No: **A-7**

Riverside Public Utilities (RPU) shall be responsible for the overall reliability of the water system. RPU will ensure that system additions, operations, maintenance, and replacement of assets follow the appropriate best practices, system planning criteria, and design standards for prudent utility practice.

Accordingly, RPU shall:

1. See that the water system is operated safely at all times within industry standards.
2. Ensure that water delivered to customers meets or surpasses all applicable local, state, and federal water quality standards and is suitable for its intended use.
3. Ensure that water system planning accounts for the growing demand for the water system service area while incorporating appropriate water use efficiency practices.
4. See that repairs to the water system are made in a timely manner.
5. Oversee maintenance of the water system to minimize service interruptions.
6. Provide service to new customers that comply with RPU rules and rates.
7. Ensure compliance with the appropriate industry standards.
8. Ensure safe operational procedures are applied and followed when working in or around electrically energized parts or equipment.
9. Incorporate advancements in technology into the design, maintenance, and operation of water system to improve system reliability and performance.



RIVERSIDE PUBLIC UTILITIES

Board Policy

Title: Electric Resources: Maintain Obligation to Serve Customers	Date Last Approved: <u>June 2014</u>
Category: Utility Business Policies	Date of Next Review: <u>June 2016</u>
Review Committee: <u>Electric</u>	Policy No: A-8

Riverside Public Utilities (RPU) shall protect existing and seek to develop new electric (generation and transmission) resources in accordance with sound utility practice and policies adopted in RPU's Energy Risk Management Policy. These resources shall meet the guidelines of the City Council, and applicable state and federal regulations, as recommended by the RPU Board.

Accordingly, RPU shall;

1. Continue to preserve rights to local control through aggressive monitoring of legislative and regulatory activities, including timely requests for action by the City Council when needed.
2. Utilize regional, state, and national organizations to further the goals of the utility and the city.
3. Proactively participate in wholesale market initiatives to advocate positions most beneficial or least impactful to RPU ratepayers.
4. Monitor Use of Greenhouse Gas Allowance Proceeds for compliance with CARB's regulation and California Health and Safety Code Section 38500.
5. Ensure compliance with RPU's Internal Compliance Program applicable resources.
6. Obtain adequate renewable resources to meet the Renewable Portfolio Standard and adequate resources to meet the requirements to reduce Greenhouse Gas Emissions.
7. Prepare required regulatory agency reports.
8. Prepare a comprehensive Integrated Resource Plan every five years.
9. Insure adequate tools and technology exist to adequately participate in wholesale markets.
10. Monitor RPU's TRR for optimal timing of a new filing at the Federal Energy Regulatory Commission.

The Board adopted Energy Risk Management Policy and RPU NERC/WECC Internal Compliance Program are attached.

Attachments: 1) Energy Risk Management Policy
2) RPU NERC/WECC Internal Compliance Program

**CITY OF RIVERSIDE
PUBLIC UTILITIES**

POWER RESOURCES RISK MANAGEMENT POLICIES

ENERGY RISK MANAGEMENT POLICY

**WHOLESALE COUNTERPARTY RISK MANAGEMENT
POLICY**

AUTHORIZED TRANSACTIONS POLICY

GLOSSARY

CITY COUNCIL MEMORANDUM

March 5, 2013
Amended April 29, 2014

**CITY COUNCIL RESOLUTION APPROVING CURRENT
POLICIES AND PROCEDURES**

CITY OF RIVERSIDE PUBLIC UTILITIES

POWER RESOURCES RISK MANAGEMENT POLICIES

ENERGY RISK MANAGEMENT POLICY

1. Introduction
2. Risk Management Objectives
3. Risk Governance Structure and Responsibilities
4. Operational Management Oversight - Front-, Middle-, Back-Office
5. Segregation of Duties
6. City Attorney's Office
7. Risk Measurement, Monitoring, Reporting
8. Hedging Program
9. Derivatives for Financial Transactions
10. Waivers
11. Conflict of Interest
12. Authorization Notification
13. Associated Guidelines, Controls, Policies and Procedures

Attachment 1 - Risk Management Committee Membership List

Attachment 2 - Energy Risk Management Policy
Acknowledgement Form

Attachment 3 - Power Resources Energy Transaction
Limits Summary

Attachment 4 - Power Resources Natural Gas
Transaction Limits Summary

CITY OF RIVERSIDE PUBLIC UTILITIES

ENERGY RISK MANAGEMENT POLICY

1. Introduction

As a municipal utility, the City of Riverside's Public Utilities Department ("RPU") is in the business of generating, transmitting and distributing electricity for the benefit of its citizen-ratepayers. RPU's objective is to minimize the overall cost of providing this service by developing, optimizing and maintaining a best available price supply portfolio that maximizes the value of its physical and financial wholesale power Transactions while minimizing the attendant financial risks. However, unlike a private-sector entity, RPU is not currently engaged in the power supply business strictly for profit. As a result, RPU is defined as a cost hedger and, therefore, precluded by this Policy from engaging in many of the risk-taking activities typical to an organization orientated solely toward profit maximization.

2. Risk Management Objectives

Although RPU does not engage in risk-taking activities typical to a private-sector organization, management recognizes that certain risks are incidental to normal power supply operations and Hedging activities. RPU's Policy is to manage risk inherent with serving load, including the risks associated with normal cost-hedging activities, those associated with participation in wholesale markets in general and the California Independent System Operator ("CAISO") in particular. This document serves as a vehicle to describe and define the Risk Management activities considered appropriate for RPU in the normal course of business.

RPU's supply portfolio is exposed to several risks, including but not limited to: (i) load variability; (ii) cost variability (including applicable CAISO resource sufficiency and associated price caps, congestion costs, energy costs and energy losses); (iii) Counterparty Risk; (iv) energy commodity price volatility; and (v) regulatory/legislative risk. From the perspective of risk mitigation, RPU's primary objective is to manage the cost of serving its customers. Normal power supply activities are to be focused around this objective. Taking unnecessary risk in order to arbitrage market opportunities, or risks unrelated to RPU's normal power supply business activities, is considered inappropriate.

RPU Power Resources management will manage Business Risks to acceptable levels established by the Risk Management Committee ("RMC"), as reviewed by the Public Utilities Board and approved by the City Council pursuant to Section 3 of this Policy.

RPU shall ensure that the use of its fuel, power resources and its transmission systems are reliable over the long-term and designed to minimize the effects of interruption or curtailment. RPU Power Resources may not engage in activities that expose the City of Riverside to speculative commodity trading risks. The Energy Risk Management Policy prescribes Transaction parameters and maximum acceptable risk limits as presented in Attachments 3 and 4 of this Policy.

To the extent feasible, given various political, regulatory and environmental constraints, RPU shall ensure that the costs of its fuels, power resources and related transmission systems remain competitive over the long-term. Therefore, RPU shall conduct its fuels, power procurements and other Transaction Activities in a manner necessary to compete successfully in the marketplace as a cost hedger. Fuel procurement activities will be conducted under the same Risk Management principles and procedures as power supply.

RPU Power Resources employees shall maintain the confidentiality of strategic plans for competitive Transactions and information exchanged with partners, suppliers, customers and other entities as necessary for successful market participation, to the fullest extent allowed under California's Public Records Act requirements.

RPU employees involved with Energy Risk Management activities, including the Risk Management Committee members (refer to Attachment 1 of this Policy), Utilities Power Resources Managers and RPU operational level employees are expected to understand fully the extent to which their decisions and actions expose RPU to risk. Any activities that are not related to RPU's normal power supply business or have the effect, or potential of increasing risk without authorization, shall be avoided. The Energy Risk Manager shall be responsible for ensuring all Power Resources employees executing Transactions reads and understands the Power Resources Risk Management Policies and signifies in writing that they have done so by completing the Energy Risk Management Policy Acknowledgement Form – Attachment 2 of this Policy. The Energy Risk Manager shall retain these forms.

3. Risk Governance Structure and Responsibilities

- a. City Council:
 - i. Approval of substantive modifications and amendments to the Power Resources Risk Management Policies.
 - ii. Ultimate authority for all Transactions entered into pursuant to the Power Resources Risk Management Policies, notwithstanding any delegations specified in the Policy.
 - iii. Approval of bilateral agreements for a term longer than five (5) calendar years or sixty (60) months.
- b. Public Utilities Board:
 - i. Transaction approval authorities within the limits established in the Power Resources Transaction Limits Summaries for Energy and Natural Gas, Attachments 3 and 4 of this Policy.
 - ii. Conduct Public Utilities Board or Customer Relations/Finance Committee meetings as needed, to review the Risk Management process including, but not limited to, risk control methodologies, product types, and performance.
 - iii. Review and recommend City Council approval of substantive modifications and amendments to the Power Resources Risk Management Policies.
- c. Risk Management Committee:

The RMC serves as the highest level of organizational Risk Management reporting to the Public Utilities Board and City Council. The RMC shall consist of the members listed in Attachment 1. The RMC is responsible for approving procedures to ensure compliance with Power Resources Risk Management Policies within RPU Power Resources.

As delegated by the Public Utilities Board and the City Council, responsibilities and authorities of the RMC include:

- i. Transaction approval authorities within the limits established in the Power Resources Transaction Limits Summaries for Energy and Natural Gas,

Attachments 3 and 4 of this Policy.

- ii. Approving the use of all types of forward and Optimization Strategies proposed by the RPU Power Resources group prior to the consummation of individual Transactions (including the historical practices and any deviation from historical practices).
- iii. Approving all financial limits associated with Transactions within the authorization as described in this Policy.
- iv. Approving the use of financial instruments on a case-by-case basis.
- v. Approving all long-term power supply strategies. Approval authority for long-term strategic plans and modeling parameters is not limited by fiscal constraints however; such plans shall be subject to review and approval by the Public Utilities Board.
- vi. Approval of strategy adjustments that result in variations of approved Transactions.
- vii. Approval of enterprise unit strategies, and associated types of transactions (not individual Transactions), expected to facilitate RPU's compliance with all relevant power procurement reliability standards and reserve requirements.
- viii. Approval of New Products as specified in Section 8 of the Authorized Transactions Policy.
- ix. Reviewing and assessing the adequacy of risk reports generated by the Middle-Office.
- x. Periodic review and approval of counterparty credit lines. Subsequent actions can result in approval, rejection or amendment to credit limits approved under delegated approval authorities.
- xi. Authority to waive credit standards on a case-by-case basis to comply with regulatory or governmental mandates.
- xii. Authority to waive credit standards on a case-by-case basis for RPU term purchase Transactions to limit price volatility risk.
- xiii. Assessing the adequacy and functioning of the system of controls for effectively implementing the Power Resources Risk Management Policies.
- xiv. Setting, changing and approving the design of internal control processes related to power supply.
- xv. Recommending capital allocation consistent with performance objectives and the overall strategic direction of RPU.
- xvi. Recommending adequate staffing and resources (e.g., number, level and experience of staff, compensation policy, hardware and software support, etc.) for RPU Power Resources.
- xvii. Recommending the structure of compensation to ensure it does not create incentives that conflict with maintaining the integrity of the risk control

infrastructure.

- xviii. Ensuring that adequate capital reserves are maintained for credit, operations and liquidity.
- xix. Recommending, as necessary, that the Public Utilities Board and City Council approve any substantive modifications or amendments to the Power Resources Risk Management Policies and associated Policies identified in Section 13 in the manner described above.

The RMC will conduct meetings as needed, but at least quarterly, to review and, if necessary, act upon the duties and responsibilities mentioned above. RMC meetings may be conducted with at least three members of the committee one of whom must be the Utilities General Manager. Any action must be affirmatively approved by the RMC prior to such action becoming effective. If the Utilities General Manager is absent or votes "no", then no action shall be taken or become effective. Meetings may be conducted in-person, telephonically, electronically, or by any comparable means by which proposed actions may be described, discussed, and approved.

d. RPU Administration:

RPU Administration is responsible for implementing the risk control structure, including the segregation of duties and independent organizational oversight. RPU Administration is identified as the Public Utilities General Manager, Utilities Assistant General Manager-Finance, and the Utilities Assistant General Manager-Resources. Pursuant to the Riverside City Charter sections 407, 601 and 1200, RPU Administration, with the approval of the City Manager, has the authority to assign particular employees to particular duties or job functions within the organization, and to fill any job vacancies on an interim basis pending permanent appointments.

RPU Administration may delegate risk-monitoring responsibilities within the Middle-Office (i.e., Energy Risk Management) function. The delegation of these responsibilities does not diminish the responsibilities of RPU Administration or Utilities Power Resources Managers, nor does it mitigate the necessity for an independent Risk Management oversight function.

As delegated by the Public Utilities Board and the City Council, responsibilities and authorities of the Public Utilities General Manager, the Utilities Assistant General Manager-Finance and/or the Utilities Assistant General Manager-Resources include:

- i. Transaction approval authorities within the limits established in the Power Resources Transaction Limits Summary for Energy and Natural Gas, Attachments 3 and 4 of this Policy.
- ii. Review and approval of the Transaction strategy by the Utilities Assistant General Manager-Resources.
- iii. Approval authorities within the limits established in Section 3 of the Wholesale Counterparty Risk Management Policy.
- iv. Counterparty prepayment authorization (refer to Section 5 of the Wholesale Counterparty Risk Management Policy).

- v. Authority to approve any non-substantive modifications or amendments to the Power Resources Risk Management Policies and associated Policies identified in Section 13 with concurrence with the City Attorney's Office.

4. Operational Management Oversight – Front-, Middle-, Back-Office

Utilities Power Resources Managers have the responsibility for Front- and Back-Office activities. The Utilities Power Resources Managers report to the Utilities Assistant General Manager-Resources and are responsible for developing and implementing market strategies and gaining approval for and transacting in new products/markets consistent with goals outlined in this Policy.

Position title changes approved by the City Council shall not have any effect upon the delegations of authority and responsibilities as described in this Policy and associated Policies identified in Section 13. Any position title changes shall be updated in the regular Policy review and approval process by the Public Utilities Board and City Council as described above.

In executing Power Resources activities, Utilities Power Resources Managers may seek the advice and involvement of individuals outside the business unit for issues related to areas outside the unit's expertise.

Utilities Power Resources Managers may approve confirmations or special conditions (pursuant to an approved master or enabling agreement.) However, confirmations that contain modifications to the legal terms and conditions must be reviewed by the City Attorney's Office and then approved by the Utilities Power Resources Management. Substantive modifications will also need to be approved by the Public Utilities Board and City Council.

The Energy Risk Manager has the responsibility for Middle-Office and is responsible for ensuring the effectiveness of the control structure, risk measurement and monthly management reporting. This includes measuring, assessing and reporting all inherent risk profiles including market, liquidity and credit risks such as counterparty exposures, Transaction limits, etc. The Energy Risk Manager shall meet with the Utilities Power Resources Managers as needed.

Each function has special concerns and responsibilities in the Transaction Activities. For purposes of risk mitigation, the RMC is authorized to approve enterprise unit strategies, and associated types of transactions (not individual Transactions), expected to facilitate RPU's compliance related to pertinent planning reliability standards and reserve requirements ("Supply Requirements") mandated by (i) the City Council, (ii) the CAISO, and (iii) the requirements of regulatory agencies of competent jurisdiction.

a. Front-Office

The Front-Office is comprised of those functions related to the business activities of RPU Power Resources. The Utilities Power Resources Managers are directly involved in resource planning, product procurement and sales Transactions and implementation of strategies within authorized limits. Position titles of specific Utilities Power Resources Managers or other employees may not be identical to the following job functions.

Term Trading

Term Trading encompasses those functions associated with monthly, quarterly, annual and long term planning. As a result, this function constitutes the fiscal

planning arm of the resource procurement process.

Long-Term Contracts

Long-term contract terms are generally greater than five years and must be approved by the Public Utilities Board and the City Council. RPU may enter into a power purchase agreement to buy energy (with or without environmental attributes), natural gas, capacity, transmission and/or ancillary services to manage the supply portfolio with cost certainty. Long-term contract Transaction activities, processes and reporting are typically exempt from the requirements of Power Resources Risk Management Policies.

Market Operations/Trading`

Market Operations/Trading is responsible for day ahead and real-time trading activities.

Day Ahead Trading

The day ahead trading function is responsible for executing Transactions according to their most recent load forecast and load/resource balance.

Day ahead trading is delegated authority for individual Transactions as identified in Attachments 1 and 2 of the Authorized Transactions Policy and within the limits established in the Power Resources Transaction Limits Summaries for Energy and Natural Gas, Attachments 3 and 4 of this Policy. This activity requires constant monitoring of the load/resource balance and the ability to determine the appropriate Transactions necessary to maintain the load/resource balance and implement resource Optimization Strategies.

Real-Time Trading

In "real time," or within the day, the principal concern is to serve the hourly loads. Since this activity entails hourly adjustments of the load/resource balance, volume constraints are not dictated by this Policy. Real-Time Trading is delegated the authority for individual Transactions as identified in Attachments 1 and 2 of the Authorized Transaction Policy and within the limits established in the Power Resources Transaction Limits Summaries for Energy and Natural Gas, Attachments 3 and 4 of this Policy.

Front-Office activities and delegated authorities include:

- i. Primary interface with all wholesale counterparties, including but not limited to, independent power producers, investor-owned utilities, broker/dealer organizations and governmental organizations.
- ii. Transact with counterparties on the Approved Counterparty list.
- iii. Identifying and recommending counterparty candidates to the Middle-Office for review and approval.
- iv. Optimize the economics of resources through physical and financial purchase and sale Transactions consistent with this Policy.

- v. Enter into natural gas Transactions, including transportation, storage and purchases to cover monthly, quarterly and annual supply requirements as contained in the RMC approved Forward Strategy Sheet.
- vi. Enter into electric capacity transactions to meet capacity requirements.
- vii. Enter into emissions Transactions to meet regulatory requirements.
- viii. Ensure proper legal authority exists to transact with counterparties.
- ix. Establishing bi-lateral transaction structures, strategies, pricing, positioning and Hedging within authorized limits and pursuant to existing contractual arrangements.
- x. Developing and establishing functional procedures to ensure workflow transparency and cross-training among line personnel.
- xi. Transaction approval limits are established in the Power Resources Transaction Limits Summaries for Energy and Natural Gas, Attachments 3 and 4 of this Policy.
- xii. Engage in individual Transactions with terms that are hourly through the following business day.

b. Middle-Office

The Middle-Office is comprised of those functions related to Risk Management and counterparty credit. Middle-Office activities are the primary responsibility of the Energy Risk Manager as delegated by the RMC.

The Energy Risk Manager may report directly to the Public Utilities General Manager or to an individual at the Assistant General Manager level which does not oversee daily power operations. The Energy Risk Manager will be functionally and organizationally independent from all business activities. As a result, the Energy Risk Manager's primary responsibilities are to manage the Middle-Office function, develop and propose to the RMC changes to this Policy and otherwise ensure that all products utilized and Transaction Activities are undertaken in compliance with current policy. This arrangement will provide independent and regular management oversight for all Hedging and Transacting Activities. The role of the Energy Risk Management function is review and oversight and will not include daily Front-Office or Back-Office business activities.

The Energy Risk Manager will be responsible for the wholesale counterparty credit review process and will serve as the first level of approval for all counterparty credit limit determinations. The Energy Risk Manager, along with the Utilities Power Resources Managers, are responsible for monitoring counterparty credit risk and shall notify RPU Power Resources in the event the counterparty's credit risk profile has changed and thus warrants a corresponding change in the counterparty Transaction limit. Additional discussion is in Section 6 of the Wholesale Counterparty Risk Management Policy.

In the event of an actual or potential violation of the Power Resources Risk Management Policies, such actual or potential violations should be brought to the attention of the Energy Risk Manager. The Energy Risk Manager shall investigate and document the circumstances surrounding the alleged violation. A report of the actual or potential violation may be provided to the Risk Management Committee at the recommendation of the Energy Risk Manager after consultation with the City Attorney's Office.

Middle-Office activities and delegated authorities include:

- i. Monitoring and assessing current and potential risk exposures.
- ii. Transaction compliance with this Policy.
- iii. Preparing, verifying and distributing all Risk Management reports.
- iv. Ensuring credit enhancements used by counterparties as a basis for transacting remain current.
- v. Temporarily or permanently halting Transactions with an otherwise approved counterparty because of credit exposure or credit condition.
- vi. Convening the RMC and obtaining approvals for revisions to this Policy or associated Policies.
- vii. Monitoring and assessing the Policies identified in Section 13, Associated Guidelines, Controls, Policies and Procedures.
- viii. Transaction approval authorities within the limits established in the Power Resources Transaction Limits Summaries for Energy and Natural Gas, Attachments 3 and 4 of this Policy.
- ix. Approval authorities within the limits established in Section 3 of the Wholesale Counterparty Risk Management Policy.
- x. Authority to add a new counterparty to the Approved Counterparty list with a credit limit not to exceed the approval authority as delegated in this Section 3 of the Wholesale Counterparty Risk Management Policy.
- xi. Authority to decrease or increase counterparty's authorized credit limit not to exceed the amount established pursuant to Section 3 of the Wholesale Counterparty Risk Management Policy.
- xii. Responsible for reporting the addition of new counterparties under the authority of the Energy Risk Manager and all credit limit changes with justification to the RMC.

c. Back-Office

The Back-Office is comprised of those functions responsible for verification, validation accounting, processing, reconciling and settling all Transactions. The responsibilities of the Back-Office encompass comprehensive support of all Transactional Activities.

Power Contracts/Projects encompass those contractual and settlement functions associated with charges related to contractual ownership or entitlements, as well as the validation, verification, and reconciliation of Transactions conducted by the Planning and Market Operations/Trading.

Back-Office activities and delegated authorities include:

- i. Ensuring proper verification, validation, reconciliation, analysis and reporting of RPU Power Resources Transactions.

- ii. Assuring completeness in data gathering and transaction reporting, counterparty confirmations, data integrity and workflow transparency between Front- and Back-Office activities.
- iii. Confirmation of Transactions.
- iv. Tracking, processing, supporting, reporting, and/or performing Transaction settlements.
- v. Contract management and compliance.
- vi. Interfacing with RPU Finance division to ensure proper energy and natural gas accounting and provide assistance with financial accounting and payment processing.
- vii. Review, negotiate and seek internal approvals (Public Utilities Board and/or City Council) of applicable enabling agreements to facilitate Transacting with counterparties.
- viii. Administer the terms and conditions of applicable agreements.
- ix. Review Transaction confirmation agreements to ascertain conformance with the terms and conditions of the underlying enabling agreement and business Transactions and report deviations to Front-Office.
- x. Ascertain that fully executed Transaction confirmation agreements are in place before Transactions take place (or in rare circumstances unexecuted confirmations supported by voice recordings in conformance with the enabling agreement).
- xi. Catalogue and safeguard copies of agreements and Transaction confirmation agreements.
- xii. Review, validate, verify, reconcile, and resolve discrepancies regarding charges from and billings to counterparties.
- xiii. Provide periodic Transaction settlement reports for financial tracking and planning purposes.

5. Segregation of Duties

Appropriate segregation of duties is to be established and maintained throughout the system of controls over financial risks. Senior management must be diligent in ensuring that appropriate segregation of duties is adhered to within the context of organizational changes, while considering staffing limitations, RPU's business model as a cost hedger, and the overall level of transactions with counterparties.

Controls over inputs and systems operations are of particular importance in ensuring the integrity of data used in risk control and management. In all cases, there will be an appropriate segregation of duties or oversight to reduce the risk of error and/or fraud.

To the maximum extent practicable given RPU's business model and level of staffing, Front-Office activities will be functionally independent from Middle- and Back-Office activities. As a result, the

Front-Office will generally neither perform nor supervise Middle-Office Risk Management activities, or Back-Office financial accounting or settlements. One exception is the Power Contracts/Projects function which also supervises Back-Office activities, and is involved in the negotiation and administration of power contracts/projects, but not the typical execution of either Term, Day Ahead or Real-Time trading activities. This does not reduce the Front-Office personnel and Utilities Power Resources Managers' responsibility for accurately recording, valuing and considering the risk associated with their activities. Utilities Power Resources Managers are responsible for ensuring the Front-Office's ability to perform delegated tasks in compliance with this Policy. This arrangement will provide independent and regular management oversight for both risk-taking and risk-control activities. It will also allow for a clear separation of duties between the Front-Office transacting and Middle-Office risk-control functions.

To the maximum extent practicable given RPU's business model and level of staffing, Middle-Office activities will be functionally independent from all Front-Office and Back-Office activities. The Middle-Office will have primary responsibility for Risk Management oversight and policy development and compliance. If there are not adequate resources necessary to fully support a Middle-Office, this function may be combined with another function provided that appropriate segregation of duties or sufficient internal controls are maintained at all times.

To the maximum extent practicable given RPU's business model and level of staffing, Back-Office settlement activities will be functionally independent from all Front-Office and Middle-Office activities. The Back-Office will have primary responsibility for all Transaction confirmation, accounting and reconciliation processes. If there are not adequate resources necessary to fully support a Back-Office, this function may be combined with another function provided that appropriate segregation of duties or sufficient internal controls are maintained at all times.

6. City Attorney's Office

A designated member of the City Attorney's Office shall serve as legal counsel to the RMC and shall advise staff, the RMC, the Public Utilities Board, and the City Council on all legal issues related to this Energy Risk Management Policy and the Policies identified in Section 13, Associated Guidelines, Controls, Policies and Procedures.

7. Risk Measurement, Monitoring, Reporting

Key to energy risk management is the monitoring of risks and the accurate and timely information that must be provided to all parties involved in any aspects of energy risk management to allow them to perform their functions appropriately. Periodic reports (e.g. monthly, quarterly, yearly) will be provided to the RMC and other appropriate parties which provide details on Transactions as determined by the RMC.

8. Hedging Program

RPU seeks to minimize financial exposure to higher-volatility spot market wholesale electricity and natural gas prices by the use of rolling hedges and open position percentage bands as approved by the Forward Strategy Sheet. Financial exposure creates budget uncertainty. In order to mitigate the financial exposure to short time horizon price volatility, RPU continually reduces its financial exposure by reducing the quantity of energy in either open long or short positions. Prompt and nearby months are hedged as close to 100% as possible, unless otherwise approved by the RMC. Since commodity price volatility is greater in the short time horizon and because there is more delivery certainty with respect to RPU's assets and supply contracts, prompt or nearby fiscal years are more fully hedged than outer years. This Hedging philosophy provides more budget certainty for the current and nearby fiscal years.

Since the open position percentage bands drive ever decreasing open position levels over time, as a month approaches operational delivery, RPU will already have a large percentage of the requirements purchased if short or sold if long to comply with policy. Therefore, there should only be a small percentage of energy left to buy or sell just prior to a given delivery month.

Regardless of the Hedging strategy, RPU would still have some exposure to spot market prices due to the quantity mismatch between block energy purchases and sales and the energy consumption pattern of RPU's retail customer base. While a block purchase may be used to reduce overall financial exposure, RPU may be exposed to potentially having purchased too much energy to meet peak loads and selling the excess during shoulder or off-peak periods when loads and prices are lower.

Analyses of the most cost effective combination of Options, forward contracts and fixed price purchases are conducted regularly by the Planning function. The results of these analyses are presented to the Risk Management Committee regularly in a Forward Strategy Sheet where the Hedging program is reviewed and approved.

9. Derivatives for Financial Transactions

Use of Derivatives should be consistent with the overall business and Risk Management objectives of RPU as a cost hedger. Derivatives may be used to manage Business Risk within limits specified by this Policy to manage financial exposures that have been identified through the risk identification and measurement process, provided that they qualify clearly as "Hedging" activities as defined in this Policy. Derivative risk should be evaluated against the exposure it is expected to modify. From this perspective, Derivatives should not increase net exposure to market risk, since the market risk created by use of the Derivatives should be offset by exposures they modify (e.g., financial Swap for price certainty).

The use of Derivatives should be assessed against any additional risk, and such use is permitted only to the extent that the expected benefit is considered to outweigh these risks. All strategies are to be reviewed against the fiscal budget to ensure proper financial planning and control. Net incremental risk exposure created from the use of Derivatives is inconsistent with RPU Risk Management objectives described in this Policy and the associated Policies identified in Section 13.

Selling or "writing" financial Options (i.e., where RPU is obligated to perform) is not permitted unless used for Hedging-purposes only (i.e., to create a fence or collar for budget purposes, selling an Option against a long position, etc.).

10. Waivers

As described in Section 3 above, the RMC has the authority to waive (i) credit standards on a case-by-case basis to comply with regulatory or governmental mandates and, (ii) credit standards on a case-by-case basis for RPU term purchase Transactions to limit price volatility risk.

11. Conflict of Interest

RPU employees or officers responsible for directly supporting, reviewing or authorizing Transaction Activities shall not enter into, or direct others to enter into, any energy, natural gas, or related Transactions other than on behalf of RPU, the City of Riverside, entities under a valid Utilities Service Agreement with the City or the City's authorized agents. Notwithstanding the preceding sentence, designated RPU staff may perform Front-Office and Back-Office activities on the behalf of others with whom the City of Riverside has contractually agreed to provide such services. All appropriate RPU employees and officers will be required to file an annual Statement of Economic Interests in order to disclose any financial interest in RPU counterparties.

12. Authorization Notification

As personnel changes dictate, the Public Utilities General Manager, or his respective designee, will inform counterparties and brokers regarding those personnel who are authorized to perform Front-, Middle- and Back-Office activities on behalf of RPU. The RMC and Public Utilities General Manager, or their respective designees, are authorized to inform counterparties of any other authorizing restrictions (i.e., no leveraged Transactions, etc.) imposed on such authorized personnel. Additionally, the Utilities Power Resources Managers or the RMC members may, for the avoidance of doubt, inform counterparties regarding trading authority and restrictions, including authorized product types and/or term limits.

13. Associated Guidelines, Controls, Policies and Procedures

The required supporting policies and procedures to this Policy are outlined below. Approval and modification of such supporting policies and procedures requires the approval of the Public Utilities Board and City Council unless otherwise stated.

City of Riverside Public Utilities Wholesale Counterparty Risk Management Policy

City of Riverside Public Utilities Authorized Transactions Policy

City Council Resolution Approving Current Policies and Procedures

ATTACHMENT 1

Risk Management Committee (“RMC”) Membership List

Public Utilities General Manager (Chair)

Utilities Assistant General Manager-Finance

Utilities Assistant General Manager-Resources

Energy Risk Manager (Secretary)

The RMC will be chaired by the Public Utilities General Manager. The Energy Risk Manager will act as secretary. Meetings may be conducted with a quorum of three RMC members, one of whom must be the Utilities General Manager. Agenda items requiring RMC action must be approved by a minimum of at least three (3) members, including the Public Utilities General Manager prior to becoming effective (refer to Section 3 of this Policy.)

A designated member of the City Attorney's Office shall serve as legal counsel to the RMC and shall advise staff, the RMC, the Public Utilities Board, and the City Council on all legal issues related to the Energy Risk Management Policy and associated Policies identified above in Section 13 (refer to Section 6 of this Policy.)

ATTACHMENT 2

Energy Risk Management Policy Acknowledgement Form

The purpose of this form is for the individual RPU employee involved with Energy Risk Management activities, including but not limited to, Front-, Middle- or Back-Office activities associated with Transactions, trading, Risk Management and other related activities to acknowledge that they have received, read and understood the Energy Risk Management Policy and related Policies adopted by RPU.

The employee recognizes that violating the Energy Risk Management Policy and related Policies can lead to disciplinary actions or even termination.

Employee Name _____

Title _____

Department

Supervisor

Control Office () Front-Office
() Middle-Office
() Back-Office
() Other

This form acknowledges that I have received, read and understood the Energy Risk Management Policy and related Policies as described in Section 13 of this Policy.

Signature of Employee

Signature of Energy Risk Manager

Date

Employee shall not transact business until the employee name is added to the authorized traders list and this form is signed by the Energy Risk Manager.

This form shall be sent to Riverside Public Utilities Energy Risk Manager.

ATTACHMENT 3
POWER RESOURCES ENERGY TRANSACTION LIMITS SUMMARY

EXECUTION AUTHORITY	PUBLIC UTILITIES BOARD	RISK MANAGEMENT COMMITTEE	PUBLIC UTILITIES GENERAL MANAGER and ASSISTANT GENERAL MANAGER(S)	TERM TRADING	DAY AHEAD TRADING	REAL-TIME TRADING
TERM LIMITS	Not to exceed 5 calendar years.	Transaction terms up to 48 consecutive months not to exceed Forward Strategy Sheet (FSS) approval.	Transaction terms up to 36 consecutive months not to exceed Forward Strategy Sheet (FSS) approval.	Transaction terms up to 24 consecutive months not to exceed Forward Strategy Sheet (FSS) approval.	Day ahead to balance of the current month. Prompt month beginning 10 days prior to conclusion of the current month.	Hourly through the following business day.
VOLUME LIMITS Capacity Energy Transmission CRRs OATT Ancillary Services	Up to 115% of annual peak forecast. Hedge and resource planning strategy parameters. Delegations of authority to enterprise unit.		Capacity requirements: Up to but not greater than 115% of annual peak load forecast Energy requirements: Up to native load, plus contract obligations		Hourly supply requirements up to 115% of hourly peak load forecast. Transacting limited to variability between supply requirements and contracted resources.	
FINANCIAL LIMITS	Not applicable	Up to 100% above the forecast energy price projection in the FSS.	PUGM: Up to 50% above the forecast energy price projection in the FSS. AGMs: Up to 25% above the forecast energy price projection in the FSS.	Up to 100% forecast energy price in the FSS.	Financial limits not applicable. Day Ahead and Real-Time trading is oriented to physical needs and financial risks should be minimized prior to reaching real-time activity.	
OPTIMIZATION	Approval of changes to the Policies.	Approval of changes or additions to authorized transactions.	Volume limits not applicable. Document and report net reduction of power supply cost or reduction of other risks.		Volume limits not applicable for the purpose of net reduction of power supply cost or reduction of other risks.	
COUNTERPARTY CREDIT LIMITS	Up to \$20,000,000		PUGM: Up to \$15,000,000 AGMs: Up to \$10,000,000 Energy Risk Manager: Up to \$5,000,000			Intentionally left blank.

ATTACHMENT 4
POWER RESOURCES NATURAL GAS TRANSACTION LIMITS SUMMARY

EXECUTION AUTHORITY	PUBLIC UTILITIES BOARD	RISK MANAGEMENT COMMITTEE	PUBLIC UTILITIES GENERAL MANAGER and ASSISTANT GENERAL MANAGER(S)	TERM TRADING	DAY AHEAD TRADING	REAL-TIME TRADING
TERM LIMITS	Not to exceed 5 calendar years.	Transaction terms up to 48 consecutive months not to exceed Forward Strategy Sheet (FSS) approval.	Transaction terms up to 36 consecutive months not to exceed Forward Strategy Sheet (FSS) approval.	Transaction terms up to 24 consecutive months not to exceed Forward Strategy Sheet (FSS) approval.	Day ahead to balance of the current month. Prompt month beginning 10 days prior to conclusion of the current month.	Hourly through the following business day.
VOLUME LIMITS	Not to exceed uncovered projected requirements.					
FINANCIAL LIMITS	Not applicable	Up to 100% above the forecast energy price projection in the FSS.	PUGM: Up to 50% above the forecast gas price projection in the FSS. AGMs: Up to 25% above the forecast gas price projection in the FSS.	Up to 100% forecast gas price in the FSS.	Financial limits not applicable. Day Ahead and Real-Time trading is oriented to physical needs and financial risks should be minimized prior to reaching real-time activity.	
OPTIMIZATION	Approval of changes to the Policies.	Approval of changes or additions to authorized transactions.	Volume limits not applicable. Document and report net reduction of power supply cost or reduction of other risks.			Volume limits not applicable for the purpose of net reduction of power supply cost or reduction of other risks.
COUNTERPARTY CREDIT LIMITS	Up to \$20,000,000		PUGM: Up to \$15,000,000 AGMs: Up to \$10,000,000 Energy Risk Manager: Up to \$5,000,000	Intentionally left blank.		

CITY OF RIVERSIDE PUBLIC UTILITIES

POWER RESOURCES RISK MANAGEMENT POLICIES

WHOLESALE COUNTERPARTY RISK MANAGEMENT POLICY

1. Introduction
2. Counterparty Credit Risk
3. Approval Authority
4. Credit Approval
5. Credit Enhancements
6. Credit Controls
7. Margin Calls
8. Reserves for Wholesale Exposure and Credit Losses
9. Credit File Documentation
10. Waivers
11. Policy Review
12. Associated Guidelines, Controls, Policies and Procedures

Attachment 1 - Authority to Establish Counterparty Credit Limits

Attachment 2 - Credit Approval Exceptions

Attachment 3 - Counterparty Credit Limits and Credit Exposure

Attachment 4 - Credit Events

Attachment 5 - Internal Assessment of Risk Management Controls
For California Wholesale Electric Markets

CITY OF RIVERSIDE PUBLIC UTILITIES

WHOLESALE COUNTERPARTY RISK MANAGEMENT POLICY

1. Introduction

The City of Riverside Public Utilities' ("RPU") electric power supply activities are directed toward the goal of providing electricity to its retail customers at the best available price consistent with sound business practices, while maintaining the reliability of the electric system. Effective wholesale counterparty management and credit analysis is essential to mitigate the counterparty credit risk associated with physical or financial Transactions in electricity markets. The objective of the Wholesale Counterparty Risk Management Policy is to preserve RPU's capital, liquidity and supply reliability by limiting wholesale counterparty credit risk to acceptable levels.

Analytical procedures for granting open lines of credit and managing counterparty exposures are required. However, RPU recognizes that the models used in managing credit risk are not predictive; they are explanatory. Credit risk management models cannot predict individual or collective credit events. Wholesale Counterparty Risk Management is expected to manage counterparty credit risks to acceptable levels established by the Risk Management Committee ("RMC"). In general, City management recognizes that RPU is currently a net buyer of resources. Therefore, exposure to counterparty credit risk will normally be greater in periods of rising market prices. Retail customer activity is currently excluded from these Policy requirements.

RPU fulfills its supply obligations by purchasing or selling power supply-related commodities that it owns or controls, contracting with counterparties on a long-term or short-term basis, or participating in the markets administered by the California Independent System Operator ("CAISO"). RPU is exposed to various risks through its participation in the CAISO Markets. Attachment 5 of this Policy describes RPU's internal assessment of the various risks that RPU is exposed to in its participation in the organized wholesale electric market and its Congestion Revenue Rights allocation and auction activities with the CAISO.

2. Counterparty Credit Risk

Forms of Counterparty credit risk are:

Payment Risk – the potential loss from the failure of a counterparty to make payment on a contract.

Performance Risk – the potential loss from the failure of a counterparty to deliver or take delivery on a contract.

Counterparty credit risk may be monitored by the Energy Risk Manager, with recommendations to the RMC as necessary, according to the concentration in the following areas: credit rating, region, contract type, contract term and Mark-to-Market exposure.

3. Approval Authority

Approval authorities are based on the expected notional dollar quantity associated with Transactions to cover RPU's Transaction Activities. The notional dollar quantity shall be reviewed annually or more frequently as required and adjusted based on market prices and open exposure volumes. Authority to establish counterparty credit limits is segregated as described in Attachment 1.

Unless otherwise provided, all new counterparties are subject to the Credit Approval Process prior to entering into any Transactions. Once approved by the RMC, a counterparty's authorized credit limit may be increased at no higher limit than as delegated in this Policy.

The RMC shall review the list of Approved Counterparties on an annual basis, or as needed.

4. Credit Approval

Power Resources is responsible for recommending new counterparties for credit review and approval. Credit limits shall be established for credit worthy counterparties based upon satisfactory review of two years of audited financial statements including, but not limited to, the balance sheet, income statement, statement of cash flows and associated notes. All counterparties will be reviewed for public debt ratings as published by Nationally Recognized Statistical Rating Organizations ("NRSRO") such as Standard & Poor's Rating Group (S&P) and Moody's Investor Services (Moody's). The counterparty must possess a long-term, senior unsecured debt rating as described in Attachment 2. Exceptions to these standards are described in Attachment 2.

Long-term Transactions proposed between RPU and counterparties not meeting the above criteria are subject to the prior approval of the Public Utilities Board and the City Council.

Once a counterparty has been determined creditworthy, a credit limit will be proposed by the Middle-Office pursuant to the methodology provided in Attachment 3.

Although a counterparty may qualify for a certain maximum credit limit, anticipated Transaction volumes, proprietary scoring, default probabilities as provided by a reputable credit monitoring service, and other business factors may prompt the selection of a lower limit that is considered more appropriate. As a result, the credit limit methodology provides limit ceilings while allowing flexibility in response to normal business activities.

5. Credit Enhancements

Wholesale counterparties that do not meet the minimum requirements for an extension of an open line of credit shall post at least one of the following types of security prior to the execution of Transactions:

a. Guarantees:

Wholesale counterparties may provide a Guarantee from a third party, or parties, that meet the creditworthiness requirements. If a counterparty provides such a Guarantee, the amount of any open line of credit will be determined through an analysis of the financial strength of the guarantor. The guarantor will be considered secondarily liable for the obligations of the counterparty.

All Guarantees must be approved as to form by the City Attorney's Office. Specific policy requirements for Guarantees are described in Section 5 of the Authorized Transactions Policy.

b. Letter of Credit:

Counterparties may provide an irrevocable Letter of Credit for an amount sufficient to cover the related Transactions. Letters of Credit must be issued by a bank or a financial institution which has a senior debt rating of at least "A-" (or its equivalent) from a NRSRO. Letters of Credit must have a term of at least forty-five (45) days past the term of the Transaction(s).

c. Prepayment:

For sale Transactions, counterparties may provide a prepayment or a cash margin deposit in an amount that is sufficient to cover the related Transactions. Discounts for prepayment, consistent with industry standards, may be applied to the sum owed as authorized by the Utilities Assistant General Manager-Finance and the Public Utilities General Manager.

6. Credit Controls

Controls over counterparty inputs and systems operations are of particular importance in ensuring the integrity of data used in counterparty credit risk control and management. In all cases, the Energy Risk Manager, or their designee, will be responsible for managing the wholesale counterparty review and ratings process, monitoring credit risk and wholesale counterparty reporting pursuant to Section 4 of the Energy Risk Management Policy.

The Energy Risk Manager shall notify Utilities Power Resources Managers and RMC in the event that the counterparty is determined to be an unacceptable credit risk. The Energy Risk Manager may reduce the counterparty credit limit as a result of a credit event as described in Attachment 4 of this Policy. Intentionally entering into unsecured Transactions with a wholesale counterparty that has total credit exposure in excess of its credit limit is not allowed under this Policy unless otherwise approved. Power Resources' delegated authority to Transact with approved counterparties is discussed in Section 4 of the Energy Risk Management Policy.

RPU's Power Scheduler/Traders and/or other Public Utilities employees or officers responsible for Transacting Activities shall not be involved in the counterparty underwriting process. The underwriting process shall have complete independence from all Transacting Activities and Power Resources staff.

7. Margin Calls

A margin call may be necessary when counterparty credit exposure exceeds an established credit limit. Timing of a margin call is not dictated by this Policy, but factors to consider include financial capacity, volume of business, overall portfolio concentration and market conditions. Calling margin may include a request for cash collateral or other credit enhancement. The Energy Risk Manager and Utilities Assistant General Manager-Finance are responsible for implementing a margin call.

8. Reserves for Wholesale Exposure and Credit Losses

The Utilities Assistant General Manager-Finance and the RMC are responsible for ensuring adequate reserves for wholesale credit exposure and credit losses pursuant to RPU's reserve policies.

9. Credit File Documentation

Credit analysis, approvals and denials must be documented in writing and all counterparty information shall be contained in formal credit files that are maintained by the Energy Risk Manager or their designee. These credit files are expected to contain audited financial statements and a credit review analysis report. These files should also contain as much of the following as possible:

- i. At least the two most recent years of audited financial statement information.

- ii. Rating information as published by a NRSRO.
- iii. Other market intelligence or relevant information related to the counterparty.
- iv. General industry information.

10. Waivers

Many of RPU's potential counterparties may be counterparties identified as small-scale power producers, limited liability entities, or special purpose entities, or there may be extenuating circumstances whereby a waiver of the standards in Section 4 is necessary to avoid anticipated regulatory penalties. Unless specifically exempted as described in Attachment 2, the Energy Risk Manager may waive the standards in Section 4 for term Transaction with such entities.

11. Policy Review

Prudence is required in implementing any and all policies and procedures. Market and industry norms, technology and risk tolerances tend to change over time. Therefore, this Policy shall be reviewed annually or as necessary, in order to make adjustments in response to changes in business objectives and/or industry norms. All substantive amendments are to be reviewed by the RMC and presented to the Public Utilities Board and City Council for final approval pursuant to Section 3 of the Energy Risk Management Policy.

12. Associated Guidelines, Controls, Policies and Procedures

The required supporting policies and procedures to this Policy are outlined below. Approval and modification of such supporting policies and procedures requires the approval of the Public Utilities Board and City Council, unless otherwise stated.

City of Riverside Public Utilities Energy Risk Management Policy

City of Riverside Public Utilities Authorized Transactions Policy

City Council Resolution Approving Current Policies and Procedures

ATTACHMENT 1

Authority to Establish Counterparty Credit Limits

Energy Risk Manager	Up to \$ 5,000,000
Assistant General Manager-Finance	Up to \$10,000,000
Assistant General Manager-Resources	Up to \$10,000,000
Public Utilities General Manager	Up to \$15,000,000
Risk Management Committee	Up to \$20,000,000
Public Utilities Board/City Council	Up to \$20,000,000+

The maximum amount of any open line of credit to be extended to any wholesale customer or counterparty¹ shall not exceed \$15,000,000, unless authorized by the RMC. This maximum assumes the largest loss contingency acceptable to RPU given current capital constraints. If credit lines exceeding \$20,000,000 are anticipated, review by the Public Utilities Board and approval by the City Council is required.

¹ For the purposes of this Policy, the CAISO is not considered a counterparty that is subject to credit limits.

ATTACHMENT 2

Credit Approval Exceptions

The counterparty must possess a long-term, senior unsecured debt rating of AT LEAST BBB- (or its equivalent) from an acceptable NRSRO. Counterparties with a rating of less than BBB- will be considered on a case-by-case basis. If ratings differ between NRSROs, the lowest available rating will be used for underwriting purposes. If the counterparty does not have a NRSRO rating, RPU Middle-Office shall establish and assign an internal rating.

Counterparties that do not possess at least a BBB- rating and satisfactory financials are generally not acceptable credit risks. However, the following counterparties are not subject to this credit review criteria:

- a. Any counterparty and/or resource in which RPU has an interest through a legally separate financing agency (e.g., Southern California Public Power Authority, Intermountain Power Agency, etc.).
- b. California municipal organizations with a rating of A- or better. Such counterparties shall be automatically added as an Approved Counterparty with a maximum credit limit of \$3 million.
- c. Counterparties associated with day-ahead/hour-ahead purchases where risk associated with market movements is eliminated.
 - i. Sale Transactions can be consummated if the counterparty maintains at least a BBB- rating from an NRSRO. Such Transactions may not exceed \$250,000 in aggregate net receivable per counterparty determined by using the most recent information available distributed by the Middle-Office.
 - ii. If a counterparty does not maintain any NRSRO ratings, a policy limit of \$100,000 in aggregate net receivables, per counterparty, is authorized until a formal review can be completed.
- d. Counterparties providing electric capacity products as discussed in Attachment 2 of the Authorized Transactions Policy.
- e. Counterparties subject to a master agreement for transactions whereby the credit risk is not assumed by RPU (e.g. Intercontinental Exchange or the CAISO).

ATTACHMENT 3

Counterparty Credit Limits and Credit Exposure

Counterparty Credit Limits

For publicly traded/privately held entities, an open line of credit may be extended up to 5% of the counterparty's adjusted tangible net worth, not to exceed \$15,000,000

Tangible Net Worth is defined as the sum of:

Shareholder equity; **minus**,
Goodwill; **minus**,
Intangible assets.

Dependent upon factors such as the size or terms of the Transaction, the following shall be included, in addition to the above, in the determination of Tangible Net Worth **minus**:

Receivables from officers;
Investments in other trading companies;
Off-balance sheet liabilities.

In the case of municipal organization counterparties, an open line of credit may be extended up to 25% of average Free Cash Flow for the prior two years, not to exceed \$15,000,000.

Free Cash Flow is defined as the sum of:

Net income; **plus or minus**,
Non-cash charges such as depreciation; **plus or minus**,
Changes in accounts receivable, inventory, prepaid expenses, accounts payable, and accrued liabilities; **minus**,
Principal Debt Service payments;
And any other adjustments deemed appropriate by RPU.

Credit Limit is defined as:

The open line of credit approved by the RMC supported with, if necessary,
The approved amount of any Guarantee(s) held,
The value of any letter of credit or cash collateral held, and/or
The approved value of any other type of collateral held.

Should a counterparty not have the components described above, the determination shall be based on other factors such as NRSRO ratings, financial statements, default probability scores, etc., on a case-by-case basis by the Energy Risk Manager.

Open lines of credit are to be established according to the limits and guidelines for approval noted below:

<u>RPU/NRSRO Rating Scale</u>	<u>Limit as % of Policy Maximum</u>
AAA	<=90 - 100%
AA	<=80 - 89%
A	<=70 - 79%
BBB	<=60 - 69%
BBB-	<=59%

For example, if a municipal counterparty qualifies for a credit limit of \$10,000,000 based on the cash flow test (e.g., 25% of average free cash flow for past two years not to exceed \$15MM), but only has a rating of BBB, then the maximum policy limit allowed would be \$6,900,000 ($\$10\text{MM} \times .69 = \6.90MM).

Credit Exposure

The total amount of a counterparty's credit exposure is defined as the sum of:

The dollar value of all amounts invoiced and unpaid (accounts receivable); plus
The dollar amount of all deliveries that have not yet been invoiced (unbilled sales); plus
The positive marked-to-market value of all forward trades; less
All offsetting amounts that are supported by legally binding netting agreements.

ATTACHMENT 4

Credit Events

Upon one or more of the following events, the counterparty's approved credit limit may be reduced to not to exceed \$100,000 unless authorized by the RMC:

- i. Rating drops below BBB- from an acceptable NRSRO.
- ii. Default Probability greater than a one-year BBB- equivalent default percentage published by an acceptable NRSRO or from a subscribed credit rating service.
- iii. Proprietary Scores such as "FRISK2" indicating high default/bankruptcy probability.
- iv. Other events requiring counterparty credit review may include, but are not limited to, press announcements, mergers, acquisitions, business sale, company reorganization, and name changes.

ATTACHMENT 5

Riverside Public Utilities Internal Assessment of Risk Management Controls For the California Wholesale Electric Markets

The purpose of this document is to describe Riverside Public Utilities' ("RPU") internal assessment of the various risks that RPU is exposed to in its participation in the organized wholesale electric market and its Congestion Revenue Rights ("CRR") allocation and auction activities within the California Independent System Operator Corporation ("CAISO") and the current governing risk management policies, procedures and controls applicable in managing these risks.

RPU is a Scheduling Coordinator ("SC") in the wholesale electricity market operated by the CAISO. Under the CAISO Tariff, RPU is required to sell its power resources imported into the CAISO balancing authority and its local electric generation into the CAISO energy or ancillary services markets. Also, RPU is required to purchase the energy and the associated ancillary services needed for RPU's load from the CAISO energy and ancillary services markets. RPU is a CRR Holder in the CAISO markets enabling RPU to participate in the CAISO CRR allocation and auction processes for the purpose of hedging the risk of congestion costs for delivery of the energy required to meet RPU's load. Further, RPU purchases transmission from the CAISO for RPU's purchases and sales of energy and ancillary services within the CAISO balancing authority. In addition, RPU is a Participating Transmission Owner in the CAISO and receives payments from the CAISO for the use of RPU's transmission Entitlements.

To help manage RPU's exposures and risks, the City Council has approved the Power Resources Risk Management Policies governing the types of transactions and delegations of authority deemed appropriate. The volumes of forward transactions for RPU's short and long positions require RPU Risk Management Committee approvals. RPU is exposed to various risks through its participation in the CAISO Markets. These risks may include, but are not limited to, legal risk, credit/default risk, liquidity risk, market risk, concentration risk, operation risk, business risk and risk of loss of financial security amounts held and invested by the CAISO. RPU recognizes and manages the identified risks as follows:

Legal Risk

The principal legal risks associated with RPU's participation in the CAISO's markets arise from potential changes in the CAISO's Tariff either at the request of the CAISO or at the direction of the Federal Energy Regulatory Commission ("FERC") that could have a significant impact on RPU's delivered costs for energy, capacity requirements and associated costs, operational policies, and/or administrative burdens and costs. RPU manages these risks by monitoring all ISO stakeholder processes and filings with FERC and participating actively in stakeholder and subsequent FERC processes relating to issues that may have a significant impact on RPU's costs or operations. In addition, RPU monitors regulatory policy developments at FERC and participates in FERC proceedings relating to issues that may have a significant impact on RPU.

There are also legal risks associated with RPU's identification and correction of errors in billings by the CAISO. RPU manages these risks by reviewing settlements statements from the CAISO and initiating dispute resolution procedures under the CAISO Tariff when errors are identified.

Credit/Default Risk

RPU defines credit risk as exposure to potential loss from the failure of a counterparty to honor its obligations, including the obligation to settle on a timely basis. In RPU's Power Resources Risk Management Policies-Wholesale Counterparty Risk Management Policy, the CAISO is not considered a counterparty that is subject to credit limits. Similarly, default risk is defined as the exposure to loss resulting from the counterparty's failure to pay or perform on a contract.

The CAISO is a not-for-profit, operator charged with managing the flow of electricity within the CAISO balancing authority via centralized energy, ancillary services and transmission congestion management markets. These markets are used to allocate transmission use, maintain operating reserves and match supply with demand at all times in the most economic manner. The CAISO does not maintain operations that would be considered "stand alone" under a normal credit review. RPU must transact with the CAISO in its role as an SC in the CAISO markets that serves retail load which depends on CAISO transmission services and is exposed to counterparty credit risk as a result. Because this atypical counterparty credit risk is a business risk inherent in the CAISO markets, RPU has been a strong supporter of CAISO initiatives that enhance the CAISO's credit and counterparty risk assessment practices to reduce the overall credit/default exposures to the Market Participants participating in the CAISO markets. Examples of RPU involvement in this respect are its support for (a) the current CAISO policy of allocating defaults in the CAISO markets to all CAISO market participants as opposed to the previous CAISO policy of allocating such defaults only to net creditors in the CAISO markets (usually RPU is a net creditor in the CAISO markets); (b) CAISO policy of unsecured credit limit of \$50 million for SC and its affiliates in aggregate in the CAISO markets. RPU has and will continue to be actively engaged in CAISO initiatives that will further enhance CAISO policies on credit/default management.

Liquidity Risk

As it relates to the CAISO, liquidity risk is the risk that arises as a result of the CAISO being unable to meet short term financial demands. Through the Credit Reforms in Organized Wholesale Electric Markets, the CAISO is setting standards and practices to reduce its liquidity risk. Specifically, (1) CAISO shortened the invoicing and payment cycle from the previous biweekly cycle to weekly cycles; (2) Market Participants are required to post financial security with the CAISO above their unsecured credit limits (\$50 million per SC and their affiliates in aggregate) and certify that they will maintain sufficient liquidity to pay CAISO invoices; (3) CAISO eliminated the use of unsecured credit for participation in the CRR auction process; and (4) eliminated the use of unsecured credit for the ongoing financial liabilities related to holding CRRs. As a Market Participant, RPU is subject to the CAISO Tariff and the Business Practice Manual for Credit Management ("BPM"). RPU has participated and will continue to participate in the Stakeholder processes that enhance CAISO credit policies on credit/default management.

As it relates to the utility, RPU maintains ample cash and strong liquidity. The City Council approved a Regulatory Risk Reserve Account, an Energy Risk Management Reserve Account, and an Operating Reserve Account, all of which are considered internally restricted assets. These funds are available for current operations, or other strategic purposes upon approval of the Board and City Council. RPU plans to continue to build its cash reserve.

Market Risk

As an SC in the CAISO markets that serves retail loads, RPU is exposed to market risks in the CAISO markets in the form of energy and ancillary services market clearing prices for sales and purchases RPU makes in those markets. RPU is also exposed to transmission congestion risks revealed through the congestion prices embedded in the market clearing prices for energy and through charges for backstop procurement of capacity by the CAISO for reliability purposes. In

addition, RPU is exposed to the perverse consequences of manipulative practices by market participants exploring the weaknesses of CAISO Tariff, rules and protocols to the detriment of the CAISO markets in general, e.g., in the past, some market participants explored the mismatch between CAISO scheduling and settlement timelines for HASP and real time markets by submitting matching virtual convergence bids to extract tens of millions of dollars from load serving entities; also in the past, some market participants explored the weaknesses in the formulation of bid cost recovery mechanism by submitting deceptive generation schedules to again extract tens of millions of dollars from load serving entities without any benefit to the CAISO markets.

With the complexity of existing markets, and implementation of new market initiatives and products, participants must rely on the CAISO Department of Market Monitoring and the CAISO Market Surveillance Committee to analyze market performance and activity, identify potential market manipulation and aggressively pursue anti-competitive behavior. Although there have been some high profile successes, it is not possible to ascertain the extent to which this may occur, and any significant negative impacts to market participants, and mitigate such negative impacts.

Pursuant to RPU's Power Resources Risk Management Policies, RPU has and is continuing to actively manage these market risks by (a) procuring sufficient resources at known costs to meet RPU's anticipated load ahead of time to reduce/eliminate energy price exposures; (b) certifying, when technically feasible, RPU's local generating units to provide ancillary services, thus reducing/hedging the cost of ancillary services purchased in the CAISO ancillary service market; (c) actively participating in the CAISO CRR allocation and auction processes to obtain sufficient CRRs to hedge the transmission congestion costs associated with RPU's power resources; (d) procuring sufficient resources at known costs to meet RPU's capacity requirements, thus reducing/eliminating potential financial exposures to CAISO backstop capacity procurement costs; (e) participating proactively in the CAISO stakeholder initiatives to institute market designs/monitoring and rules of conduct conducive to a well-functioning market and eliminate deceptive and manipulative conducts that are detrimental to the market.

Furthermore, RPU has established processes and valuation methodology to specifically value the transmission congestion risks associated with its power resources and the use of CRR instruments to hedge such risks. The description of the valuation methodology is in Appendix A. RPU intends to perform such valuation and assessment on a periodic basis but no less frequent than annually.

Concentration Risk

As explained above, RPU's concentration exposure to the CAISO markets is atypical in that RPU must sell into the CAISO markets, all of its imports into the CAISO balancing authority and its local generation and RPU must buy from the CAISO markets all energy and ancillary services needed to serve RPU's retail load. RPU is also 100% dependent upon CAISO for transmission services. Thus, RPU's concentration exposure to the CAISO markets on a gross basis is 100% for sales and purchases of energy/ancillary services as well as transmission services. The CAISO current practice is to net the sales against the purchases for financial settlement and credit risk management purposes. Given this practice, the tools used by RPU to mitigate this atypical concentration risk are those described in the Market Risk section.

Operation Risk

The CAISO's operating and market rules and protocols are complex and constantly evolving and thus expose RPU to the following types of operation risks: (a) inability to respond to CAISO operating/dispatching directives due to imperfect modeling of RPU's local generation capabilities; (b) conflicting operating directives or absence of operating directives when needed; (c) CAISO operating/dispatching directives for the benefit of the CAISO that might conflict with RPU's

distribution reliability needs; (d) imperfections in CAISO software and hardware that could cause lost market opportunities or additional costs; (e) potential inability of RPU to timely upgrade the RPU software systems to conform with CAISO software system requirements causing loss in efficiency, lost market opportunities and resulting in additional costs.

RPU has managed and will continue to manage these operational risks by (a) maintaining close communication and coordination with the CAISO operations personnel when operational issues arise; (b) seeking to clarify operational issues ahead of time via formal agreement, e.g., MSS agreement; (c) participating in the CAISO stakeholder initiatives to institute clear market/operational rules and protocols to reduce/eliminate potential conflicts in the first instance.

Business Risk

As stated above, the CAISO is the single largest wholesale transaction counterparty that RPU is required to conduct business with and in doing so exposes RPU to a variety of business risks described above, e.g., legal, credit/default, liquidity, market, concentration, and operation risks.

The specific strategies to mitigate such business risks are as described above.

Loss of Financial Security Amounts Held and Invested by the CAISO

As stated above, RPU must transact with the CAISO in the energy and ancillary service markets for its imports and local generation, relies on the CAISO for transmission, and participates in the CAISO CRR allocation and auction processes. Thus, it is certain that RPU will need to post secured credit postings with CAISO for certain transactions, e.g., CRR auctions and possibly for other transactions, e.g., energy transactions if CAISO institutes credit policy based on gross purchases. As required by the CAISO Tariff and the BPM, RPU is required to post financial security held in an account managed by a designated financial institution for the benefit of the CAISO. Although, these policies have the potential to increase the costs to RPU in the CAISO markets, such policies are beneficial mitigating factors in reducing the risk of loss of financial security amounts posted by RPU. RPU has accepted this atypical risk of Loss of Financial Security as a business risk inherent in RPU's compulsory participation in the CAISO markets and will continue to proactively monitor and participate in the related CAISO stakeholder initiatives.

Minimum Participation Verification Process Congestion Revenue Rights

The following is a description of RPU's process used to value the risks of holding Congestion Revenue Rights (CRRs) in the CAISO market and methods used to minimize such risks, as stipulated in FERC Order 741, Sections 3.a.i, 3.a.ii, and 3.a.iii.

Section 3.a.i

Describe the valuation and risk assessment methodologies used.

RPU recognizes holding CRRs has inherent risks that must be managed. Such risks stem from holding negatively valued CRRs that the holder must make payment for. RPU adopts a conservative strategy to minimize such risks. This strategy is based on two principles: (1) RPU only acquires CRRs transmission paths with matched source-sink pair to physical resources that have ownership entitlement or contracts with at the source locations and load at the sink location, and (2) RPU attempts to avoid obtaining negatively valued CRRs holdings during the CRR allocation process and RPU strictly prohibits the acquisition of negatively valued CRRs in the auction process.

Methodologies to implement this strategy begins with an analysis of historical congestion charges on the transmission paths that RPU requires to wheel power from its resources to its load. RPU staff then develops a CRR nomination strategy that takes into account cost volatility and binding constraints for each path. The objective is to identify the paths having higher congestion cost volatility that are also more likely to be available for RPU to obtain via the free allocation process. Once these paths have been identified, the paths are prioritized for nominating CRRs in the CAISO allocation process.

RPU avoids nominating or purchasing CRRs on any path that exhibits clearly negative congestion patterns. By minimizing the nomination in the allocation process on paths that historically have congestion patterns in the opposite direction of RPU's resource-to-load pair and adopting a strict prohibition on acquiring negatively valued CRRs in the auction process, RPU substantially mitigates the possibility of holding negatively valued CRRs in its CRR portfolio. In the rare cases where negative congestion patterns do occur, these can only occur on paths where RPU is simultaneously scheduling physical resources. Thus RPU will be financially indifferent to such negative congestion, since the excess revenue we receive on our physical schedule will offset the negative CRR congestion payment.

Discuss the highest risks to your CRR trading strategy and the methods used to assess your CRR holdings and activities relevant to such risks.

RPU does not take on unnecessary CRR risks. RPU's strategy and practice as described above is to procure CRRs only on transmission paths from its resources to its load by time periods (on and off), and to match to the maximum extent feasible the CRRs to resource-load pairs at all hours that CRRs are available and to procure no more CRRs than are required to serve its load, thereby hedging against congestion price volatility on those transmission paths.

However, such strategy does not completely eliminate the risks of holding negatively valued CRRs. For example, if RPU's resource is unavailable either due to a planned or a forced outage or operational/contractual considerations (e.g. peaking resources) and the congestion pattern is in the opposite direction of RPU's CRR (negatively valued CRRs), then RPU's physically based hedging strategy will not be effective. Therefore, RPU also performs a thorough review and

quantification of the historical congestion charges for the relevant periods when RPU's resources are most likely to be unavailable and try to eliminate (to the maximum extent possible) the holding of negatively valued CRRs during such time periods.

Section 3.a.ii

Describe your processes ensuring the independence of your valuation and risk assessment functions.

RPU's CRR risk assessment functions are performed by the Power Resource's Front-Office group on an ongoing basis. A detailed valuation of all RPU CRR holdings is also performed annually by the Front-Office group. After this valuation is completed, the Middle-Office group reviews the results and provides an independent assessment of the valuation methodology and results.

Pursuant to the City of Riverside Public Utilities Power Resources Risk Management Policies, appropriate segregation of duties is to be established and maintained throughout the system of controls over financial risks. Duties are segregated between Front-Office, Middle-Office and Back-Office. The Middle-Office is comprised of those functions related to risk management and counterparty credit. Middle-Office activities are the primary responsibility of the Energy Risk Manager as delegated by the Risk Management Committee. The Energy Risk Manager is to be functionally and organizationally independent from all business activities. The role of the Energy Risk Management function is review and oversight and will not include daily Front-Office or Back-Office business activities.

Describe the processes that are in place to ensure risks are adequately reported throughout the organization.

The valuation and assessment process described above are shared with RPU's Risk Management Committee on at least an annual basis (or more frequently as applicable).

In addition, pursuant to the City of Riverside Public Utilities Power Resources Risk Management Policies, the Energy Risk Manager is responsible for ensuring the effectiveness of the control structure, risk measurement and monthly management reporting. This includes preparing, verifying and distribution all risk management reports and also includes measuring, assessing and reporting all inherent risk profiles.

Section 3.a.iii

Discuss the relevant methods used to limit exposure in the CRR markets.

The method used by RPU to limit exposure in the CRR markets is as follows:

As described above, RPU only acquires positively valued CRRs in the CAISO allocation process in quantity, time periods and on paths that match RPU's resources and system load.

Any CRR shortfalls are covered in the auction process by purchasing only positively valued CRRs that match in quantity, time periods, and on paths that match RPU's resource-load pair. For this, RPU staff develops bid curves for each path of interest based on statistical analysis of historical congestion costs. At no time are bid curves submitted that can result in the acquisition of excess CRRs.

Describe the sources of liquidity your firm has access to in order to minimize the risk of default at various levels of risk events (sections of publicly available SEC filings may be referenced).

RPU currently holds substantial working capital to fund the ongoing operational cash-flow requirements. Included are reserves specifically established for operation and energy risk management that can be used for financial liquidity purposes.

Briefly describe how Delegation of Authority or other policy, procedures and controls is used to restrict traders in the types of transaction they may enter into and their corresponding trade limits.

RPU staff can only participate in the CAISO allocation and auction processes to acquire CRRs for RPU's load. RPU staff is not allowed to conduct bilateral trades to sell acquired CRRs. All of RPU's CRR procurement strategies, assessment of congestion cost risks and collateral limits are reviewed and approved by RPU's Power Resources Managers. The CRR procurement process itself is conducted under the supervision of a Power Resources Manager. To cover CRR purchases and liabilities, the CAISO requires RPU to post a collateral deposit into a Secured Collateral Account. The minimum amount for RPU is currently \$500,000 for the annual auction and \$100,000 for the monthly auction. RPU's Usable Secured Available Credit exceeds the minimum \$500,000 for the CAISO CRR auction process. This collateral deposit becomes a hard upper bound during the CRR Auction process (both annual and monthly), limiting RPU's purchases to a pre-determined maximum purchase amount.

APPENDIX A

Subject: RPU CRR Valuation Methodology

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CRR Valuation Methodology (using historical CAISO LMP-MCC pricing information)

The CA-ISO publishes the hourly day-ahead (DAM) LMP price components (energy, losses and congestion) for every significant node in the ISO system; these historical hourly prices are available back to April 1, 2009.

RPU conducts all CRR valuation based on historical congestion data. We first identify the source (injection) point of our transmission path with the appropriate CA-ISO node and defined the sink point to be the MLAP_RVSD node. Next, we compute the monthly average heavy-load (HL) and light-load (LL) LMP-MCC congestion price differences between these source and sink nodes for the previous 36 months, which by definition quantifies the congestion costs for each path during the previous three (3) year time period. We then average these data by either monthly or quarterly time intervals, in order to derive average congestion costs for our source-sink paths that align with the CAISO allocation and auction processes.

For purposes of future CRR valuation, we assumed that historical congestion estimates follow a well-defined statistical distribution with the same average costs over future time periods. We then calculated the total monthly HL and LL CRR value for each source to sink path as CRR Value = (CRR MW obtained) x (total HL or LL hours) x (monthly average congestion estimate), along with the probability distribution associated with each estimate. These calculations are used to project our total future CRR portfolio value, as well as to assist in the development of CRR nomination strategies and bidding curves (for the annual and monthly allocation and auction processes).

CITY OF RIVERSIDE PUBLIC UTILITIES

POWER RESOURCES RISK MANAGEMENT POLICIES

AUTHORIZED TRANSACTIONS POLICY

1. Purpose
2. Execution Authority
3. Transaction Authority
4. Transaction Management
5. Contract Requirements
6. Credit Requirements
7. Speculation
8. New Products Approval Process
9. Regulatory/Legislative Requirements
10. Associated Guidelines, Controls, Policies and Procedures

Attachment 1 – Authorized Transactions

Attachment 2 - Regulatory/Legislative Transactions

CITY OF RIVERSIDE PUBLIC UTILITIES
AUTHORIZED TRANSACTIONS POLICY

1. Purpose

The purpose of the City of Riverside Public Utilities (“RPU”) Authorized Transactions Policy is to define the types of authorized Transactions referenced in Attachment 1, Authorized Transactions, and the delegated authority to execute the Transactions.

2. Execution Authority

Delegations of authority to execute Transactions are described in Attachment 1-Authorized Transactions, unless defined otherwise by the Risk Management Committee (“RMC”).

3. Transaction Authority

All Transaction Activities in physical and financial products will be governed by the associated Transaction limits presented in this Policy and the Policies identified in Section 10. Forward and futures contracts are to be limited to identified resource or Hedge needs, subject to available product size.

A violation of these control policies is a serious matter, particularly if it involves RPU’s reputation and financial standing in the industry. If a Front-Office representative knowingly enters into an unauthorized Transaction or transacts with a counterparty that has a credit exposure in excess of its assigned credit limit, he/she may be subject to disciplinary action as determined by the Public Utilities General Manager in a manner consistent with the City of Riverside’s Human Resources policies.

In 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act was signed into federal law. The Dodd-Frank Act (“Act”) was enacted to increase transparency, accountability and ensuring stability in the financial markets. The Commodity Futures Trading Commission (“CFTC”) has enacted regulations to implement the Act that regulate how financial swap transactions should be cleared, how counterparties to the financial swap transactions should have risk policies in place before engaging in such financial swap transactions, how such transactions must be conducted through a mandatory clearing mechanism, and registration/recordkeeping/reporting requirements of such financial swap transactions. Some of existing and future RPU’s power and gas Transactions are likely to fall under the CFTC regulations under the Act. Therefore, RPU shall be in full compliance with the CFTC regulations under the Act.

4. Transaction Management

Term Transactions are authorized subsequent to the development of a Forward Strategy Sheet approved by the RMC. No new Transaction(s), (whether on a Term, Day Ahead or Real-Time basis) are to be entered into with a counterparty if such Transaction(s) is expected to cause the counterparty to exceed their credit limit, or if that counterparty has already exceeded their credit limit, except as they may mitigate (offset) existing exposure, or if those Transactions have prior approval of the Energy Risk Manager, Utilities Assistant General Manager-Finance, Utilities

Assistant General Manager-Resources or Public Utilities General Manager, within authorized limits and in accordance with the associated Policies identified in Section 10.²

The Utilities Power Resources Manager shall be authorized to enter into Transactions subject to (i) compliance with their authorized Transaction limits specified in Attachments 3 and 4 of the Energy Risk Management Policy, and (ii) with prior review and approval of the Transaction strategy by the Utilities Assistant General Manager-Resources. The Utilities Power Resources Manager shall be responsible for determining the type and cost of any proposed term Transaction. The Energy Risk Manager shall verify that the counterparty to the Transaction is on the RMC approved list of counterparties. The terms and conditions of all written Confirmations shall be reviewed by the Front-Office function to ensure that any non-standard terms and conditions are properly submitted for review and approval by the office of the City Attorney, if necessary, prior to RPU becoming financially committed to the Transaction.

All Transactions must be committed over recorded phone lines, via electronic mail, or through a signed Confirmation from both parties. All Transactions shall be executed at the Department's offices or the designated off-site locations in accordance with City of Riverside's emergency recovery plan. All other off-premises Transactions are prohibited unless authorized by the Public Utilities General Manager and reported to the Risk Management Committee in specific instances.

Once the term Transaction has been completed and confirmed by the Counterparty, it is the responsibility of the Utilities Power Resources Manager to document the Transaction on a Deal Sheet and update the Power Resources systems and records to reflect all current Transactions. Signed copies of the Deal Sheet, the written Confirmation and other related documents shall be sent to the Energy Risk Manager within five (5) business days of the Transaction for verification that the deal was an approved Transaction pursuant to the approved Forward Strategy Sheet. Such documentation shall also be provided to the applicable Utilities Power Resources Managers within five (5) business days of the Transaction.

5. Contract Requirements

a. Master Agreements:

The use of master or enabling agreements to govern trading relationships with counterparties is considered to be the preferred practice and should be followed whenever reasonably possible. The Utilities Power Resources Managers have the delegated authority to execute individual written confirmations, cover sheets or other agreements made pursuant to an approved master agreement or enabling agreement. Below is a list of the agreements already approved or contemplated.

- i. The Western Systems Power Pool ("WSPP") Agreement, as amended, should be used as the master agreement for short-term physical and financial Transactions with WSPP members. The WSPP Agreement applies to all Transactions between WSPP members, unless the parties to a Transaction expressly opt out of the WSPP Agreement. Individual members can specify on the WSPP website whether it agrees to the netting provisions in the agreement. The WSPP Agreement was approved by City Council on November 9, 1999.
 - Master confirmation agreements should be used to confirm all Transactions entered into under the WSPP Agreement of one week or more, or for which the counterparty sends a confirmation agreement containing terms that do not conform to the Master Agreement or if desired by RPU or the counterparty.

² The prohibition against entering into Transactions which result in a counterparty exceeding or continuing to exceed their established credit limit presupposes that Front-Office personnel have been provided with all relevant accounts receivable and payment information related to the counterparty.)

- ii. North American Energy Standards Board Contract for Sale and Purchase of Natural Gas (“NAESB”) is a standardized set of business practices and standards that most buyers and sellers have adopted for their natural gas and electricity physical Transactions. The NAESB does not require any specific purchase or sale of natural gas, but constitutes the terms and conditions that would apply to any natural gas or electricity purchase or sale ultimately agreed to between RPU and a counterparty who subscribes to the NAESB contract terms and conditions. The NAESB was approved by City Council on April 8, 2008.
 - Transacting under the NAESB with an approved counterparty will require an executed Base Contract for Sale and Purchase of Natural Gas which incorporates by reference the general terms and conditions as published by the NAESB, and specifying certain elections and special conditions applicable to individual Transactions.
- iii. The Edison Electric Institute (“EEI”) Agreement may be used as the master agreement for financially firm power product Transactions in lieu of the WSPP Agreement, and for Transactions with non-WSPP members. The EEI Agreement provides an array of reciprocal credit and collateral requirements for each party and counterparty to be negotiated and specified on a “Cover Sheet.” The EEI Agreement was approved by City Council on October 11, 2011.
- iv. International Swaps and Derivatives Association, Inc. (“ISDA”) agreements should be used for all Swap Transactions and may be used in lieu of the EEI Agreement for financially firm power products. The ISDA multilateral procedure saves time and expense that would otherwise be spent on bilateral negotiations. Special provisions or elections shall be negotiated and specified on a “Cover Sheet.” This agreement has not yet been approved by the City Council.

Master netting agreements should be incorporated into all counterparty agreements and Transactions.

b. Terms and Conditions:

Terms and conditions shall not conflict with the terms and conditions required by the City of Riverside as described below. All master or enabling agreements must be approved as to form by the City Attorney’s Office and the City Council prior to execution. All confirmations or special conditions that substantively modify the legal terms and conditions in the related master or enabling agreement must be reviewed and approved as to form by the City Attorney’s Office and then approved by the Utilities Power Resources Management.

Absent prior authorization from the appropriate regulatory body(ies), any agreement entered into pursuant to this Policy (“Agreement”) containing terms and conditions inconsistent with those articulated below will not be a valid agreement.

- i. Each counterparty to any Agreement must warrant and represent that it possesses the necessary corporate, governmental, and/or legal authority, right, and power to enter into the agreement and perform each and every duty imposed thereunder.
- ii. No provision of any Agreement shall restrict the ability of the City to enter into new agreements with any counterparty or to perform fully under any existing agreement.

- iii. Unless specifically required by a master or enabling agreement duly approved by the appropriate regulatory body(ies), no provision of any Agreement shall require the City to unilaterally indemnify or release from liability any counterparty, nor shall it impose indemnification or release of liability obligations on the City less favorable than those imposed on the counterparty(ies) to the agreement.
- iv. No waiver by the City of its rights under an Agreement shall be deemed a waiver with respect to any other rights under that agreement or any other agreement.
- v. Nothing contained in any Agreement shall be construed to create an association, joint venture, trust, partnership, or agency relationship between or among the parties, or to impose a trust or partnership covenant, obligation, or liability on or with regard to any of the parties.
- vi. No Agreement shall be construed to create rights in, or to grant remedies to, any third party as a beneficiary of that agreement or of any duty, obligation, or undertaking established therein.
- vii. If the City has reasonable grounds for insecurity regarding the performance of any obligation under any Agreement by any counterparty and the Agreement so provides, the City may demand adequate assurance of performance, including, but not limited to, a standby irrevocable letter of credit, a prepayment, a security interest in an asset, or a performance bond or guaranty.
- viii. No provision in any Agreement shall restrict the ability of the City to seek specific performance of any counterparty's duties and obligations under that Agreement in any court of competent jurisdiction.
- ix. No Agreement shall obligate the City to submit any dispute arising therefrom to binding arbitration.
- x. No provision in any Agreement shall require the City to act in contravention of the California Public Records Act or otherwise restrict the ability of the City to comply with existing, applicable laws and regulations.

c. Special terms and conditions related to Guarantees

Any guaranty entered into for the purpose of protecting the financial interests of the City shall contain the following provisions:

- i. A statement that the guaranty is one of payment and not of collection.
- ii. A statement that the guaranteed obligations are unconditional, irrespective of value, genuineness, validity, waiver, release, alteration, amendment, or enforceability of the guaranteed obligations.
- iii. A statement that the guarantor agrees to pay the guaranteed obligations on the date due and waives demand, notice, marshaling of assets, or any comparable requirements.
- iv. A statement that the guarantor waives its right to subrogation until the guaranteed obligations are paid in full.

- v. A statement that the guaranty shall reinstate if any guaranteed obligation made by the primary obligor is recaptured as a result of the primary obligor's bankruptcy or insolvency.
- vi. A statement that the guaranty is binding on successors of the guarantor.
- vii. A statement restricting the guarantor's right to terminate the guaranty with less than thirty (30) days notice.

6. Credit Requirements

Credit requirements and limits are identified in the Wholesale Counterparty Risk Management Policy.

7. Speculation

Speculative trading activities and positions are prohibited. Hedging and portfolio Optimization is permitted.

8. New Products Approval Process

A New Product is any physical or financial instrument, transaction type or commodity market currently not defined in the most recently approved Authorized Transactions.

The RMC is delegated authority to approve New Products. In a periodic report to the Public Utilities Board, the Public Utilities General Manager shall include an update and description of the New Products approved by the RMC.

The Utilities Power Resources Managers, the Assistant General Manager-Resources and the Assistant General Manager-Finance shall review the Transaction details, including but not limited to:

- i. Identification of risks and risks being mitigated.
- ii. Pricing and associated Premiums/discounts.
- iii. Credit and market exposure.
- iv. Operational elements.
- v. Internal operating considerations, administration and management, subject to Middle- and Back-Office verification.
- vi. Proposed reporting requirements, including any changes to current procedures and systems requirements arising from implementation.
- vii. Special consideration shall be given to the transaction process to ensure that proper control mechanisms are in place in order to prevent an unauthorized Transaction from being executed.
- viii. Accounting, regulatory, and tax related risk elements.
- ix. Legal, tax, finance and internal audit review and concurrence, if necessary.

Upon approval of the Assistant General Manager-Resources and the Assistant General Manager-Finance, the Utilities Power Resources Managers shall notify the Energy Risk Manager of their desire to enter into a new type of Transaction.

The Utilities Power Resources Manager shall prepare a report including the elements described above, the proposed limits, and written recommendation for RMC approval of the New Product and amendment to Attachment 1 of this Policy.

The report and written recommendation shall be presented to the RMC for review and approval. In the event that circumstances and/or market conditions do not allow for delay, the report and recommendation for approval shall be distributed in electronic format to the RMC. Transactions under the new product are prohibited until approved by the RMC.

9. Regulatory/Legislative Requirements

Regulatory requirements may result from either legislation being passed or regulations being implemented. RPU may be required to satisfy such requirements in a timely manner and failure to do so could subject RPU to severe penalties from a regulatory agency such as the CAISO or a reliability organization. Such requirements shall be fully described in Attachment 2-Regulatory/Legislative Transactions of this Policy and subject to RMC approval. Thereafter, individual Transactions shall not require prior approval but will be subject to after-the-fact reviews by the RMC at the next regularly scheduled RMC meeting.

10. Associated Guidelines, Controls, Policies and Procedures

The required supporting policies and procedures to this Policy are outlined below. Approval and modification of such supporting policies and procedures requires the approval of the Public Utilities Board and City Council unless otherwise stated.

City of Riverside Public Utilities Energy Risk Management Policy

City of Riverside Public Utilities Wholesale Counterparty Risk Management Policy

City Council Resolution Approving Current Policies and Procedures

ATTACHMENT 1

City of Riverside Public Utilities Authorized Transactions

Required master or enabling agreements must be in effect prior to any Transactions. The conditions described in the Governance sections below will fulfill some of the requirements under the Act.

1. Forward Power Purchases

- i. Cover a Forecasted Supply Shortage
- ii. Bonneville Power Administration ("BPA") Returns
- iii. Economic Displacement Power Purchase of existing physical resources
- iv. System and/or Local Capacity for Resource Adequacy Requirements

Governance

Monthly forward volumes are approved by the RMC.
The Forward Strategy Sheet shall be documented for transactional strategies and related Transactions.

2. Forward Power Sales

- i. Imbalance Transaction
- ii. Sell Forecasted Surplus Energy
- iii. Sell Forecasted Surplus System Resource Adequacy Capacity

Governance

Monthly forward volumes are approved by the RMC.
The Forward Strategy Sheet shall be documented for transactional strategies and related Transactions.

3. Purchases/Sales Transaction in CAISO Market

- i. Energy
- ii. Capacity
- iii. Ancillary Services
- iv. Congestion
- v. Losses
- vi. Transmission
- vii. Inter SC Trades
- viii. Congestion Revenue Rights
- ix. Demand Response

Governance

Short term Transactions (hourly) authorized under the Conformed Fifth Replacement CAISO Tariff as of November 5, 2012, are within the delegated authority of Attachments 3 and 4 to the Energy Risk Management Policy. Future CAISO market functionality which produces a new transaction type (e.g., convergence bidding) in which RPU is not mandated to participate, must be approved by the RMC and will be added to this list of CAISO approved Transactions. Such approval must occur prior to RPU initiating and

participating in new products or functionality that may be subsequently added to the CAISO markets.

4. Congestion Revenue Rights (“CRR”)

Governance

Transactions (monthly, annually, long-term) are within the delegated authority of Attachments 3 and 4 to the Energy Risk Management Policy.

5. Purchases/Sales for Generation and Transmission Outages (Planned/Unplanned) or Emergency Conditions

- i. Imbalance Transaction
- ii. Outage Conditions
- iii. Changes in Base Assumption encompassed in the Forward Strategy Sheet
- iv. Loss of Generation
- v. Loss of Transmission
- vi. CAISO declared emergency at a guaranteed price

Governance

Short term Transactions (hourly-daily) are within the delegated authority of Attachments 3 and 4 to the Energy Risk Management Policy.

6. Bilateral Purchases/Sales of Ancillary Services outside the CAISO

- i. Imbalance Transaction
- ii. Spin/Non-spin
- iii. Regulation

Governance

Short term Transactions (hourly-daily) and term Transactions are within the delegated authority of Power Resources.

7. Hedging Costs with Purchased Physical Transactions

- i. Physical Call
- ii. Physical Put (buying a Put when long on energy)
- iii. Heat Rate Options

Governance

Monthly forward volumes are approved by the RMC.

8. Hedging Costs with Financial Instruments (requires ISDA)

- i. Financial Call
- ii. Financial Put (buying a Put when long on energy)
- iii. Financial Swap (fixed/index) for Gas/Power
- iv. Physical Swap (fixed/index) for Gas/Power
- v. Weather Derivatives
- vi. Gas Options, Futures

Governance

The Forward Strategy Sheet shall be documented for transactional strategies and related Transactions.

Refer to discussion of Derivatives in Section 9 of the associated Energy Risk Management Policy.

9. Energy/Capacity Layoff

- i. Optimization Transaction
- ii. Banking
- iii. Cash Outs
- iv. Net simultaneous delivery to different geographical locations

Governance

Short term Transactions (hourly-daily) and term Transactions are within the delegated authority of Attachments 3 and 4 to the Energy Risk Management Policy.

10. Physical Natural Gas Products Purchase/Sale (requires “NAESB”)

- i. Energy
- ii. Transportation
- iii. Storage
- iv. Puts/Calls
- v. Balancing

Governance

Monthly forward volumes are approved by the RMC. The Forward Strategy Sheet shall be documented for transactional strategies and related Transactions.

Risk Considerations: RPU should ensure that any gas purchased under firm contracts is for anticipated forecasted operation and intended to be consumed at delivery when economic.

11. Renewable Energy Credits (Purchase/Sale)

- i. Complies with regulatory requirements

Governance

Monthly forward volumes are approved by the RMC. The Forward Strategy Sheet shall be documented for transactional strategies and related Transactions.

12. Emission Credits Purchases/Sales (forward and after-the-fact)

- i. GHG Allowance
- ii. Reclaim Trading Credits
- iii. Requirements as may be established

Governance

Sales of volumes excess to amounts required by regulatory agencies is authorized.

ATTACHMENT 2

City of Riverside Public Utilities Regulatory/Legislative Transactions

1. Capacity Procurement

RPU must satisfy its capacity requirements pursuant to any policies adopted by the City Council, imposed by the CAISO, or adopted by relevant regulatory agencies and reliability organizations. Since the capacity requirements pursuant to such policies are well defined and the procurement of capacity to meet such capacity requirements must take into account the most updated RPU's resources information, the RMC after-the-fact review shall document:

- i. The capacity requirements pursuant to the applicable policies, and
- ii. Existing available RPUs resources to meet the requirement.
- iii. The additional capacity procured to meet the capacity requirements.

Counterparties accepted by the CAISO to provide electric capacity products in the CAISO markets to meet CAISO capacity requirement policies shall be considered acceptable counterparties by RPU for the purchase of such capacity products. The performance obligations and monetary sanctions applicable to CAISO electric capacity products are the responsibility of the seller of such electric capacity products as specified in Section 6 "Bidding and Scheduling Obligations" of the CAISO Business Practice Manual for Reliability Requirements and Article V – Resource Adequacy, Section 40.7 "Compliance" of the Conformed Fourth Replacement CAISO Tariff as of January 5, 2010. Thus failure to perform by the counterparty for electric capacity products in the CAISO markets will not increase RPU's financial liability to the CAISO or to the counterparty.

2. Cap and Trade Regulation

Under the regulations promulgated by the California air Resource Board ("CARB"), RPU must comply with mandatory reporting requirements ("MRR") for the Greenhouse Gas ("GHG") emissions as well as meet direct compliance obligations of GHG emissions from RPU's power generating resources by obtaining sufficient GHG allowance instruments for each compliance period. One GHG allowance entitles the entity holding it to incur one ton of GHG emission. Failure to meet direct GHG compliance during any compliance period will result in stiff financial penalties imposed by CARB that are multiples of compliance obligations.

RPU has been allocated approximately one million free allowances per year for each year during the period of 2013-2020 which approximately equates to RPU's GHG emissions from RPU's power generating resources per year. In theory, RPU is fully hedged against its direct GHG compliance obligations associated with RPU's power generating resources. However, if RPU is required to sell RPU's freely allocated allowances into the CARB administered quarterly auctions, RPU is likely to face mismatches between the allowance volume sold into the auction and allowance volume bought out of the auction. Such volume mismatches cannot be effectively or completely eliminated simply by engaging in hedging activities in the secondary markets. The most effective and cost neutral strategy is to engage in simultaneous buys and sales transactions in the CARB quarterly auctions trying to match the buy and sale volumes at all times. To the extent RPU is able to match the buy and sale volumes in any given auction, then the financial exposures can be managed and minimized.

In addition, RPU might engage in additional hedging activities in the auctions or in the secondary market for GHG compliance obligations not covered by the freely allocated GHG allowances. The Public Utilities Board and City Council have authorized the staff to engage in such hedging

transactions. RMC will be periodically informed of RPU'S compliance status with the Cap and Trade program which may include but not be limited to:

- i. The amount of RPU's freely allocated allowances by vintage year.
- ii. The amount of RPU's freely allocated allowances successfully sold (by vintage year) in the CARB auctions.
- iii. The revenues derived from the sales of freely allocated allowances by each quarterly auction.
- iv. The amount of allowance bought in the quarterly auctions and in the secondary market.
- v. The costs incurred from the purchases of allowances by each quarter.
- vi. The cumulative direct compliance obligations for the compliance period.

CITY OF RIVERSIDE PUBLIC UTILITIES

POWER RESOURCES RISK MANAGEMENT POLICIES

GLOSSARY

Approved Counterparty: Entities authorized to transact with RPU as described in Sections 3 and 4 of the Wholesale Counterparty Risk Management Policy.

Business Risk: Quantifiable or identifiable risk relating to normal power supply operations and to activities that are a by-product of the normal power supply activities of RPU that relate to development and sales of products and services, including support activities. Resource optimization is a fundamental activity within normal power supply operations. Such risk is necessary to production and delivery of products and services of RPU and cannot be avoided without RPU's incurring substantial economic disadvantage, since avoidance would unduly limit business operations. For example, a market exposure to fluctuations in hourly energy prices is a business risk if it results from activities within real-time supply activities. Forecasted Transactions that expose RPU to market risk and are probable of occurring are also considered business risks.

Counterparty Credit Risk: Exposure to economic loss resulting from default by a party to a contract (e.g., a counterparty).

Deal Sheet: A form prepared by the Utilities Power Resources Manager which describes the details of an Authorized Transaction, as identified in the Forward Strategy Sheet approved by the RMC. Each Deal Sheet is prepared to document the Transaction.

Derivative: Any financial instrument, such as a futures contract, Swap or Option, which derives its value from the value of an underlying security or physical commodity.

Energy Risk Management: Is the application of financial risk management tools to financial and physical risks in energy markets (power and natural gas). Can include risks measured in either monetary and energy units.

Financial Exposure: For a fiscal year is defined as the sum of the monthly products of the open long or short energy positions in electricity and natural gas in that fiscal year, multiplied by the respective forward prices for those commodities.

Forward Strategy Sheet: Provides a guideline of Transaction possibilities (purchase, sell or no action) and reflects current outlook of various Option products in lieu of outright commodity purchases where feasible in order to maximize flexibility and efficiency. Represents RMC approval of certain Transaction parameters.

Hedging: Reducing risk. It includes activities that reduce risk or that convert one type of risk to another deemed more tolerable. As a routine Power Resources activity, RPU hedges against price risk. To qualify as Hedging, an activity should be expected to produce a measurable offset to risk relating to an asset, liability, committed Transaction, or probable forecasted Transaction. Such offset should be measured against changes in market values or cash flows (e.g., marked-to-market).

Mark-to-Market (“MTM”): Marking to market is the process of determining the current value of all Transactions used to close inherent portfolio open positions over a defined period. Marking the portfolio to market identifies how the portfolio and individual Transactions compare to market valuations at a given point in time.

Optimization: The process of utilizing strategies and/or instruments to optimize economic benefits associated with load/resource management. Optimization differs from trading in that the strategic rationale for a Transaction is the driver rather than the economic benefit alone. Trading functions are designed to form commodity positions with the intent of speculating on market arbitrage opportunities.

Optimization Strategy: Any approved business activity that on its own or in combination does not increase risk but reduces net power costs.

Option: A contract that gives the holder the right, but not the obligation, to purchase or sell the underlying commodity, which could be a futures contract, a Swap or the commodity itself.

Premium: The price of an Option.

Prompt Month: The month following the current operating month (e.g., June is the prompt month if the current operating month is May).

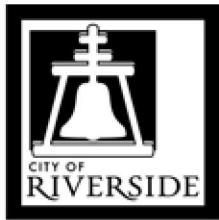
Risk Management: Limiting and reducing risk associated with all business activities of RPU that could result in economic loss. It includes activities that identify, measure, assess, limit and reduce risk. As related to the use of Derivatives, Risk Management means reducing risks in the broad sense of the term, including activities that select one type of risk over another when it is considered more tolerable, but it does not include activities that increase risk beyond levels established by this Policy.

Supply Requirements: Those requirements related to reliability and reserve standards mandated by (i) the Riverside City Council, (ii) the CAISO, and (iii) the requirements of regulatory agencies of competent jurisdiction.

Swap: A custom-tailored, individually negotiated Transaction designed to manage financial risk. In a typical commodity or price Swap, parties exchange payments based on changes in the price of a commodity or a market index while fixing the price they effectively pay for the physical commodity. The Transaction enables each party to manage exposure to commodity prices or index values. Settlements are made in cash.

Transaction: All of the approved Transaction types defined in Attachment 1 of the Authorized Transaction Policy. Includes physical or financial obligations of RPU and one or more counterparties related to energy, capacity, ancillary services, transmission service, natural gas, renewable energy credits and greenhouse gasses.

Transaction Activities: The activities involved in the energy supply decision process involving Transactions as defined herein.



City of Arts & Innovation

City Council Memorandum

City of Arts & Innovation

TO: HONORABLE MAYOR AND CITY COUNCIL DATE: MARCH 5, 2013

FROM: PUBLIC UTILITIES DEPARTMENT ITEM NO: 13

WARDS: ALL

SUBJECT: PUBLIC UTILITIES POWER RESOURCES RISK MANAGEMENT POLICIES

ISSUE:

The item for City Council consideration is approval of the revised Power Resources Risk Management Policies which includes the Energy Risk Management Policy, the Wholesale Counterparty Risk Management Policy and the Authorized Transactions Policy.

RECOMMENDATION:

That the City Council approve the proposed revisions to the Public Utilities Power Resources Risk Management Policies, including the Energy Risk Management Policy, the Wholesale Counterparty Risk Management Policy and the Authorized Transactions Policy.

BOARD RECOMMENDATION:

On February 1, 2013, the Board of Public Utilities unanimously approved this item.

COMMITTEE RECOMMENDATION:

On February 14, 2013, the Utility Services/Land Use/Energy Development Committee, with Chair Gutierrez, Vice Chair Gardner and Member Davis present, unanimously approved and recommended that the City Council approve this item.

BACKGROUND:

Riverside Public Utilities ("RPU") procures the bulk of its power through long-term contracts. In order to predict how much power will be needed to serve customer load, the Power Resources Division prepares long-term forecasts. In general, the long-term procurements are over five years in length, provide a specified amount of annual power to RPU and are a mix of renewable and non-renewable resources.

However, RPU procures approximately 10-15% of its power, as well as the natural gas to power internal generation, from short-term contracts and individual purchases to cover planned and unplanned resource outages and additional summer peaking energy needs. These transactions are carried out by Power Resources staff, subject to the oversight of the City Council, the Board of

Public Utilities and the RPU Risk Management Committee. The oversight is set forth in the Public Utilities Power Resources Risk Management Policies (“RMP”).

In 1998, the first RMP document was approved. This policy was developed to give guidance to staff regarding the purchase and sale of energy related products in the newly deregulated energy market. The RMP prescribes delegations of authority, energy transaction parameters, maximum acceptable risk limits and procedures to manage wholesale counterparty credit risk. The policy is important in rating agency discussions and required for RPU’s participation in the California wholesale electric markets.

Practice and experience necessitates changes in the policy and contribute information to allow possible different decisions to be made in dealing with the risks being faced. The RMP has been reviewed on an annual basis and recommended changes were periodically adopted by the City. In 2010, the RMP was reformatted and revised to (i) streamline the original policy since it was designed as a comprehensive set of policies geared toward an organization with expansive trading and risk management activities, and (ii) reflect market changes as a result of 2009 California Independent System Operator Market Redesign and Technology Upgrade.

The components of the RMP include:

- Energy Risk Management Policy
- Wholesale Counterparty Risk Management Policy
- Authorized Transactions Policy

As part of the ongoing internal review process, the RMP has been updated largely in response to the changes in regulatory requirements and to better fit the needs and organizational structure of RPU. Strike-through and “clean” copies of the proposed policy are attached to this report. The following highlights the proposed changes:

Operational Management Oversight – Front-, Middle-, Back-Offices

The RMP defines roles by functional office, referencing them as Front-, Middle-, and Back-office. The Front-Office is comprised of those functions related to the business activities of RPU Power Resources, including planning, market operations and trading, and long term contracts. The Middle-Office is comprised of those functions related to risk management and counterparty credit, including the Energy Risk Manager. The Back-Office is comprised of those functions responsible for verification, validation accounting, processing, reconciling and settling all transactions.

The pre-existing responsibilities and delegations of authority have been reclassified by functional office rather than by manager title. Upon review of the energy risk management policies of similar municipal utilities, it was determined RPU was unique in its description of roles and responsibilities to specific managers in the Power Resources division. This design created both redundancy and inflexibility. Further, identifying and aligning the delegations of authority under Front-, Middle-, or Back-Office reduces organizational risk such as unclear lines of authority, inadequate staffing and lack of clear accountability over specific duties.

Revises Reporting Requirements

The current RMP includes a list of very specific and static reports for presentation to the Risk Management Committee (“RMC”) on a regular basis. The revised RMP allows for the development and presentation of reports at the pleasure of the RMC. This eliminates the burden on staff to create unnecessary reports in order to only meet a policy requirement thus allowing staff to focus on the development of more meaningful data.

Added Delegations of Authority

The following Delegations of Authority shall be added under the relevant function as described in the Energy Risk Management Policy:

The Utilities Assistant General Manager-Resources shall review and has the authority to approve the Transaction strategy.

RPU Administration has the authority to approve any non-substantive modifications or amendments to the RMP.

The Front-Office may enter into emissions Transactions to meet regulatory requirements.

The Middle-Office may have the authority to add new counterparties to the Approved Counterparty list with a credit limit not to exceed the approval authority as delegated in the RMP.

The Middle-Office is responsible for reporting the addition of new counterparties under the authority of the Energy Risk Manager and all credit limit changes with justification to the RMC.

Reformatting of the Wholesale Counterparty Risk Management Policy

The proposed RMP provides for moving hard coded methodologies into attachments rather than embedding them into the body of the policy. This will make the RMP more user friendly, transparent and will streamline future amendments.

Federal Energy Regulatory Commission Order 741

FERC Order 741 reforms and standardizes credit policies used in the organized wholesale electric power markets. Market participants must provide an annual attestation from an officer of the company that specific risk management principles are being followed by the company or responsible party. The proposed RMP includes an attachment to the Wholesale Counterparty Risk Management Policy for inclusion of RPU's Internal Assessment of Risk Management Controls for the California Wholesale Electric Markets.

Dodd-Frank Wall Street Reform and Consumer Protection Act

The Dodd-Frank Act was enacted to increase transparency, accountability and ensuring stability in the financial markets. The proposed RMP recognizes these new compliance requirements under the Authorized Transactions Policy.

Regulatory/Legislative Requirements

Regulatory requirements may result from either legislation being passed or regulations being implemented. The proposed RMP includes a new attachment to the Authorized Transaction Policy whereby these requirements shall be fully described for RMC approval. Thereafter, individual Transactions shall not require prior approval but will be subject to after-the-fact review by the RMC.

Amendment to the Authorized Transaction Policy

The following Transactions shall be authorized and added to Attachment 1:

Selling Forecasted Surplus System Resource Adequacy Capacity under Forward Power Sales.

Add (i) Green House Gas Allowances, (ii) Reclaim Trading Credits, and (iii) requirements as may be established under Emission Credits Purchases/Sales (forward and after-the-fact).

Overall, a major benefit of the delegations of authority described in the RMP is to provide a framework for the timely and orderly procurement of energy and fuel with adequate separation of duties and management oversight, while providing RPU the ability to react in order to preserve cost stability during periods when the markets are volatile. The proposed delegations are comparable to similar sized municipal utilities providing electric service in the State of California.

FISCAL IMPACT:

There is no fiscal impact associated with this report.

Prepared by: David H. Wright, Public Utilities General Manager

Certified as to availability of funds: Brent A. Mason, Finance Director/Treasurer

Approved by: Belinda J. Graham, Assistant City Manager
for Scott C. Barber, City Manager

Approved as to form: Gregory P. Priamos, City Attorney

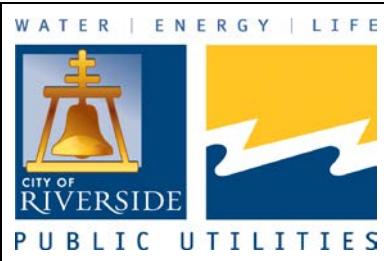
Concurs with:



Ken Gutierrez, Chair
Utility Services/Land Use/Energy Development Committee

Attachments:

1. Power Resources Risk Management Policies - Red-line with accepted format changes
2. Power Resources Risk Management Policies - Clean
3. Board of Public Utilities Public Minutes of February 1, 2013



CITY OF RIVERSIDE PUBLIC UTILITIES DEPARTMENT

NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION- WESTERN ELECTRICITY COORDINATING COUNCIL INTERNAL COMPLIANCE PROGRAM

TABLE OF CONTENTS

1. INTRODUCTION
 - 1.1 Purpose
 - 1.2 Background
2. SCOPE
3. ORGANIZATION AND STRUCTURE
 - 3.1 Administrative Responsibilities
 - 3.1.1 Public Utilities General Manager
 - 3.1.2 Deputy General Manager
 - 3.1.3 Utilities Assistant General Manager-Energy Delivery
 - 3.1.4 Utilities Assistant General Manager-Resources
 - 3.1.5 Utilities Regulatory Compliance Manager
4. PROCEDURES
 - 4.1 Reliability Standard Compliance Policies
 - 4.2 Compliance Program
 - 4.3 Immediate Review
5. TRAINING
 - 5.1 Requirements
 - 5.2 External Industry Participation
 - 5.3 Incentives for Compliance
6. COMPLIANCE MONITORING
 - 6.1 Self-Assessment
 - 6.2 Internal Auditing
7. ACTUAL OR POTENTIAL RELIABILITY STANDARD VIOLATIONS
 - 7.1 Self-reporting
 - 7.2 Reports
 - 7.3 Notifications
 - 7.3.1 Penalty Determinations
8. SUMMARY

ATTACHMENT A – Organization Chart

ATTACHMENT B – Reliability Standard Compliance Policy Example

ATTACHMENT C – Version History Example

1. INTRODUCTION

1.1 Purpose

The purpose of Riverside Public Utilities' ("RPU") Internal Compliance Program ("ICP") is to ensure that RPU sustains a strong atmosphere of compliance with respect to the reliability standards that have been promulgated by the North American Electric Reliability Corporation ("NERC") and the Western Electricity Coordinating Council ("WECC") and subsequently approved and allowed to become effective by the Federal Energy Regulatory Commission ("FERC"). RPU has made a commitment to invest the necessary resources to implement and maintain a robust and effective ICP as documented below.

The ICP documents general policies, procedures, and guidelines related to RPU's compliance with the reliability standards. It delineates overall compliance responsibilities, describes various internal compliance monitoring and enforcement measures, and provides for training to ensure that compliance responsibilities are thoroughly understood by RPU personnel involved with compliance matters.

1.2 Background

NERC was founded in 1968 by representatives of the electric utility industry for the purpose of developing and promoting voluntary compliance with rules and protocols for the reliable operation of the bulk power electric transmission systems of North America. The bulk power system generally includes facilities operated at 100 kV or higher and is defined as "facilities and control systems necessary for operating an interconnected electric energy transmission network...and electric energy from generation facilities needed to maintain transmission reliability." FPA § 215(a)(1). Following the passage of the U.S. Energy Policy Act of 2005, which called for the creation of an international "electricity reliability organization" to develop and enforce reliability standards (see FPA § 215(b) and (c)), NERC was subsequently certified by FERC as the electric reliability organization. NERC's voluntary set of reliability standards were then approved by FERC and became mandatory under federal law as of June 18, 2007. Users, owners, and operators of the bulk power system are listed in a compliance registry maintained by NERC according to the different utility functions they perform and are responsible for knowing the content of and complying with the reliability standards. FPA § 215(b)(1). NERC continues to develop new reliability standards and revise existing reliability standards.

WECC is responsible for coordinating and promoting electric system reliability for the Western Interconnection, which includes the City of Riverside, and has been delegated authority for overseeing compliance with the reliability standards by users, owners, and operators of the bulk power system within the Western Interconnection.

NERC and WECC have adopted Compliance Monitoring and Enforcement Program Implementation Plans that are used to monitor, assess, and enforce compliance with FERC-approved NERC reliability standards and WECC regional reliability standards. Each registered entity must comply with all reliability standards that are applicable to functions for which they are registered.

Subject to FERC oversight, NERC and WECC are authorized to enforce the reliability standards with monetary and non-monetary penalties and sanctions. Monetary penalties include fines ranging from \$1,000 to \$1 million per violation per day, depending on factors such as the level of risk to the bulk power system created by the violation. Under Section 215(e)(6) of the Federal Power Act, penalties for violating the reliability standards must be reasonably related "to the seriousness of the violation" and must take into consideration efforts by the "user, owner, or operator to remedy the violation in a timely manner." FERC may also independently investigate and enforce compliance with the reliability standards.

2. SCOPE

RPU is registered with WECC and NERC as a Distribution Provider and Resource Planner.¹ It is the policy of RPU to comply and document compliance with all reliability standards that apply to these functional categories.

3. ORGANIZATION AND STRUCTURE

RPU staff with responsibilities supporting the ICP include (i) the Public Utilities General Manager, (ii) the Deputy General Manager, (iii) the Utilities Assistant General Manager-Energy Delivery, (iv) the Utilities Assistant General Manager-Resources, (v) the Utilities Regulatory Compliance Manager, and (vi) Responsible Managers and Subject Matter Experts as assigned (refer to Attachment A-Organization Chart). Staff shall perform their assigned duties consistent with the exercise of due diligence, and shall promote an organizational culture that encourages a commitment to compliance with the law.

Pursuant to the Riverside City Charter sections 407, 601, and 1200, the Public Utilities General Manager, with the approval of the City Manager, has the authority to assign particular employees to particular duties or job functions within the organization, and to fill any job vacancies on an interim basis pending permanent appointments.

RPU shall use reasonable efforts not to assign responsibility for activities under the ICP to individuals known to have deliberately engaged in reliability standards violations or conduct inconsistent with compliance with the reliability standards.

3.1 Administrative Responsibilities

3.1.1 Public Utilities General Manager

- a. The Public Utilities General Manager has overall responsibility for RPU's ICP and shall actively support and be involved in RPU's NERC and WECC reliability standard compliance efforts.
- b. Substantive modifications to the ICP which are necessary to comply with additional or revised FERC, NERC, and/or WECC regulations shall be approved by the Public Utilities General Manager, in consultation with the Deputy General Manager, the Utilities Regulatory Compliance Manager and the City Attorney's Office. Other substantive modifications shall be approved by the Board of Public Utilities and the City Council.

3.1.2 Deputy General Manager

As delegated by the Public Utilities General Manager, the Deputy General Manager has the following responsibilities and authorities:

¹ **Distribution Provider ("DP"):** Provides and operates the "wires" between the transmission system and the end-use customer. For those end-use customers who are served at transmission voltages, the Transmission Owner also serves as the Distribution Provider. Thus, the Distribution Provider is not defined by a specific voltage, but rather as performing the Distribution function at any voltage.

Resource Planner ("RP"): The entity that develops a long-term (generally one year and beyond) plan for the resource adequacy of specific loads (customer demand and energy requirements) within a Planning Authority Area.

- a. The Deputy General Manager shall report RPU's compliance activities on a periodic basis to the Public Utilities General Manager, the Board of Public Utilities and the City Council, if recommended by the Board of Public Utilities.
- b. The Deputy General Manager, in consultation with the City Attorney's Office, shall notify the Public Utilities General Manager of an actual or potential violation of applicable reliability standards. Any decisions regarding litigation or potential litigation shall be made by the City Council.
- c. The Deputy General Manager, in consultation with the City Attorney's Office, shall notify the Public Utilities General Manager if a final penalty or sanction (i.e., financial liability or other obligations inuring to RPU that reflects either the outcome of settlement negotiations involving RPU and WECC, NERC, or FERC or the result of investigation and/or dispute resolution processes administered by WECC, NERC, or FERC) is assessed.

3.1.3 Utilities Assistant General Manager-Energy Delivery and Utilities Assistant General Manager-Resources

As delegated by the Public Utilities General Manager, responsibilities and authorities of the Utilities Assistant General Manager-Energy Delivery and the Utilities Assistant General Manager-Resources include:

- a. Understanding the scope of the reliability standards applicable to their division.
- b. Allocating sufficient staff and resources to ensure compliance with applicable reliability standards.
- c. Identifying and assigning Responsible Managers for their divisions. Responsible Managers must be City of Riverside Management II employees.
- d. Review and approval of internal compliance policies and documentation.
- e. Attending internal compliance team meetings at the request of the Utilities Regulatory Compliance Manager.
- f. Directing staff to cooperate with compliance activities described in the ICP, including but not limited to, meeting attendance, training, reporting, communication, and managing compliance documentation. Staff shall perform duties in a manner that complies with applicable reliability standards.
- g. Certifying final responses for approval by the Deputy General Manager or the Public Utilities General Manager, including but not limited to, compliance certification statements to NERC/WECC (e.g. Annual Self-certification, Periodic Data Submittals, Exception Reporting, Spot Checks, Self-Reported Violations, and any other data submittals of a similar nature).

3.1.4 Utilities Regulatory Compliance Manager

The Utilities Regulatory Compliance Manager shall have day-to-day operational responsibility for the ICP. The Utilities Regulatory Compliance Manager may report directly to the Public Utilities General Manager or to the Deputy General Manager. The Utilities Regulatory Compliance Manager shall not

report to an individual who oversees daily operations in the Energy Delivery or Power Resources Divisions.

For the purposes of the ICP, the Utilities Regulatory Compliance Manager shall have adequate resources and appropriate authority as delegated herein to provide independent oversight for all activities related to the implementation of the ICP. The Utilities Regulatory Compliance Manager shall be independent of those responsible for compliance with the reliability standards. The Utilities Regulatory Compliance Manager shall also have independent direct access to the governing authority or an appropriate subgroup of the governing authority which may include, but not be limited to, the Public Utilities General Manager, the City Manager, the Public Utilities Board and the City Council in the event that an actual or potential violation of applicable reliability standards warrants such access.

As delegated by the Public Utilities General Manager, responsibilities and authorities of the Utilities Regulatory Compliance Manager include:

- a. Ensuring the effective development and implementation of RPU's ICP.
- b. Overseeing the implementation of RPU's NERC Reliability Standard Compliance Policies ("RSCPs"). An example of an RSCP is provided in Attachment B.
- c. Oversight and responsibility for all communication and correspondence related to the ICP, WECC and NERC.
- d. Conducting reviews and assessment to verify the effectiveness of the ICP.
- e. Communicate updates and changes to the (i) the Subject Matter Experts, (ii) Responsible Managers, and (iii) executive management and City Attorney's Office as necessary.
- f. Initiating internal compliance team meetings to discuss current issues, lessons learned best practices and other routine matters regarding the reliability standards. These meetings shall be held on a regular, but at least quarterly, basis.
- g. Attending applicable training sessions and workshops to remain current in compliance practices and requirements.
- h. Internal reporting of any non-compliance or potential non-compliance with the applicable reliability standards.
- i. Preparing responses and compiling evidence in response to NERC/WECC requests for information (or the delegation thereof) and preparing RPU's responses to self-certifications, spot-check letters, and similar compliance monitoring and enforcement activities by NERC/WECC, in consultation with the City Attorney's Office.

4. PROCEDURES

4.1 Reliability Standard Compliance Policies

RPU has developed an approved RSCP for each applicable reliability standard. The RSCPs describe procedures that RPU will follow to ensure compliance with the reliability standards. Complete and current RSCPs and the ICP are maintained, updated, and distributed by the Utilities Regulatory

Compliance Manager. Electronic copies are located on the Utilities Regulatory Compliance Manager's internal hard drive and are posted on RPU's intranet Share Point portal available to RPU personnel.

The Responsible Manager shall ensure that the substantive compliance actions described in the RSCPs are carried out in accordance with the procedures described therein and shall review the RSCPs that they are responsible for implementing on an annual basis. Following this review, Responsible Managers shall make recommendations for retention or modification of the RSCPs to the Utilities Regulatory Compliance Manager. The final modified RSCPs shall be reviewed and approved by either the Utilities Assistant General Manager-Energy Delivery or Utilities Assistant General Manager-Resources and the Deputy General Manager. The Utilities Regulatory Compliance Manager shall maintain the RSCP Revision History Log (refer to Attachment C).

4.2 Compliance Program

On an annual basis, or more frequently due to FERC, NERC or WECC actions, the ICP shall be reviewed and improved where practicable. The Regulatory Compliance Manager will initiate a request for review and the SMEs and Responsible Managers shall confirm the compliance documents are up-to-date. As part of this review, RPU shall assess the risk of violations and take appropriate steps to design, implement, or modify the ICP. The risk assessment shall be based upon impact and probability. The Violation Risk Factor shall be considered for each applicable requirement. Trends shall be identified for priority placement.

The final modified ICP shall be reviewed by the City Attorney's Office and shall be approved by the Public Utilities General Manager. Such review is evidenced by various methods including, but not limited to, the Revision History, minutes of the internal meetings, internal audits, internal reports and copies of correspondence or request for action, to the extent not subject to applicable legal privileges.

Further, substantive modifications to the ICP, other than those that are necessary to comply with additional or revised FERC, NERC, and/or WECC requirements, shall also be approved by the Public Utilities Board and the City Council.

4.3 Immediate Review

Immediate reviews (outside of the annual cycle) of the RSCPs and/or the ICP may be conducted by the Responsible Manager or the Utilities Regulatory Compliance Manager in consultation with appropriate RPU and/or City staff. Circumstances that could trigger an immediate review of an RSCP or the ICP include, but are not limited to, the following: (i) FERC approval of revisions to an existing reliability standard; (ii) approval, by FERC, of a new interpretation of an existing reliability standard; (iii) issuance, by WECC, of a Notice of Alleged Violation; (iv) submittal, by RPU, of an Exception Report; (v) self-reporting, by RPU, of an actual or potential violation; or (vi) when the findings of an internal audit warrant such.

If an event occurs that results in the need to immediately review a RSCP or the ICP, the Utilities Regulatory Compliance Manager, with the assistance of appropriate RPU staff and, if necessary, the City Attorney's Office, shall prepare a report describing the details of the event and making recommendations, which may include, for example, modification to the RSCP with appropriate documentation, additional training, or changes in reporting, testing or procedures. If the review was triggered by an actual or potential violation of applicable reliability standards, the report shall include the elements described below under the heading "Actual or Potential Reliability Standards Violations."

5. TRAINING

5.1 Requirements

Training for RPU personnel directly responsible for compliance with the reliability standards is to be conducted within each Utility division responsible for carrying out the applicable RSCP.

At the direction of the Utilities Regulatory Compliance Manager, the Responsible Managers reporting to the Public Utilities Assistant General Manager-Energy Delivery and the Public Utilities Assistant General Manager-Resources shall (i) establish regular training schedules, (ii) develop and provide (or arrange for) training, and (iii) verify that all RPU personnel have received appropriate training to ensure that the reliability standards and the respective responsibilities of RPU personnel related to reliability standards are clearly understood.

The Responsible Manager shall keep written records of this training, including attendance, and shall provide documentation, including copies of any materials distributed at the training, to the Utilities Regulatory Compliance Manager. Overview and awareness training regarding the ICP and the reliability standards is mandatory for all appropriate RPU personnel and will be conducted annually. The Utilities Regulatory Compliance Manager shall be responsible for developing and providing (or arranging for) the overview and awareness training and verifying that appropriate RPU personnel attend the training.

Consultants and contractors shall receive training appropriate to their duties and responsibilities. RPU employees, consultants, and contractors not involved in activities related to the reliability standards will not be required to attend training.

5.2 External Industry Participation

The Utilities Regulatory Compliance Manager shall participate in WECC, NERC and other outreach activities to share compliance program activities with other entities, adjacent utilities, and/or local organizations. RPU personnel responsible for reliability standard requirements shall be encouraged to attend WECC-related conferences and user meetings.

5.3 Incentives for Compliance

RPU currently offers a number of award programs which recognizes employees who display consistent job performance leading to reliable utility services and exceptional customer service. These programs may be used to encourage employee compliance with the reliability standards and accountability for compliance.

6. COMPLIANCE MONITORING

6.1 Self-Assessment

The Utilities Regulatory Compliance Manager shall establish a self-assessment schedule and procedure for the Utilities Regulatory Compliance Manager or the Responsible Managers to employ in order to verify that RPU personnel are fully complying with the reliability standards and are generating documentation germane to their substantive compliance responsibilities and that existing RSCPs and related policies, procedures, and/or guidelines are effective means of ensuring ongoing compliance. Self-assessment procedures may include, but are not limited to, requests for required reports, review of retained documents, reliability risk, and independent verification of testing and results.

6.2 Internal Auditing

Internal auditing shall be conducted on an annual cycle and may be performed by or through the staff of a neighboring utility, a joint powers authority such as the Southern California Public Power Authority, or outside consultants with expertise in reliability standards compliance, in addition to RPU or City personnel not routinely involved in substantive compliance matters. The Utilities Regulatory Compliance Manager shall also consider and/or request the assistance of the Internal Auditors for the City of Riverside. Such a request may include: (i) instruction and guidance to RPU personnel, consultants, or other individuals regarding principles and standards for internal auditing; (ii) provision of written guidelines to be followed throughout the audit, including methods for, and timing of, communications, standards for written reports, and acceptable conduct; and, (iii) provision of assistance and advice, upon request, throughout the compliance audit process.

7. ACTUAL OR POTENTIAL RELIABILITY STANDARDS VIOLATIONS

7.1 Self-Reporting

In the event that possible or potential violations of reliability standards are reported anonymously² or discovered by City staff, such possible or potential violations shall immediately be brought to the attention of the Utilities Regulatory Compliance Manager, who shall immediately inform the City Attorney's Office.

The Utilities Regulatory Compliance Manager, in consultation with the Deputy General Manager, the Public Utilities Assistant General Manager-Energy Delivery and/or the Public Utilities Assistant General Manager-Resources, and the City Attorney's Office, shall immediately review the reliability standard(s) that may have been violated to determine if a violation has occurred or is occurring. If so, the Utilities Regulatory Compliance Manager shall submit to WECC a self-report (via the process established by WECC for the submittal of self-reports). If it is clear that a violation has occurred or is continuing to occur, RPU shall take reasonable steps to correct the problem; a mitigation plan shall be prepared and submitted along with the self-report or shortly thereafter.

In all instances, City staff involved in self-reporting the violation shall cooperate with WECC with respect to any inquiries, investigations, or other processes occurring as a result of the self-report.

City staff should report potential or actual violations to their immediate supervisor or seek guidance from the Utilities Regulatory Compliance Manager and may do so without fear of retaliation.

7.2 Reports

If notified of an actual or potential violation of applicable reliability standards whether through internal compliance monitoring processes (such as review of RSCPs and related documentation or internal audits, for example) or via a communication from WECC or NERC (such as a notice of violation, a notice of investigation, or similar type of communication), the Utilities Regulatory Compliance Manager shall investigate the circumstances surrounding the alleged violation (or supervise the investigation thereof) and prepare a report for any valid actual or potential violation. The report of the alleged violation shall be provided to the Deputy General Manager. The report shall include the following:

² An anonymous report can be made by contacting the City of Riverside Waste and Abuse Hotline at (951) 826-2232 or complete an online complaint form, or by sending hard copy correspondence to the Utilities Regulatory Compliance Manager. Items reported through the hotline will be addressed by the City's Internal Audit Department and the Public Utilities General Manager.

- a. The details of the actual or potential violation and actions taken or to be taken to remedy the violation (if there appears to be a reasonable basis for concluding that a violation is occurring), including modification to the RSCPs, additional training, or changes in reporting, testing or procedures.
- b. A discussion of whether the alleged violation was caused by City staff and, if so, whether the conduct, action, or omission to act that resulted in an alleged violation should lead to disciplinary action. This section of the report shall be treated as confidential and shall be handled in accordance with the City of Riverside Personnel Policy and Procedures and in consultation with the City of Riverside Human Resources Department.
- c. Recommendations regarding a general course of action beyond immediate remedial actions which may consist of engaging in settlement negotiations with WECC, NERC, and/or FERC related to the alleged violation, disputing the alleged violation or proposed penalty, implementing a plan to mitigate the violation (if one has not been implemented already), or taking other actions, consistent with applicable procedural rules and processes administered by WECC, NERC, and FERC. Self-reporting, development of mitigation plans, making exception reports, and/or responding to other requests for information related to the alleged violation shall not be delayed pending the reports to the Public Utilities Board and City Council.

7.3 Notifications

In the event of an actual or potential violation of applicable reliability standards, the Utilities Regulatory Compliance Manager shall have prepared and presented the report as described above. The Public Utilities General Manager shall inform the Public Utilities Board and/or City Council of the actual or potential violation. Per Riverside City Charter, any decisions regarding litigation or potential litigation shall be made by the City Council.

For notification purposes, WECC requires a “CEO (or equivalent) Contact” role be identified and added to the WECC web portal. This role shall be assigned to the Deputy General Manager.

7.3.1. Penalty Determinations

If a final penalty or sanction (*i.e.*, financial liability or other obligations inuring to RPU that reflects either the outcome of settlement negotiations involving RPU and WECC, NERC, or FERC or the result of investigation and/or dispute resolution processes administered by WECC, NERC, or FERC) is assessed, the Public Utilities General Manager, in consultation with the City Attorney’s Office shall notify the Public Utilities Board and the City Council.

8. SUMMARY

To ensure RPU sustains a strong atmosphere of compliance with respect to the reliability standards, RPU has developed this Internal Compliance Policy to document general policies, procedures, and guidelines related to RPU’s compliance with reliability standards.

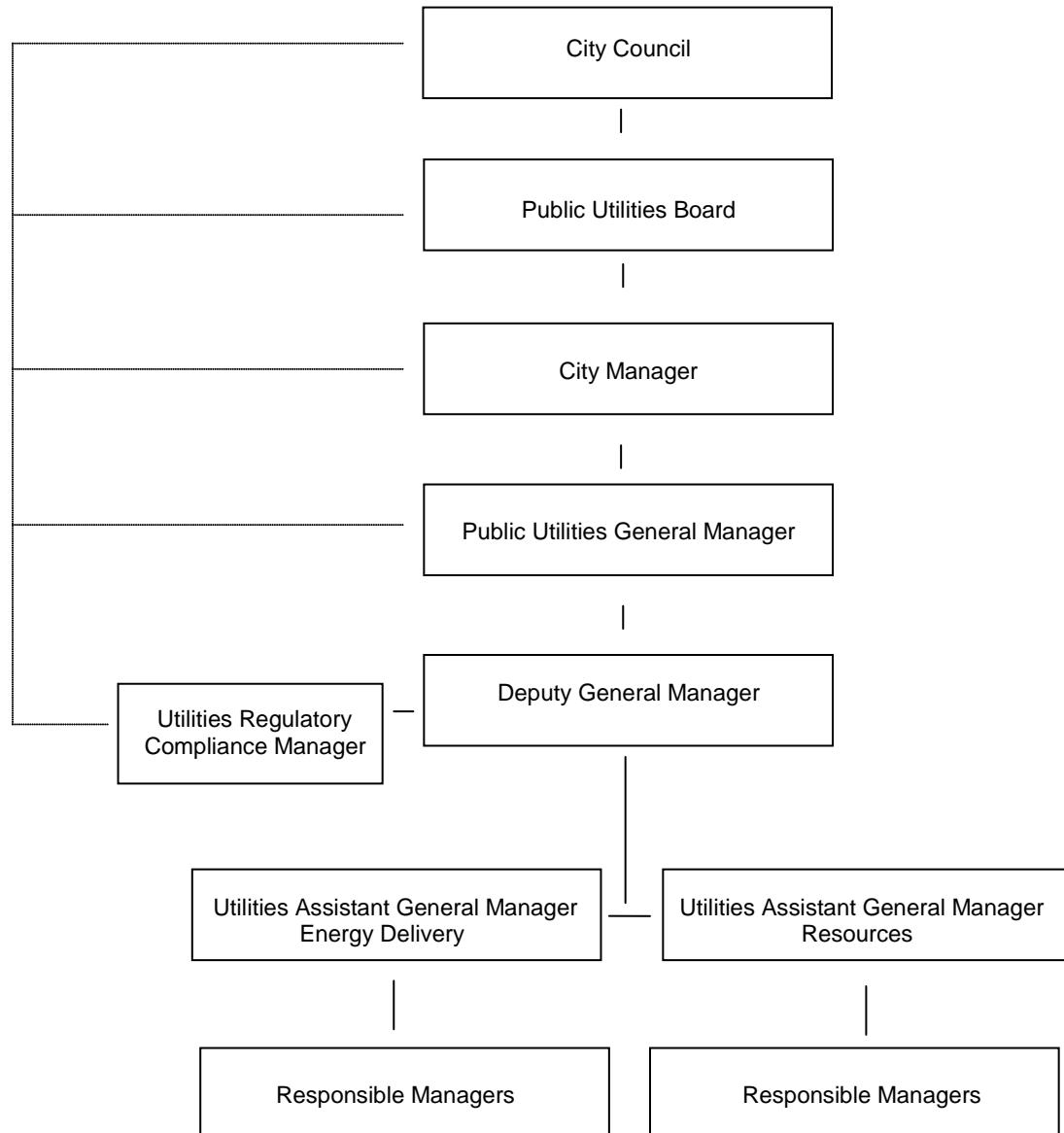
Questions regarding the ICP should be sent to the Utilities Regulatory Compliance Manager.

VERSION HISTORY

VERSION	DATE	CHANGE TRACKING
1	9/9/2008	Adopted by City Council
2	4/26/2011	Amended to meet FERC Policy Statement on Penalty Guidelines revised on 3/18/10
3	12/31/2013	Amended to (i) meet WECC Internal Compliance Program Assessment guidelines, (ii) add Utilities Chief Operations Officer, and (iii) improve format
4	XX/XX/2017	Amended to (i) replace Utilities Chief Operations Officer with Deputy General Manager, (ii) to remove the Purchase/Selling Entity and Load Serving Entity registration as these functions were deactivated by FERC in 2015, (iii) update Section 4.2 and, (iv) amend contact information for anonymous reporting.

ATTACHMENT A
RIVERSIDE PUBLIC UTILITIES
INTERNAL COMPLIANCE PROGRAM

Organization Chart



The Utilities Regulatory Compliance Manager shall also have independent direct access to the governing authority or an appropriate subgroup of the governing authority which may include, but not be limited to, the Utilities General Manager, the City Manager, the Public Utilities Board and the City Council in the event that an actual or potential violation of applicable reliability standards warrants such access.

RPU RELIABILITY STANDARD COMPLIANCE POLICY

NERC Reliability Standard

EOP-004-2 Event Reporting

Background: Riverside Public Utilities (“RPU”) is registered with the Western Electricity Coordinating Council (“WECC”) and the North American Electric Reliability Corporation (“NERC”) as a **Distribution Provider and Resource Planner**. It is the policy of RPU to comply with reliability standards promulgated by the WECC and the NERC, as subsequently approved and allowed to become effective by the Federal Energy Regulatory Commission (“FERC”). Any conflict between this RPU Compliance Policy and the applicable NERC and/or WECC reliability standard(s) shall be resolved in favor of the NERC/WECC reliability standard(s).

References: NERC Reliability Standard EOP-004-2 - *Event Reporting*

Purpose: “To improve the reliability of the Bulk Electric System by requiring the reporting of events by Responsible Entities.”

Applicability: The referenced NERC Reliability Standard is specifically applicable to RPU as a Distribution Provider.

Riverside Public Utilities Policy: RPU, as a registered Distribution Provider, is subject to Requirements 1, 2 and 3 of NERC Reliability Standard EOP-004-2.

Requirement 1 provides that “[e]ach Responsible Entity shall have an event reporting Operating Plan in accordance with EOP-004-2 Attachment 1 that includes the protocol(s) for reporting to the Electric Reliability Organization and other organizations (e.g., the Regional Entity, company personnel, the Responsible Entity’s Reliability Coordinator, law enforcement, or governmental authority). *[Violation Risk Factor: Lower] [Time Horizon: Operations Planning]*”

Requirement 2 provides that “[e]ach Responsible Entity shall report events per their Operating Plan within 24 hours of recognition of meeting an event type threshold for reporting or by the end of the next business day if the event occurs on a weekend (which is recognized to be 4 PM local time on Friday to 8 AM Monday local time). *[Violation Risk Factor: Medium] [Time Horizon: Operations Assessment]*”

Requirement 3 provides that “[e]ach Responsible Entity shall validate all contact information contained in the Operating Plan pursuant to Requirement R1 each calendar year. *[Violation Risk Factor: Medium] [Time Horizon: Operations Planning]*”

RPU operates at 69kV and neither its load nor its generating facilities are connected to the Bulk Electric System. RPU does operate and maintain an Under Frequency Load Shedding system agreed upon in the Master Metered Sub-System Agreement by RPU and the California Independent System Operator (CAISO) and in accordance with the WECC Off Nominal Frequency Study.

RPU RELIABILITY STANDARD COMPLIANCE POLICY

NERC Reliability Standard EOP-004-2 Event Reporting

RPU complies with Requirement 1, pursuant to RPU Standard Practice 230.001 – Reporting Events to Regulatory Agencies (RPU's Operating Practice). According to Standard Practice 230.001, events are analyzed and the Department of Energy (DOE) and NERC-required reports are completed and provided to the DOE, NERC, WECC, the WECC Reliability Coordinator (Peak Reliability), the CAISO and Southern California Edison.

RPU will comply with Requirement 2, when it has a reportable event pursuant to RPU's Standard Practice 230.001.

RPU will comply with Requirement 3 by verifying contact information every calendar year while reviewing RPU's Standard Practice 230.001.

Noncompliance: Actual or anticipated failure to adhere to this RPU policy, or the underlying WECC or NERC policy, shall be immediately reported in accordance with the City of Riverside Public Utilities NERC-WECC Internal Compliance Program.

Record Retention: All written and electronic records related to compliance with this policy shall be retained for the greater of the period required by the (i) City of Riverside Record Retention Policy, (ii) Western Electricity Coordinating Council, or (iii) North American Electric Reliability Corporation.

Attachment: NERC Reliability Standard EOP-004-2

RPU RELIABILITY STANDARD COMPLIANCE POLICY

NERC Reliability Standard

EOP-004-2 Event Reporting

This RPU NERC Reliability Standard Compliance Policy supersedes RPU's prior policy for compliance with NERC Reliability Standard EOP-004-2 dated 7/1/2015.

Required Signatures:



Pat Hohl
Assistant General Manager-Energy Delivery



Kevin Milligan
Deputy General Manager

7/31/2016

Date

RPU RELIABILITY STANDARD COMPLIANCE POLICY

NERC Reliability Standard

EOP-004-2 Event Reporting

VERSION HISTORY

VERSION	DATE	CHANGE TRACKING
1	6/17/2007	Effective Date
2	10/3/2008	More Descriptive
3	03/02/2009	Replaced California-Mexico Reliability Coordinator with WECC Reliability Coordinator Added Version History
4	9/1/2010	NERC Deactivated RPU as GO/GOP as of 6/17/2007
5	1/1/2014	Revised to comply with NERC Reliability Standard EOP-004-2
6	7/31/2014	Periodic review and updates
7	7/1/2015	Periodic review. Removed PSE reference. Revised paragraph on Noncompliance.
8	7/31/2016	Periodic review. Removed LSE reference.

A. Introduction

- 1. Title:** Event Reporting
- 2. Number:** EOP-004-2
- 3. Purpose:** To improve the reliability of the Bulk Electric System by requiring the reporting of events by Responsible Entities.
- 4. Applicability:**

- 4.1.** Functional Entities: For the purpose of the Requirements and the EOP-004 Attachment 1 contained herein, the following functional entities will be collectively referred to as “Responsible Entity.”
 - 4.1.1.** Reliability Coordinator
 - 4.1.2.** Balancing Authority
 - 4.1.3.** Transmission Owner
 - 4.1.4.** Transmission Operator
 - 4.1.5.** Generator Owner
 - 4.1.6.** Generator Operator
 - 4.1.7.** Distribution Provider

5. Effective Dates:

The first day of the first calendar quarter that is six months beyond the date that this standard is approved by applicable regulatory authorities. In those jurisdictions where regulatory approval is not required, the standard shall become effective on the first day of the first calendar quarter that is six months beyond the date this standard is approved by the NERC Board of Trustees, or as otherwise made effective pursuant to the laws applicable to such ERO governmental authorities.

6. Background:

NERC established a SAR Team in 2009 to investigate and propose revisions to the CIP-001 and EOP-004 Reliability Standards. The team was asked to consider the following:

1. CIP-001 could be merged with EOP-004 to eliminate redundancies.
2. Acts of sabotage have to be reported to the DOE as part of EOP-004.
3. Specific references to the DOE form need to be eliminated.
4. EOP-004 had some ‘fill-in-the-blank’ components to eliminate.

The development included other improvements to the standards deemed appropriate by the drafting team, with the consensus of stakeholders, consistent with establishing high quality, enforceable and technically sufficient Bulk Electric System reliability standards.

The SAR for Project 2009-01, Disturbance and Sabotage Reporting was moved forward for standard drafting by the NERC Standards Committee in August of 2009. The Disturbance and Sabotage Reporting Standard Drafting Team (DSR SDT) was formed in late 2009.

The DSR SDT developed a concept paper to solicit stakeholder input regarding the proposed reporting concepts that the DSR SDT had developed. The posting of the concept paper sought comments from stakeholders on the “road map” that will be used by the DSR SDT in updating or revising CIP-001 and EOP-004. The concept paper provided stakeholders the background information and thought process of the DSR SDT. The DSR SDT has reviewed the existing standards, the SAR, issues from the NERC issues database and FERC Order 693 Directives in order to determine a prudent course of action with respect to revision of these standards.

B. Requirements and Measures

- R1.** Each Responsible Entity shall have an event reporting Operating Plan in accordance with EOP-004-2 Attachment 1 that includes the protocol(s) for reporting to the Electric Reliability Organization and other organizations (e.g., the Regional Entity, company personnel, the Responsible Entity’s Reliability Coordinator, law enforcement, or governmental authority). *[Violation Risk Factor: Lower] [Time Horizon: Operations Planning]*
- M1.** Each Responsible Entity will have a dated event reporting Operating Plan that includes, but is not limited to the protocol(s) and each organization identified to receive an event report for event types specified in EOP-004-2 Attachment 1 and in accordance with the entity responsible for reporting.
- R2.** Each Responsible Entity shall report events per their Operating Plan within 24 hours of recognition of meeting an event type threshold for reporting or by the end of the next business day if the event occurs on a weekend (which is recognized to be 4 PM local time on Friday to 8 AM Monday local time). *[Violation Risk Factor: Medium] [Time Horizon: Operations Assessment]*
- M2.** Each Responsible Entity will have as evidence of reporting an event, copy of the completed EOP-004-2 Attachment 2 form or a DOE-OE-417 form; and evidence of submittal (e.g., operator log or other operating documentation, voice recording, electronic mail message, or confirmation of facsimile) demonstrating the event report was submitted within 24 hours of recognition of meeting the threshold for reporting or by the

end of the next business day if the event occurs on a weekend (which is recognized to be 4 PM local time on Friday to 8 AM Monday local time). (R2)

R3. Each Responsible Entity shall validate all contact information contained in the Operating Plan pursuant to Requirement R1 each calendar year. *[Violation Risk Factor: Medium]* *[Time Horizon: Operations Planning]*

M3. Each Responsible Entity will have dated records to show that it validated all contact information contained in the Operating Plan each calendar year. Such evidence may include, but are not limited to, dated voice recordings and operating logs or other communication documentation. (R3)

C. Compliance

1. Compliance Monitoring Process

1.1 Compliance Enforcement Authority

The Regional Entity shall serve as the Compliance Enforcement Authority (CEA) unless the applicable entity is owned, operated, or controlled by the Regional Entity. In such cases the ERO or a Regional Entity approved by FERC or other applicable governmental authority shall serve as the CEA.

1.2 Evidence Retention

The Responsible Entity shall keep data or evidence to show compliance as identified below unless directed by its Compliance Enforcement Authority to retain specific evidence for a longer period of time as part of an investigation:

The following evidence retention periods identify the period of time an entity is required to retain specific evidence to demonstrate compliance. For instances where the evidence retention period specified below is shorter than the time since the last audit, the Compliance Enforcement Authority may ask an entity to provide other evidence to show that it was compliant for the full time period since the last audit.

- Each Responsible Entity shall retain the current Operating Plan plus each version issued since the last audit for Requirements R1, and Measure M1.
- Each Responsible Entity shall retain evidence of compliance since the last audit for Requirements R2, R3 and Measure M2, M3.

If a Responsible Entity is found non-compliant, it shall keep information related to the non-compliance until mitigation is complete and approved or for the duration specified above, whichever is longer.

The Compliance Enforcement Authority shall keep the last audit records and all requested and submitted subsequent audit records.

1.3 Compliance Monitoring and Enforcement Processes:

- Compliance Audit
- Self-Certification
- Spot Checking
- Compliance Investigation
- Self-Reporting
- Complaint

1.4 Additional Compliance Information

- None

Table of Compliance Elements

R #	Time Horizon	VRF	Violation Severity Levels			
			Lower VSL	Moderate VSL	High VSL	Severe VSL
R1	Operations Planning	Lower	The Responsible Entity had an Operating Plan, but failed to include one applicable event type.	The Responsible Entity had an Operating Plan, but failed to include two applicable event types.	The Responsible Entity had an Operating Plan, but failed to include three applicable event types.	The Responsible Entity had an Operating Plan, but failed to include four or more applicable event types. OR The Responsible Entity failed to have an event reporting Operating Plan.

EOP-004-2 — Event Reporting

R #	Time Horizon	VRF	Violation Severity Levels			
			Lower VSL	Moderate VSL	High VSL	Severe VSL
R2	Operations Assessment	Medium	<p>The Responsible Entity submitted an event report (e.g., written or verbal) to all required recipients more than 24 hours but less than or equal to 36 hours after meeting an event threshold for reporting.</p> <p>OR</p> <p>The Responsible Entity failed to submit an event report (e.g., written or verbal) to one entity identified in its event reporting Operating Plan within 24 hours.</p>	<p>The Responsible Entity submitted an event report (e.g., written or verbal) to all required recipients more than 36 hours but less than or equal to 48 hours after meeting an event threshold for reporting.</p> <p>OR</p> <p>The Responsible Entity failed to submit an event report (e.g., written or verbal) to two entities identified in its event reporting Operating Plan within 24 hours.</p>	<p>The Responsible Entity submitted an event report (e.g., written or verbal) to all required recipients more than 48 hours but less than or equal to 60 hours after meeting an event threshold for reporting.</p> <p>OR</p> <p>The Responsible Entity failed to submit an event report (e.g., written or verbal) to three entities identified in its event reporting Operating Plan within 24 hours.</p>	<p>The Responsible Entity submitted an event report (e.g., written or verbal) to all required recipients more than 60 hours after meeting an event threshold for reporting.</p> <p>OR</p> <p>The Responsible Entity failed to submit an event report (e.g., written or verbal) to four or more entities identified in its event reporting Operating Plan within 24 hours.</p> <p>OR</p> <p>The Responsible Entity failed to submit a report for an event in EOP-004 Attachment 1.</p>

R #	Time Horizon	VRF	Violation Severity Levels			
			Lower VSL	Moderate VSL	High VSL	Severe VSL
R3	Operations Planning	Medium	<p>The Responsible Entity validated all contact information contained in the Operating Plan but was late by less than one calendar month.</p> <p>OR</p> <p>The Responsible Entity validated 75% but less than 100% of the contact information contained in the Operating Plan.</p>	<p>The Responsible Entity validated all contact information contained in the Operating Plan but was late by one calendar month or more but less than two calendar months.</p> <p>OR</p> <p>The Responsible Entity validated 50% and less than 75% of the contact information contained in the Operating Plan.</p>	<p>The Responsible Entity validated all contact information contained in the Operating Plan but was late by two calendar months or more but less than three calendar months.</p> <p>OR</p> <p>The Responsible Entity validated 25% and less than 50% of the contact information contained in the Operating Plan.</p>	<p>The Responsible Entity validated all contact information contained in the Operating Plan but was late by three calendar months or more.</p> <p>OR</p> <p>The Responsible Entity validated less than 25% of contact information contained in the Operating Plan.</p>

D. Variances

None.

E. Interpretations

None.

F. References

Guideline and Technical Basis (attached)

EOP-004 - Attachment 1: Reportable Events

NOTE: Under certain adverse conditions (e.g. severe weather, multiple events) it may not be possible to report the damage caused by an event and issue a written Event Report within the timing in the standard. In such cases, the affected Responsible Entity shall notify parties per Requirement R2 and provide as much information as is available at the time of the notification. Submit reports to the ERO via one of the following: e-mail: systemawareness@nerc.net, Facsimile 404-446-9770 or Voice: 404-446-9780.

Submit EOP-004 Attachment 2 (or DOE-OE-417) pursuant to Requirements R1 and R2.

Event Type	Entity with Reporting Responsibility	Threshold for Reporting
Damage or destruction of a Facility	RC, BA, TOP	Damage or destruction of a Facility within its Reliability Coordinator Area, Balancing Authority Area or Transmission Operator Area that results in actions to avoid a BES Emergency.
Damage or destruction of a Facility	BA, TO, TOP, GO, GOP, DP	Damage or destruction of its Facility that results from actual or suspected intentional human action.
Physical threats to a Facility	BA, TO, TOP, GO, GOP, DP	Physical threat to its Facility excluding weather or natural disaster related threats, which has the potential to degrade the normal operation of the Facility. OR Suspicious device or activity at a Facility. Do not report theft unless it degrades normal operation of a Facility.

EOP-004-2 — Event Reporting

Event Type	Entity with Reporting Responsibility	Threshold for Reporting
Physical threats to a BES control center	RC, BA, TOP	Physical threat to its BES control center, excluding weather or natural disaster related threats, which has the potential to degrade the normal operation of the control center. OR Suspicious device or activity at a BES control center.
BES Emergency requiring public appeal for load reduction	Initiating entity is responsible for reporting	Public appeal for load reduction event.
BES Emergency requiring system-wide voltage reduction	Initiating entity is responsible for reporting	System wide voltage reduction of 3% or more.
BES Emergency requiring manual firm load shedding	Initiating entity is responsible for reporting	Manual firm load shedding \geq 100 MW.
BES Emergency resulting in automatic firm load shedding	DP, TOP	Automatic firm load shedding \geq 100 MW (via automatic undervoltage or underfrequency load shedding schemes, or SPS/RAS).
Voltage deviation on a Facility	TOP	Observed within its area a voltage deviation of \pm 10% of nominal voltage sustained for \geq 15 continuous minutes.

Event Type	Entity with Reporting Responsibility	Threshold for Reporting
IROL Violation (all Interconnections) or SOL Violation for Major WECC Transfer Paths (WECC only)	RC	Operate outside the IROL for time greater than IROL T_v (all Interconnections) or Operate outside the SOL for more than 30 minutes for Major WECC Transfer Paths (WECC only).
Loss of firm load	BA, TOP, DP	Loss of firm load for ≥ 15 Minutes: ≥ 300 MW for entities with previous year's demand $\geq 3,000$ OR ≥ 200 MW for all other entities
System separation (islanding)	RC, BA, TOP	Each separation resulting in an island ≥ 100 MW
Generation loss	BA, GOP	Total generation loss, within one minute, of : $\geq 2,000$ MW for entities in the Eastern or Western Interconnection OR $\geq 1,000$ MW for entities in the ERCOT or Quebec Interconnection
Complete loss of off-site power to a nuclear generating plant (grid supply)	TO, TOP	Complete loss of off-site power affecting a nuclear generating station per the Nuclear Plant Interface Requirement

EOP-004-2 — Event Reporting

Event Type	Entity with Reporting Responsibility	Threshold for Reporting
Transmission loss	TOP	Unexpected loss within its area, contrary to design, of three or more BES Elements caused by a common disturbance (excluding successful automatic reclosing).
Unplanned BES control center evacuation	RC, BA, TOP	Unplanned evacuation from BES control center facility for 30 continuous minutes or more.
Complete loss of voice communication capability	RC, BA, TOP	Complete loss of voice communication capability affecting a BES control center for 30 continuous minutes or more.
Complete loss of monitoring capability	RC, BA, TOP	Complete loss of monitoring capability affecting a BES control center for 30 continuous minutes or more such that analysis capability (i.e., State Estimator or Contingency Analysis) is rendered inoperable.

EOP-004 - Attachment 2: Event Reporting Form

EOP-004 Attachment 2: Event Reporting Form	
Use this form to report events. The Electric Reliability Organization will accept the DOE OE-417 form in lieu of this form if the entity is required to submit an OE-417 report. Submit reports to the ERO via one of the following: e-mail: systemawareness@nerc.net , Facsimile 404-446-9770 or voice: 404-446-9780.	
Task	Comments
1. Entity filing the report include: Company name: Name of contact person: Email address of contact person: Telephone Number: Submitted by (name):	
2. Date and Time of recognized event. Date: (mm/dd/yyyy) Time: (hh:mm) Time/Zone:	
3. Did the event originate in your system?	Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/>
Event Identification and Description: (Check applicable box) <input type="checkbox"/> Damage or destruction of a Facility <input type="checkbox"/> Physical Threat to a Facility <input type="checkbox"/> Physical Threat to a control center <input type="checkbox"/> BES Emergency: <input type="checkbox"/> public appeal for load reduction <input type="checkbox"/> system-wide voltage reduction <input type="checkbox"/> manual firm load shedding <input type="checkbox"/> automatic firm load shedding <input type="checkbox"/> Voltage deviation on a Facility <input type="checkbox"/> IROL Violation (all Interconnections) or SOL Violation for Major WECC Transfer Paths (WECC only) <input type="checkbox"/> Loss of firm load <input type="checkbox"/> System separation <input type="checkbox"/> Generation loss <input type="checkbox"/> Complete loss of off-site power to a nuclear generating plant (grid supply) <input type="checkbox"/> Transmission loss <input type="checkbox"/> unplanned control center evacuation <input type="checkbox"/> Complete loss of voice communication capability <input type="checkbox"/> Complete loss of monitoring capability	

Guideline and Technical Basis

Distribution Provider Applicability Discussion

The DSR SDT has included Distribution Providers (DP) as an applicable entity under this standard. The team realizes that not all DPs will own BES Facilities and will not meet the “Threshold for Reporting” for any event listed in Attachment 1. These DPs will not have any reports to submit under Requirement R2. However, these DPs will be responsible for meeting Requirements R1 and R3. The DSR SDT does not intend for these entities to have a detailed Operating Plan to address events that are not applicable to them. In this instance, the DSR SDT intends for the DP to have a very simple Operating Plan that includes a statement that there are no applicable events in Attachment 1 (to meet R1) and that the DP will review the list of events in Attachment 1 each year (to meet R3). The team does not think this will be a burden on any entity as the development and annual validation of the Operating Plan should not take more than 30 minutes on an annual basis. If a DP discovers applicable events during the annual review, it is expected that the DP will develop a more detailed Operating Plan to comply with the requirements of the standard.

Multiple Reports for a Single Organization

For entities that have multiple registrations, the DSR SDT intends that these entities will only have to submit one report for any individual event. For example, if an entity is registered as a Reliability Coordinator, Balancing Authority and Transmission Operator, the entity would only submit one report for a particular event rather submitting three reports as each individual registered entity.

Summary of Key Concepts

The DSR SDT identified the following principles to assist them in developing the standard:

- Develop a single form to report disturbances and events that threaten the reliability of the Bulk Electric System
- Investigate other opportunities for efficiency, such as development of an electronic form and possible inclusion of regional reporting requirements
- Establish clear criteria for reporting
- Establish consistent reporting timelines
- Provide clarity around who will receive the information and how it will be used

During the development of concepts, the DSR SDT considered the FERC directive to “further define sabotage”. There was concern among stakeholders that a definition may be ambiguous and subject to interpretation. Consequently, the DSR SDT decided to eliminate the term sabotage from the standard. The team felt that it was almost impossible to determine if an act or event was sabotage or vandalism without the intervention of law enforcement. The DSR SDT felt that attempting to define sabotage would result in further ambiguity with respect to

reporting events. The term “sabotage” is no longer included in the standard. The events listed in EOP-004 Attachment 1 were developed to provide guidance for reporting both actual events as well as events which may have an impact on the Bulk Electric System. The DSR SDT believes that this is an equally effective and efficient means of addressing the FERC Directive.

The types of events that are required to be reported are contained within EOP-004 Attachment 1. The DSR SDT has coordinated with the NERC Events Analysis Working Group to develop the list of events that are to be reported under this standard. EOP-004 Attachment 1 pertains to those actions or events that have impacted the Bulk Electric System. These events were previously reported under EOP-004-1, CIP-001-1 or the Department of Energy form OE-417. EOP-004 Attachment 1 covers similar items that may have had an impact on the Bulk Electric System or has the potential to have an impact and should be reported.

The DSR SDT wishes to make clear that the proposed Standard does not include any real-time operating notifications for the events listed in EOP-004 Attachment 1. Real-time communication is achieved is covered in other standards. The proposed standard deals exclusively with after-the-fact reporting.

Data Gathering

The requirements of EOP-004-1 require that entities “promptly analyze Bulk Electric System disturbances on its system or facilities” (Requirement R2). The requirements of EOP-004-2 specify that certain types of events are to be reported but do not include provisions to analyze events. Events reported under EOP-004-2 may trigger further scrutiny by the ERO Events Analysis Program. If warranted, the Events Analysis Program personnel may request that more data for certain events be provided by the reporting entity or other entities that may have experienced the event. Entities are encouraged to become familiar with the Events Analysis Program and the NERC Rules of Procedure to learn more about with the expectations of the program.

Law Enforcement Reporting

The reliability objective of EOP-004-2 is to improve the reliability of the Bulk Electric System by requiring the reporting of events by Responsible Entities. Certain outages, such as those due to vandalism and terrorism, may not be reasonably preventable. These are the types of events that should be reported to law enforcement. Entities rely upon law enforcement agencies to respond to and investigate those events which have the potential to impact a wider area of the BES. The inclusion of reporting to law enforcement enables and supports reliability principles such as protection of Bulk Electric System from malicious physical attack. The importance of BES awareness of the threat around them is essential to the effective operation and planning to mitigate the potential risk to the BES.

Stakeholders in the Reporting Process

- Industry

- NERC (ERO), Regional Entity
- FERC
- DOE
- NRC
- DHS – Federal
- Homeland Security- State
- State Regulators
- Local Law Enforcement
- State or Provincial Law Enforcement
- FBI
- Royal Canadian Mounted Police (RCMP)

The above stakeholders have an interest in the timely notification, communication and response to an incident at a Facility. The stakeholders have various levels of accountability and have a vested interest in the protection and response to ensure the reliability of the BES.

Present expectations of the industry under CIP-001-1a:

It has been the understanding by industry participants that an occurrence of sabotage has to be reported to the FBI. The FBI has the jurisdictional requirements to investigate acts of sabotage and terrorism. The CIP-001-1-1a standard requires a liaison relationship on behalf of the industry and the FBI or RCMP. These requirements, under the standard, of the industry have not been clear and have lead to misunderstandings and confusion in the industry as to how to demonstrate that the liaison is in place and effective. As an example of proof of compliance with Requirement R4, Responsible Entities have asked FBI Office personnel to provide, on FBI letterhead, confirmation of the existence of a working relationship to report acts of sabotage, the number of years the liaison relationship has been in existence, and the validity of the telephone numbers for the FBI.

Coordination of Local and State Law Enforcement Agencies with the FBI

The Joint Terrorism Task Force (JTTF) came into being with the first task force being established in 1980. JTTFs are small cells of highly trained, locally based, committed investigators, analysts, linguists, SWAT experts, and other specialists from dozens of U.S. law enforcement and intelligence agencies. The JTTF is a multi-agency effort led by the Justice Department and FBI designed to combine the resources of federal, state, and local law enforcement. Coordination and communications largely through the interagency National Joint Terrorism Task Force, working out of FBI Headquarters, which makes sure that information and intelligence flows freely among the local JTTFs. This information flow can be most beneficial to the industry in analytical intelligence, incident response and investigation. Historically, the most immediate response to an industry incident has been local and state law enforcement agencies to suspected vandalism and criminal damages at industry facilities. Relying upon the JTTF

coordination between local, state and FBI law enforcement would be beneficial to effective communications and the appropriate level of investigative response.

Coordination of Local and Provincial Law Enforcement Agencies with the RCMP

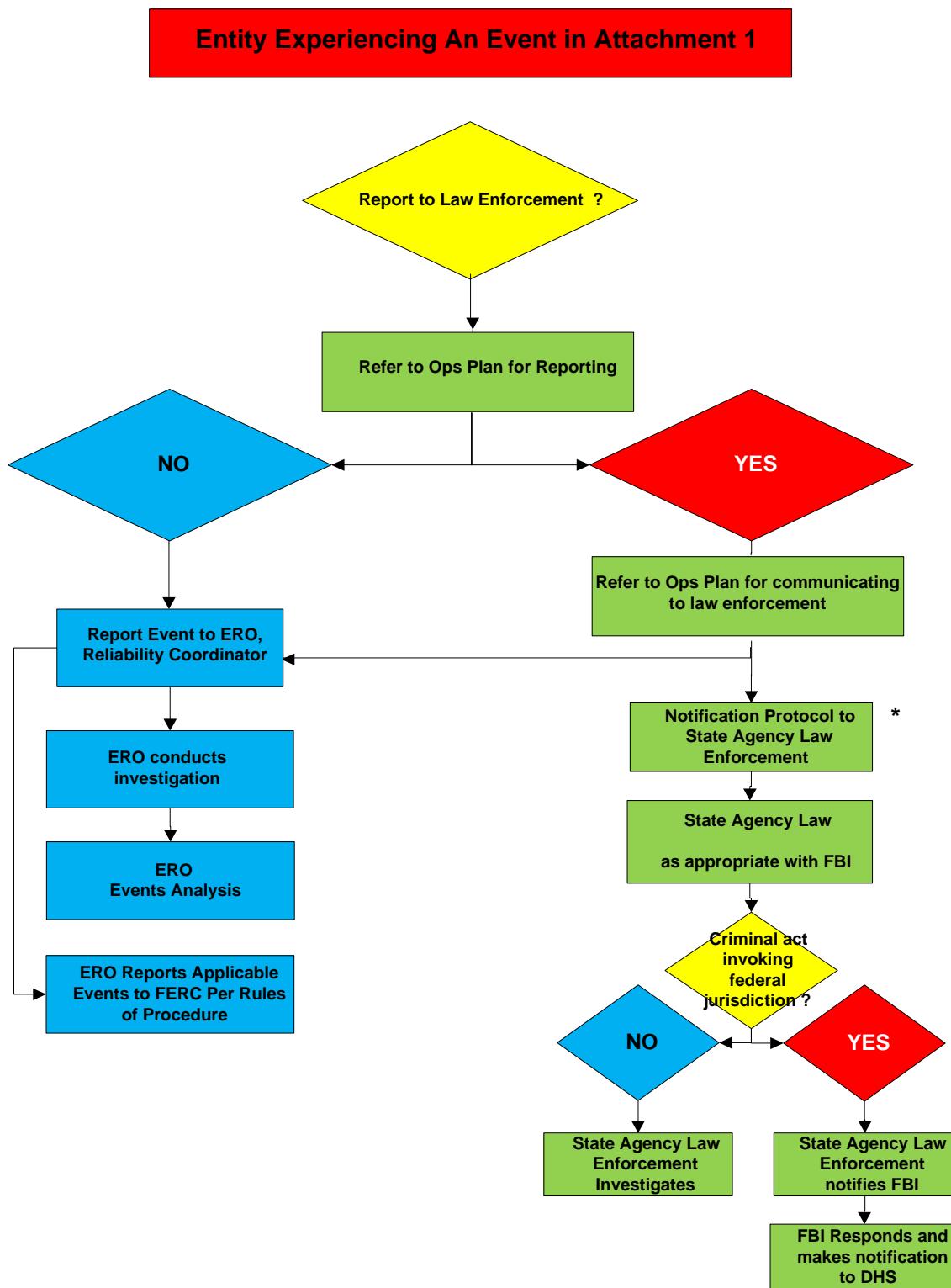
A similar law enforcement coordination hierarchy exists in Canada. Local and Provincial law enforcement coordinate to investigate suspected acts of vandalism and sabotage. The Provincial law enforcement agency has a reporting relationship with the Royal Canadian Mounted Police (RCMP).

A Reporting Process Solution – EOP-004

A proposal discussed with the FBI, FERC Staff, NERC Standards Project Coordinator and the SDT Chair is reflected in the flowchart below (Reporting Hierarchy for Reportable Events).

Essentially, reporting an event to law enforcement agencies will only require the industry to notify the state or provincial or local level law enforcement agency. The state or provincial or local level law enforcement agency will coordinate with law enforcement with jurisdiction to investigate. If the state or provincial or local level law enforcement agency decides federal agency law enforcement or the RCMP should respond and investigate, the state or provincial or local level law enforcement agency will notify and coordinate with the FBI or the RCMP.

Example of Reporting Process including Law Enforcement



* Canadian entities will follow law enforcement protocols applicable in their jurisdictions

Disturbance and Sabotage Reporting Standard Drafting Team (Project 2009-01) - Reporting Concepts

Introduction

The SAR for Project 2009-01, Disturbance and Sabotage Reporting was moved forward for standard drafting by the NERC Standards Committee in August of 2009. The Disturbance and Sabotage Reporting Standard Drafting Team (DSR SDT) was formed in late 2009 and has developed updated standards based on the SAR.

The standards listed under the SAR are:

- CIP-001 — Sabotage Reporting
- EOP-004 — Disturbance Reporting

The changes do not include any real-time operating notifications for the types of events covered by CIP-001 and EOP-004. The real-time reporting requirements are achieved through the RCIS and are covered in other standards (e.g. EOP-002-Capacity and Energy Emergencies). These standards deal exclusively with after-the-fact reporting.

The DSR SDT has consolidated disturbance and sabotage event reporting under a single standard. These two components and other key concepts are discussed in the following sections.

Summary of Concepts and Assumptions:

The Standard:

- Requires reporting of “events” that impact or may impact the reliability of the Bulk Electric System
- Provides clear criteria for reporting
- Includes consistent reporting timelines
- Identifies appropriate applicability, including a reporting hierarchy in the case of disturbance reporting
- Provides clarity around of who will receive the information

Discussion of Disturbance Reporting

Disturbance reporting requirements existed in the previous version of EOP-004. The current approved definition of Disturbance from the NERC Glossary of Terms is:

1. An unplanned event that produces an abnormal system condition.
2. Any perturbation to the electric system.

3. The unexpected change in ACE that is caused by the sudden failure of generation or interruption of load.

Disturbance reporting requirements and criteria were in the previous EOP-004 standard and its attachments. The DSR SDT discussed the reliability needs for disturbance reporting and developed the list of events that are to be reported under this standard (EOP-004 Attachment 1).

Discussion of Event Reporting

There are situations worthy of reporting because they have the potential to impact reliability.

Event reporting facilitates industry awareness, which allows potentially impacted parties to prepare for and possibly mitigate any associated reliability risk. It also provides the raw material, in the case of certain potential reliability threats, to see emerging patterns.

Examples of such events include:

- Bolts removed from transmission line structures
- Train derailment adjacent to a Facility that either could have damaged a Facility directly or could indirectly damage a Facility (e.g. flammable or toxic cargo that could pose fire hazard or could cause evacuation of a control center)
- Destruction of Bulk Electric System equipment

What about sabotage?

One thing became clear in the DSR SDT's discussion concerning sabotage: everyone has a different definition. The current standard CIP-001 elicited the following response from FERC in FERC Order 693, paragraph 471 which states in part: “*... the Commission directs the ERO to develop the following modifications to the Reliability Standard through the Reliability Standards development process: (1) further define sabotage and provide guidance as to the triggering events that would cause an entity to report a sabotage event.*”

Often, the underlying reason for an event is unknown or cannot be confirmed. The DSR SDT believes that by reporting material risks to the Bulk Electric System using the event categorization in this standard, it will be easier to get the relevant information for mitigation, awareness, and tracking, while removing the distracting element of motivation.

Certain types of events should be reported to NERC, the Department of Homeland Security (DHS), the Federal Bureau of Investigation (FBI), and/or Provincial or local law enforcement. Other types of events may have different reporting requirements. For example, an event that is related to copper theft may only need to be reported to the local law enforcement authorities.

Potential Uses of Reportable Information

Event analysis, correlation of data, and trend identification are a few potential uses for the information reported under this standard. The standard requires Functional entities to report the incidents and provide known information at the time of the report. Further data gathering necessary for event analysis is provided for under the Events Analysis Program and the NERC Rules of Procedure. Other entities (e.g. – NERC, Law Enforcement, etc) will be responsible for performing the analyses. The [NERC Rules of Procedure \(section 800\)](#) provide an overview of the responsibilities of the ERO in regards to analysis and dissemination of information for reliability. Jurisdictional agencies (which may include DHS, FBI, NERC, RE, FERC, Provincial Regulators, and DOE) have other duties and responsibilities.

Collection of Reportable Information or “One stop shopping”

The DSR SDT recognizes that some regions require reporting of additional information beyond what is in EOP-004. The DSR SDT has updated the listing of reportable events in EOP-004 Attachment 1 based on discussions with jurisdictional agencies, NERC, Regional Entities and stakeholder input. There is a possibility that regional differences still exist.

The reporting required by this standard is intended to meet the uses and purposes of NERC. The DSR SDT recognizes that other requirements for reporting exist (e.g., DOE-417 reporting), which may duplicate or overlap the information required by NERC. To the extent that other reporting is required, the DSR SDT envisions that duplicate entry of information should not be necessary, and the submission of the alternate report will be acceptable to NERC so long as all information required by NERC is submitted. For example, if the NERC Report duplicates information from the DOE form, the DOE report may be sent to the NERC in lieu of entering that information on the NERC report.

Rationale:

During development of this standard, text boxes were embedded within the standard to explain the rationale for various parts of the standard. Upon BOT approval, the text from the rationale text boxes was moved to this section.

Rationale for R1:

The requirement to have an Operating Plan for reporting specific types of events provides the entity with a method to have its operating personnel recognize events that affect reliability and to be able to report them to appropriate parties; e.g., Regional Entities, applicable Reliability Coordinators, and law enforcement and other jurisdictional agencies when so recognized. In addition, these event reports are an input to the NERC Events Analysis Program. These other parties use this information to promote reliability, develop a culture of reliability excellence, provide industry collaboration and promote a learning organization.

Every Registered Entity that owns or operates elements or devices on the grid has a formal or informal process, procedure, or steps it takes to gather information regarding what happened when events occur. This requirement has the Responsible Entity establish documentation on

how that procedure, process, or plan is organized. This documentation may be a single document or a combination of various documents that achieve the reliability objective. The communication protocol(s) could include a process flowchart, identification of internal and external personnel or entities to be notified, or a list of personnel by name and their associated contact information. An existing procedure that meets the requirements of CIP-001-2a may be included in this Operating Plan along with other processes, procedures or plans to meet this requirement.

Rationale for R2:

Each Responsible Entity must report and communicate events according to its Operating Plan based on the information in EOP-004-2 Attachment 1. By implementing the event reporting Operating Plan the Responsible Entity will assure situational awareness to the Electric Reliability Organization so that they may develop trends and prepare for a possible next event and mitigate the current event. This will assure that the BES remains secure and stable by mitigation actions that the Responsible Entity has within its function. By communicating events per the Operating Plan, the Responsible Entity will assure that people/agencies are aware of the current situation and they may prepare to mitigate current and further events.

Rationale for R3:

Requirement 3 calls for the Responsible Entity to validate the contact information contained in the Operating Plan each calendar year. This requirement helps ensure that the event reporting Operating Plan is up to date and entities will be able to effectively report events to assure situational awareness to the Electric Reliability Organization. If an entity experiences an actual event, communication evidence from the event may be used to show compliance with the validation requirement for the specific contacts used for the event.

Rationale for EOP-004 Attachment 1:

The DSR SDT used the defined term “Facility” to add clarity for several events listed in Attachment 1. A Facility is defined as:

“A set of electrical equipment that operates as a single Bulk Electric System Element (e.g., a line, a generator, a shunt compensator, transformer, etc.)”

The DSR SDT does not intend the use of the term Facility to mean a substation or any other facility (not a defined term) that one might consider in everyday discussions regarding the grid. This is intended to mean ONLY a Facility as defined above.

Version History

Version	Date	Action	Change Tracking
2		Merged CIP-001-2a Sabotage Reporting and EOP-004-1 Disturbance Reporting into EOP-004-2 Event Reporting; Retire CIP-001-2a Sabotage Reporting and Retired EOP-004-1 Disturbance Reporting.	Revision to entire standard (Project 2009-01)
2	November 7, 2012	Adopted by the NERC Board of Trustees	
2	June 20, 2013	FERC approved	

ATTACHMENT C

VERSION HISTORY

1/1/2017

RPU RELIABILITY STANDARD COMPLIANCE POLICY	VERSION	DATE	CHANGE TRACKING	
1 N	CIP-002-1 CIP-002-1 CIP-002-1 CIP-002-2 CIP-002-3 CIP-002-3 CIP-002-3 CIP-002-3 CIP-002-3 CIP-002-3 CIP-002-3 CIP-002-3 CIP-002-3 CIP-002-3 CIP-002-5.1 -011-2	0 1 2 3 4 5 6 7 8 9 10 11	6/17/2007 10/3/2008 10/1/2009 4/1/2010 10/1/2010 10/1/2011 10/1/2012 10/1/2013 10/1/2014 7/1/2015 10/1/2015 7/1/2016	KEMA Risk based methodology assessment report Revised RSCP and Updated RPU Critical Cyber Asset Identification Report Update NERC Standard Number and minor revisions NERC Deactivated RPU as GO/GOP as of 6/17/2007 Annual Review pursuant to R2, R3, R4 Annual Review pursuant to R2, R3, R4 Annual Review pursuant to R2, R3, R4. Updated names of Sr. Manager and General Annual Review pursuant to R2, R3, R4 Removed PSE reference. Revised paragraph on Noncompliance Annual Review pursuant to R2, R3, R4 CIP-002-5.1 effective date. RSCPs for CIP-002-3 -009-3 have been retired
2	COM-001-2 COM-001-2.1	1 2	10/1/2015 3/1/2016	Effective date FERC errata on 11/13/2015. Removed reference to LSE.
3	COM-002-4	1	7/1/2016	Effective date
4	EOP-004-1 EOP-004-1 EOP-004-1 EOP-004-1 EOP-004-2 EOP-004-2 EOP-004-2 EOP-004-2	1 2 3 4 5 6 7 8	6/17/2007 10/3/2008 3/2/2009 9/1/2010 1/1/2014 7/31/2014 7/1/2015 7/31/2016	More descriptive Replaced California-Mexico Reliability Coordinator with WECC Reliability Coordinator NERC Deactivated RPU as GO/GOP as of 6/17/2007 Revised to comply with NERC Reliability Standard EOP-004-2 Periodic review and updates Periodic review. Removed PSE reference. Revised paragraph on Noncompliance. Periodic review. Removed LSE reference.
5 N	EOP-005-2 EOP-005-2 EOP-005-2 EOP-005-2	1 2 3 4	7/1/2013 7/31/2014 7/1/2015 7/31/2016	Effective Date Periodic review and updates Periodic review. Removed PSE reference. Periodic review. Removed LSE reference.
6	FAC-002-0 FAC-002-0 FAC-002-0 FAC-002-1 FAC-002-1 FAC-002-1 FAC-002-1 FAC-002-1 FAC-002-2 FAC-002-2	1 2 3 4 5 6 7 8 9 10	6/17/2007 9/16/2008 9/1/2010 10/1/2011 10/31/2013 1/21/2014 7/31/2014 7/1/2015 1/1/2016 7/31/2016	More descriptive NERC Deactivated RPU as GO/GOP as of 6/17/2007 Update NERC Standard Number Updated reference to Transmission System Planning Criteria Requirement 2 retirement approved by FERC Periodic review and updates Periodic review. Removed PSE reference. Revised paragraph on Noncompliance. NERC revised standard effective date Periodic review. Removed LSE reference.
7	IRO-010-1a IRO-010-1a IRO-010-1a IRO-010-1a IRO-010-1a IRO-010-1a IRO-010-2	1 2 3 4 5 6	10/1/2011 10/19/2012 1/10/2014 7/31/2014 7/1/2015 1/1/2017	Effective Date Updated information flow processes Added Peak Reliability as Reliability Coordinator. Removed non-essential fourth paragraph under section heading Riversides Public Utilities Policy. Periodic review and updates Periodic review. Removed PSE reference. Revised paragraph on Noncompliance. Applicable to DP. Removed LSE reference.
8 N	MOD-004-1 MOD-004-1 MOD-004-1 MOD-004-1 MOD-004-1 MOD-004-1 MOD-004-1 MOD-004-1 MOD-004-1	1 2 3 4 5 6 7 8	4/1/2011 6/1/2011 3/30/2012 10/19/2012 6/15/2013 7/31/2014 7/1/2015 7/31/2016	Implementation Removed references to CAISO Operating Procedure S-322 Removed reference to L.1.6 of Appendix L Revised applicability based on CAISO Tariff Removed reference to L.1.7 due to CAISO Tariff revision Periodic review and updates Periodic review. Removed PSE reference. Revised paragraph on Noncompliance. Periodic review. Removed LSE reference. Only R4 applicable to RP.
9 N	MOD-020-0	1	6/17/2007	

VERSION HISTORY

1/1/2017

RPU RELIABILITY STANDARD COMPLIANCE POLICY	VERSION	DATE	CHANGE TRACKING
MOD-020-0	2	8/5/2008	Inapplicable RSCP
MOD-020-0	3	9/1/2010	NERC Deactivated RPU as GO/GOP as of 6/17/2007
MOD-020-0	4	10/1/2012	New AGM
MOD-020-0	5	7/31/2014	Periodic review and updates
MOD-020-0	6	7/1/2015	Periodic review. Removed PSE reference.
MOD-020-0	7	7/31/2016	Periodic review. Removed LSE reference. Revised compliance language.
10	MOD-031-1	1	7/1/2016 Effective date
	MOD-031-1	2	7/31/2016 Periodic review. Revised compliance language for R4.
	MOD-031-2	1	10/1/2016 MOD-031-2 effective date
11	MOD-032-1	1	7/1/2016 Effective date
12 N	NUC-001-2	1	11/15/2010 Inapplicable RSCP
	NUC-001-2.1	2	7/31/2014 Periodic review and updates
	NUC-001-2.1	3	7/1/2015 Periodic review. Removed PSE reference.
	NUC-001-3	4	1/1/2016 Updated NERC Reliability Standard NUC-001-3 effective date 1/1/2016
	NUC-001-3	5	7/31/2016 Periodic review. Removed LSE reference.
13 N	PRC-004-1	0	6/17/2007
	PRC-004-1	1	4/17/2008 Inapplicable RSCP
	PRC-004-1	2	7/13/2009 Changed "Council" to "Corporation"
	PRC-004-1	3	9/1/2010 NERC Deactivated RPU as GO/GOP as of 6/17/2007
	PRC-004-2a	4	4/1/2012 Updated NERC RS PRC-004-2a
	PRC-004-2.1a	5	11/25/2013 Update NERC RS PRC-004-2.1a
	PRC-004-2.1a	6	7/31/2014 Periodic review and updates
	PRC-004-2.1(i)a	7	7/1/2015 Updated NERC RS PRC-004-2.1(i)a effective 5/29/2015. Periodic review. Removed PSE reference.
	PRC-004-4(i)	8	7/1/2016 Updated NERC RS PRC-004-4(i). Removed LSE reference.
14	PRC-005-1	0	6/17/2007
	PRC-005-1	1	4/17/2008 Inapplicable RSCP
	PRC-005-1	2	7/13/2009 Changed "Council" to "Corporation"
	PRC-005-1	3	9/1/2010 NERC Deactivated RPU as GO/GOP as of 6/17/2007
	PRC-005-1a	4	12/9/2011 Update NERC Standard Number effective 9/26/2011. No material changes
	PRC-005-1b	5	5/11/2012 Update NERC Standard Number PRC-005-1b effective 3/14/2012. No material changes
	PRC-005-1.1b	6	11/25/2013 Update NERC Standard Number PRC-005-1.1b
	PRC-005-1.1b	7	7/31/2014 Periodic review and updates
	PRC-005-1.1b	7.1	7/31/2016 Periodic review. Removed PSE and LSE reference.
	PRC-005-2	8	4/1/2015 PRC-005-2 is effective and applicable to RPU as a Distribution Provider.
	PRC-005-2(i)	9	7/1/2015 Update NERC Reliability Standard Number PRC-005-2(i) effective 5/29/2015. Periodic review. Removed PSE reference. Revised paragraph on Noncompliance.
	PRC-005-2(i)	9.1	7/31/2016 Periodic review. Removed PSE and LSE reference.
	PRC-005-6	10	1/1/2016 Update NERC Reliability Standard Number PRC-005-6 effective 1/1/2016
	PRC-005-6	10.1	7/31/2016 Periodic review. Removed PSE and LSE reference. Updated Versio History to include review/revisions to PRC-005-1.1b, PRC-005-2(i).
15	PRC-006-1	1	10/1/2013 Effective Date
	PRC-006-1	2	3/31/2014 Revised compliance process for R9. Removed reference dates on WECC Coordinated Off-Nominal Frequency Load Shedding and Restoration Plan and Southern Island Load Tripping Plan.
	PRC-006-1	3	7/31/2014 Periodic review and updates
	PRC-006-1	4	12/15/2014 Update to reference SP SUB-002
	PRC-006-1	5	7/1/2015 Periodic review. Removed PSE reference. Revised paragraph on Noncompliance.
	PRC-006-2	6	10/1/2015 NERC revised reliability standard effective date
	PRC-006-2	7	7/31/2016 Periodic review. Removed LSE reference.
16	PRC-008-0	1	6/17/2007
	PRC-008-0	2	11/12/2008 More descriptive
	PRC-008-0	3	9/1/2010 NERC Deactivated RPU as GO/GOP as of 6/17/2007
	PRC-008-0	4	2/1/2013 Replaced reference to Standard Practice ST-001 with Standard Practice SUB-001

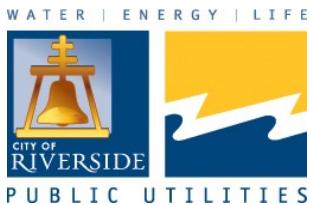
VERSION HISTORY

1/1/2017

	RPU RELIABILITY STANDARD COMPLIANCE POLICY	VERSION	DATE	CHANGE TRACKING
PRC-008-0	5	7/31/2014	Periodic review and updates	
PRC-008-0	6	7/1/2015	Periodic review. Removed PSE reference. Revised paragraph on Noncompliance.	
PRC-008-0	7	7/31/2016	Periodic review. Removed LSE reference.	
17 N	PRC-010-0	0	6/17/2007	
	PRC-010-0	1	4/17/2008	Inapplicable RSCP
	PRC-010-0	2	9/1/2010	NERC Deactivated RPU as GO/GOP as of 6/17/2007
	PRC-010-0	3	1/21/2014	Requirement 2 retirement approved by FERC
	PRC-010-0	4	7/31/2014	Periodic review and updates
	PRC-010-0	5	7/1/2015	Periodic review. Removed PSE reference.
	PRC-010-0	6	7/31/2016	Periodic review. Removed LSE reference.
18 N	PRC-011-0	0	6/17/2007	
	PRC-011-0	1	4/17/2008	Inapplicable RSCP
	PRC-011-0	2	9/1/2010	NERC Deactivated RPU as GO/GOP as of 6/17/2007
	PRC-011-0	3	7/31/2014	Periodic review and updates
	PRC-011-0	4	7/1/2015	Periodic review. Removed PSE reference.
	PRC-011-0	5	7/31/2016	Periodic review. Removed LSE reference.
19 N	PRC-015-0	0	6/17/2007	
	PRC-015-0	1	4/17/2008	Inapplicable RSCP
	PRC-015-0	2	9/1/2010	NERC Deactivated RPU as GO/GOP as of 6/17/2007
	PRC-015-0	3	7/31/2014	Periodic review and updates
	PRC-015-0	4	7/1/2015	Periodic review. Removed PSE reference.
	PRC-015-0	5	7/31/2016	Periodic review. Removed LSE reference.
20 N	PRC-016-0	0	6/17/2007	
	PRC-016-0	1	4/17/2008	Inapplicable RSCP
	PRC-016-0.1	2	5/13/2009	Update NERC Standard Number
	PRC-016-0.1	3	9/1/2010	NERC Deactivated RPU as GO/GOP as of 6/17/2007
	PRC-016-0.1	4	7/31/2014	Periodic review and updates
	PRC-016-0.1	5	7/1/2015	Periodic review. Removed PSE reference.
	PRC-016-0.1	6	7/31/2016	Periodic review. Removed LSE reference.
21 N	PRC-017-0	0	6/17/2007	
	PRC-017-0	1	4/17/2008	Inapplicable RSCP
	PRC-017-0	2	7/13/2009	Changed "Council" to "Corporation"
	PRC-017-0	3	9/1/2010	NERC Deactivated RPU as GO/GOP as of 6/17/2007
	PRC-017-0	4	7/31/2014	Periodic review and updates
	PRC-017-0	5	7/1/2015	Periodic review. Removed PSE reference.
	PRC-017-0	6	7/31/2016	Periodic review. Removed LSE reference.
22 N	PRC-021-1	0	6/17/2007	
	PRC-021-1	1	4/17/2008	Inapplicable RSCP
	PRC-021-1	2	9/1/2010	NERC Deactivated RPU as GO/GOP as of 6/17/2007
	PRC-021-1	3	7/31/2014	Periodic review and updates
	PRC-021-1	4	7/1/2015	Periodic review. Removed PSE reference.
	PRC-021-1	5	7/31/2016	Periodic review. Removed LSE reference.
23 N	PRC-022-1	0	6/17/2007	
	PRC-022-1	1	4/17/2008	Inapplicable RSCP
	PRC-022-1	2	9/1/2010	NERC Deactivated RPU as GO/GOP as of 6/17/2007
	PRC-022-1	3	1/21/2014	Requirement 2 retirement approved by FERC
	PRC-022-1	4	7/31/2014	Periodic review and updates
	PRC-022-1	5	7/1/2015	Periodic review. Removed PSE reference.
	PRC-022-1	6	7/31/2016	Periodic review. Removed LSE reference.
24 N	PRC-023-1	1	7/1/2010	Inapplicable RSCP
	PRC-023-1	2	9/1/2010	NERC Deactivated RPU as GO/GOP as of 6/17/2007
	PRC-023-2	3	7/1/2012	Updated Reliability Standard -2. Aligned description of why RPU has concluded that the Standard is inapplicable
	PRC-023-2	4	7/31/2014	Periodic review and updates

VERSION HISTORY**1/1/2017**

	RPU RELIABILITY STANDARD COMPLIANCE POLICY	VERSION	DATE	CHANGE TRACKING
	PRC-023-3	5	10/1/2014	PRC-023-3 effective date
	PRC-023-3	6	7/1/2015	Periodic review. Removed PSE reference.
	PRC-023-3	7	7/31/2016	Periodic review. Removed LSE reference.
25 N	PRC-025-1	1	10/1/2014	Effective date
	PRC-025-1	2	7/1/2015	Periodic review. Removed PSE reference.
	PRC-025-1	3	7/31/2016	Periodic review. Removed LSE reference.
26	TOP-001-1	1	6/17/2007	
	TOP-001-1	2	7/31/2008	More descriptive
	TOP-001-1	3	1/29/2009	Replaced California-Mexico Reliability Coordinator with WECC Reliability Coordinator
	TOP-001-1	4	7/13/2009	Removed reference to the Metered Subsystem Agreement. Simplified wording in
	TOP-001-1	5	9/1/2010	NERC Deactivated RPU as GO/GOP as of 6/17/2007
	TOP-001-1a	6	11/17/2011	Removed reference of SCE. Update NERC Standard Number
	TOP-001-1a	7	1/10/2014	Added Peak Reliability as Reliability Coordinator
	TOP-001-1a	8	7/31/2014	Periodic review and updates
	TOP-001-1a	9	7/1/2015	Periodic review. Removed PSE reference. Revised paragraph on Noncompliance.
	TOP-001-1a	10	7/31/2016	Periodic review. Removed LSE reference.
27	TOP-003-3	1	1/1/2017	Effective date



RIVERSIDE PUBLIC UTILITIES

Board Policy

Title: Water Resources: Rights, Protection, & Development	Date Last Approved: <u>June 2014</u>
Category: Utility Business Policies	Date of Next Review: <u>June 2016</u>
Review Committee: <u>Water</u>	Policy No: A-9

Access to water enabled Riverside to develop and grow to the city it is today. Access to adequate local water supplies is one of the utmost goals of the RPU Board. Riverside Public Utilities' (RPU) shall protect its existing water rights and aggressively seek to develop new water rights as needed to meet projected future demands.

Accordingly, RPU shall:

1. Not use or permit the use of water outside the RPU existing service area without prior approval by the Board and Council.
2. Aggressively pursue the utilization of recycled water supplies and infrastructure to create new supplies in a cost effective manner in order to decrease or eliminate reliance on imported water.
3. In partnership with other local agencies, continue to preserve local control of our groundwater basins through implementation of adopted groundwater management plans, monitoring of legislative and regulatory activities, and where appropriate advocating our position at local, regional, state and federal levels.
4. Determine the timeline for evaluation of water supply benefit studies due to the permanent need for increased water in the city.
5. Increase awareness among RPU customers of the significant value regarding their water resources.
6. Promote, and where appropriate, incentivize conservation, reclamation, and demand management to maximize the beneficial use of the City's publicly owned water supply.
7. Prepare a comprehensive 25-year Urban Water Management Plan in years ending with "0" and "5".

The Board adopted Water Portfolio Management Policy is attached.

Attachment: Water Portfolio Management Policy

Riverside Public Utilities

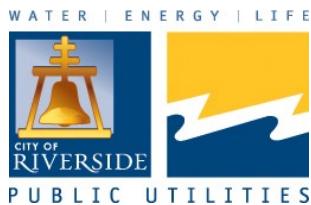
Policy Principles for Water Portfolio Management

Background

Riverside Public Utilities has invested significantly in water supply facilities to extract and convey local groundwater resources as well as in peaking, emergency, and redundant supply capacity from the Metropolitan Water District of Southern California. The diversity of local water supply facilities -- including 54 active groundwater wells overlying three groundwater basins -- coupled with three primary imported water connections creates a high level of redundancy and reliability for customers served by Riverside Public Utilities. RPU's goal of "Water Independence" will be defined and guided by the following policy principles.

Policy Principles

- Riverside recognizes its important role as stewards managing a publicly owned resource for the benefit of a diverse community of agricultural, commercial, institutional and residential stakeholders.
- Riverside will plan water supply projects to minimize its operational reliance on imported water and insulate the community from external pressures faced by other communities dependent on the Bay-Delta water conveyance facilities while appropriately advocating for a viable state water supply system.
- Riverside will strive to annually exercise its maximum allowable groundwater production and export rights under the 1969 Western Judgment.
 - In exercising its rights, Riverside will preferentially produce water at the lowest cost, while ensuring acceptable water quality, best practices for basin management, and compliance with agreements, judgments, and other restrictions.
- Riverside recognizes the critical role that conjunctive management of surface, recycled, and groundwater supplies play in the protection, reliability and sustainability of local, regional, and statewide water supplies for water users and the environment.
 - In recognizing such, Riverside will work cooperatively with regional and wholesale water agencies to purchase and "bank" imported water when economically and physically feasible.
 - Riverside will continually evaluate the economic feasibility of using imported water to extend recycled water supplies when used for groundwater recharge.
- Riverside will strive to appropriately monetize unused and potentially expiring local water production and export rights through pre-planned and pre-executed water sales agreements.
- Riverside will ensure water supply availability for its customers through appropriate and economically balanced local and imported water supplies, conservation and water use efficiency, and demand management measures.



RIVERSIDE PUBLIC UTILITIES

Board Policy

Title: **Customer Care**

Date Last Approved: June 2014

Category: **Utility Business Policies**

Date of Next Review: June 2016

Review Committee: Customer Relations/Finance Policy No: **A-10**

Riverside Public Utilities (RPU) is owned by the people it serves. With respect to interactions with consumers or those applying to be customers, RPU shall ensure conditions, procedures, or decisions are safe, dignified, lawful, non-intrusive, and provide appropriate confidentiality or privacy.

Accordingly, RPU shall:

1. Comply with all state and federal regulations that protect the confidentiality of the customer. All customer data is confidential and may not be utilized except as related to customer account management; improving services to customers; educating customers regarding utility services; and other lawful purposes related to providing utility and other City services.
2. Protect any customer information or data unless legally required to disclose such information to do so under the Public Records Act, in compliance with City policy. Individual customer account information is generally exempt from disclosure.
3. Prohibit the release of customer information and data for mailing lists, political promotion, surveys, mailers or publications. Bill inserts unrelated to Utility services may be included with utility service statements where space permits as approved by the General Manager.
4. Prohibit the release of individual identifying customer information to vendors or other service providers. This includes information gathered through automated meter reading devices. Information may be aggregated or identified with non-customer specific information if it can assist in providing data that may reduce or refine customer bills. Individual data may be shared if the customer signs a release if rebates, products or services are provided by a third party.
5. Only elicit information that is necessary on required application forms.
6. Use methods of collecting, reviewing, transmitting, or storing client information that protect against improper access to such information.
7. Not cause or allow any actions in violation of the Riverside Public Utilities Rules and Rates regarding treatment of customers.
8. Maintain Riverside Public Utilities facilities that provide a reasonable level of customer privacy, both visual and aural.

9. Establish with customers a clear understanding of what may be expected and what may not be expected from service offered.
10. Provide adequate time for customers to resolve issues where rates, charges or procedures are in question. Customer accounts must be paid in the interim where resolution may be beyond the due date of the customer's outstanding balance.



RIVERSIDE PUBLIC UTILITIES

Board Policy

Title: **Fiscal Policies**

Date Last Approved: _____

Category: **Utility Business Policies**

Date of Next Review: **Dec 2018**

Review Committee: Customer Relations/Finance Policy No: **A-11**

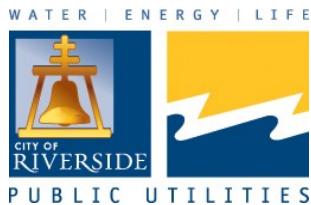
Riverside Public Utilities (RPU), pursuant to policies adopted by the City Council of the City of Riverside (City Council) and the Board of Public Utilities (Board), is responsible for managing RPU's finances. Fiscal policies shall be designed to establish guidelines for the fiscal stability of RPU and provide guidance to staff in carrying out their fiscal responsibilities.

Accordingly, RPU shall:

1. Promote long term financial stability by establishing clear and consistent financial reporting guidelines.
2. Ensure that RPU will maintain its financial health in order to meet its strategic goals.
3. Development of cash reserve and budgeting policies.
4. Provide guidelines for capitalization of RPU assets.
5. Provide funds to maintain and invest in its utility infrastructure.
6. Enhance short and long-term financial credit quality by helping to achieve the highest possible credit and bond ratings.
7. Provide guidance and controls for effective investment of RPU funds in accordance with City investment policies and State law.
8. Provide the Board and City Council with a framework for measuring fiscal performance of RPU against established parameters and guidelines.
9. Link long-term financial planning with day-to-day operations.
10. Document the Board and City Council philosophy for effective ratemaking and recovery of RPU costs of electric and water service.

The Board adopted Fiscal Policies are attached.

Attachment: Fiscal Policies



RIVERSIDE PUBLIC UTILITIES

Board Policy

Title: **Role of the Chair for Public Meetings** Date Last Approved: June 2014

Category: **Board Specific Policies** Date of Next Review: June 2016

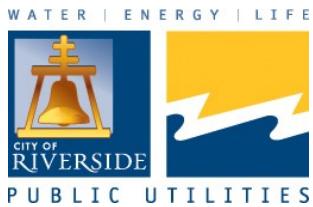
Review Committee: Customer Relations/Finance Policy No: **B-1**

Standing Rule 5 B (attached to Policy A-1) outlines the role of the Chair of the Riverside Public Utilities Board. This board policy provides additional detail.

The Chair assures the integrity of the Board's public meeting process.

Accordingly, the Chair shall perform his or her role such that:

1. The Board conducts business consistent with its own rules and those legitimately imposed upon it from outside the organization. The Chair will recognize absences by Board members for inclusion in the minutes and initiate discussions when Board absences impact the ability of the Board to hear adequate opinions and conduct business.
2. The content of the Board meeting discussions is limited to those issues on the agenda which are within the Board's subject matter jurisdiction.
3. Board meeting deliberations will be fair, open, and thorough, but also timely, orderly, and kept to the point. Public comment should be kept on track and within appropriate time constraints.
4. Each board member has a right to voice his or her opinion about each issue. The Chair has an obligation to call for closure to each topic when adequate time to address concerns has been provided.



RIVERSIDE PUBLIC UTILITIES

Board Policy

Title: **Board Committee Structure**

Date Last Approved: June 2014

Category: **Board Specific Policies**

Date of Next Review: June 2016

Review Committee: Customer Relations/ Finance

Policy No: **B-2**

Standing Rule 8 (attached to Policy A-1) outlines the establishment and composition of Committees of the RPU Board. This board policy provides additional detail.

Board committees, when used, will be assigned so as to reinforce the wholeness of the Board's job and so as never to interfere with delegation from the Board to the General Manager. All standing committee activities shall be subject to requirements of the Ralph M. Brown Act of the State of California. Committees usually meet monthly at a time and place determined by the members.

Accordingly:

1. Board committees are to help the Board do its job. Committees ordinarily will assist the Board by preparing policy alternatives, implications, and direction for Board deliberation.
2. Board committees only meet when there are topics or issues that need further deliberation by the committee to benefit the Board as a whole. It is normal for scheduled committee meetings to be cancelled when it is determined further discussion on individual items will not benefit the Board in their advisory or decision making policy.
3. The only Board committees are those which are set forth in the Standing Rules.

a. Customer Relations/ Finance Committee

The Customer Relations/Finance Committee will review financial results, rates, financings and strategies related to both the electric and water utilities. The Customer Relations/ Finance Committee is composed of the Board members as discussed in the Standing Rules.

b. Electric Committee

The Electric Committee will review financial results, rules, rates and strategies related exclusively to the electric utility. The chair of this committee serves on the Customer Relations/Finance Committee.

c. Water Committee

The Water Committee will review financial results, rules, rates and strategies related exclusively to the water utility. The chair of this committee serves on the Customer Relations/Finance Committee.

4. The Board Chair may appoint other ad hoc committees, on an as needed, temporary basis.
5. This policy applies to any ad hoc committee which is formed by Board action.



RIVERSIDE PUBLIC UTILITIES

Board Policy

Title: **Communications and Support of Board**

Date Last Approved: June 2014

Category: **Board Specific Policies**

Date of Next Review: June 2016

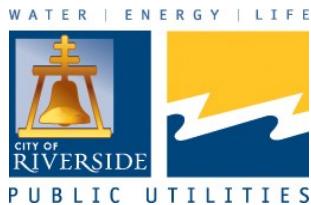
Review Committee: Customer Relations/ Finance

Policy No: **B-3**

In order to make fully informed decisions, the RPU Board should be informed and supported in its work.

Accordingly, the Board may request that the General Manager:

1. Submit monitoring data required by the Board in a timely, accurate, and understandable fashion, directly addressing provisions of Board policies.
2. Apprise the Board of major and unusual land acquisition, contracts, unusual or exceptional purchases, relevant trends, significant public reaction, material external and internal changes, particularly changes in the assumptions upon which any Board policy has previously been established.
3. Advise the Board if, in the General Manager's opinion, the Board is not in compliance with its own policies, particularly in the case of Board behavior that is detrimental to the relationship between the Board and General Manager.
4. Marshal for the Board as many staff and external points of view, issues and options as needed for fully informed Board choices.
5. Present information in a form that effectively communicates and is not unnecessarily complex or lengthy.
6. Provide a mechanism for official Board, officer, or committee communications.
7. Interact with the Board as a whole through both the committee structure and board meetings.
8. Report in a timely manner an actual or anticipated noncompliance with any policy of the Board.
9. Agendize for Board review and/or approval any issue within the Board's subject matter jurisdiction subject to the discretion of the General Manager.



RIVERSIDE PUBLIC UTILITIES

Board Policy

Title: **Board Training/Education Policy**

Date Last Approved: June 2014

Category: **Board Specific Policies**

Date of Next Review: June 2016

Review Committee: Customer Relations/ Finance Policy No: **B-4**

It is expected that RPU Board members shall need to travel to various conferences, seminars and training sessions. The Board shall annually establish the total amount budgeted for training and education for all Board members, and include in the overall annual Utility budget for council consideration. New board members shall be encouraged to attend training seminars offered by electric and water associations specifically aimed at recently appointed board members. No limit will be placed upon the number of board members attending conferences in state. It is expected that no more than four board members will attend the same conference, seminar or training event out of state. In the event that more than four members would like to attend, the Board Chair shall provide specific approval for expanded attendance.

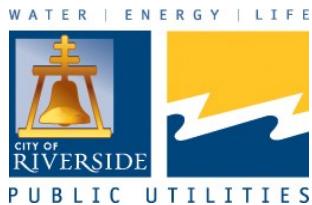
Some of the organizations that offer training that might be beneficial to board members are:

American Public Power Association
California Municipal Utilities Association
Association of Metropolitan Water Agencies
Association of California Water Agencies

Board members must follow the state law (Gov. Code Section 53232.2) and report back to the full board a summary of their attendance. Board travel is encouraged so that board members can share increased knowledge of utility related issues with fellow board members.

Tours of facilities are available and recommended for all board members. These can be scheduled through the General Manager.

Reimbursement for travel costs follows normal City policy. No expenditures for spouses or partners who attend meetings with board members is reimbursable.



RIVERSIDE PUBLIC UTILITIES

Board Policy

Board Interaction with

Title: **the General Manager and Staff**

Date Last Approved: June 2014

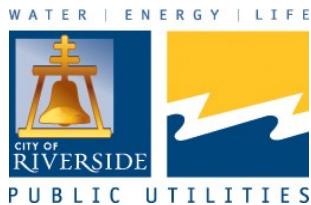
Category: **General Manager Related Policies** Date of Next Review: June 2016

Review Committee: Customer Relations/Finance Policy No: **C-1**

The Public Utilities General Manager is the RPU Board's only link to operational achievement and conduct, so that all authority and accountability of staff, as far as the Board is concerned, is considered the authority and accountability of the General Manager.

Accordingly:

1. The Board as a body and individual Board members will never give instructions to persons who report directly or indirectly to the General Manager.
2. Board members may contact other members of the executive management staff to ask questions or to provide information where appropriate.
3. The Board as a body and individual Board members will refrain from evaluating, either formally or informally, the overall job performance of any staff.



RIVERSIDE PUBLIC UTILITIES

Board Policy

Title: **Pricing of Products and Services** Date Last Approved: June 2014

Category: **General Manager Related Policies** Date of Next Review: June 2016

Review Committee: Customer Relations/Finance Policy No: **C-2**

Riverside Public Utilities (RPU) shall not adopt pricing practices or rate setting that are inconsistent with the established Electric and Water Rules and Rates, bond covenants, and the law.

Accordingly RPU shall:

1. Ensure pricing practices that result in revenues that are sufficient to provide safe, reliable utility services to its customers/owners.
2. Ensure pricing practices that result in the use of resources in a manner consistent with sound business and economic practices.
3. Ensure pricing practices that maximize long-term the value for our customer-owners, recognizing that this will generally occur by enhancing our operational effectiveness and customer loyalty.
4. Ensure pricing practices maintain the separate financial integrity and viability of the individual services provided by Riverside Public Utilities.
5. Ensure accounting and cost or service records demonstrate the financial viability of each of the individual services provided by Riverside Public Utilities.
6. Work to maintain and improve bond ratings including necessary rating agency related presentations on an annual basis or as needed.

W A T E R | E N E R G Y | L I F E



P U B L I C U T I L I T I E S

Fiscal Policies

Adopted on July 26, 2016

**Riverside Public Utilities
Fiscal Policies**

Table of Contents

Revision History	3
Related Policies Referenced.....	3
Glossary of Terms.....	4
Purpose	7
Goals	7
Financial Reporting	8
Cash Reserves	8
Operating and Capital Budgeting.....	9
Asset Capitalization.....	11
Debt Management.....	12
Credit Ratings.....	12
Investments	13
Risk Management	14
Forecasting and Financial Planning.....	15
Revenue Development and Monitoring of Customer Rates.....	15
APPENDIX A.....	17
CASH RESERVE POLICY	17
APPENDIX B	28
DEBT MANAGEMENT POLICY.....	28

Riverside Public Utilities Fiscal Policies

Revision History

DATE	GOVERNING BODY	APPROVAL HISTORY
06/26/2001	CC	RPU Fiscal Policy
12/18/2015	PUB	Review of RPU Cash Reserve Policy
02/10/2016	FC	Review of RPU Cash Reserve Policy
03/22/2016	CC	Approval of RPU Cash Reserve Policy
05/23/2016	PUB	Review of RPU Updated Fiscal Policies
07/13/2016	FC	Review of RPU Updated Fiscal Policies
07/26/2016	CC	Approval of RPU Updated Fiscal Policies

Related Policies Referenced

- 2016 RPU Cash Reserve Policy
- City of Riverside Administrative Manual Policy 06.003.00
- City of Riverside Investment Policy
- RPU Power Resources Risk Management Policies
- Resolution No. 22203 – Eight Supplemental Resolution authorizing the issuance of 2011A Variable Rate Refunding Water Revenue Bonds
- Resolution No. 22537 – Seventeenth Supplemental Resolution authorizing the issuance of 2013A Refunding Electric Revenue Bonds and 2013B Taxable Electric Revenue Bonds

Riverside Public Utilities Fiscal Policies

Glossary of Terms

The following terms are used frequently throughout the Fiscal Policy document. Definitions are provided for terms that are common to Riverside Public Utilities. For definitions of terms unique to a specific component of the policy, please refer to the body of the document where the term is discussed.

Accrual Basis of Accounting

A system of accounting based on the accrual principal, under which revenue is recognized (recorded) when earned, and expenses are recognized when incurred. Totals of revenues and expenses are shown in the financial statements (prepared at the end of an accounting period), whether or not cash was received or paid out in that period. Accruals basis accounting conforms to the provisions of GAAP in preparing financial statements for external users, and is employed by most companies except the very small ones (which use cash basis accounting).

Allocation

A distribution of funds or costs from one account or appropriation to one or more accounts or appropriations.

Appropriation

Authorization for a specific agency to make expenditures or create obligations from a specific fund for a specific purpose. It is usually limited in amount and period of time during which the expenditure is to be recognized.

Arbitrage

In general, arbitrage is the practice of taking advantage of a price difference between two or more markets. With respect to the issuance of municipal securities, arbitrage usually refers to the difference between the interest paid on tax-exempt bonds and the interest earned by investing the proceeds of the tax-exempt bonds in higher-yielding taxable securities. Federal income tax laws generally restrict the ability to earn arbitrage in connection with tax-exempt bonds or other federally tax-advantaged bond.

Base Budget

Ongoing expense for personnel, contractual services, materials and supplies, and the replacement of supplies and equipment required to maintain service levels previously authorized by the City Council.

Budget Carryover

The unencumbered balance of an appropriation that continues to be available for expenditure in years subsequent to the year of enactment.

Budgetary Control System

A system for controlling costs and revenues by comparing actual results with budget plans and then taking corrective action where necessary.

California Public Utilities Commission (CPUC)

A regulatory agency that regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies in the state of California.

Capital Improvement Plan (CIP)

A plan for capital expenditures to be incurred each year over a period of five future years setting forth each capital project, the amount to be expended in each year, and the source of funding for those expenditures.

Cash Basis Accounting

Accounting method that recognizes revenues and expenses at the time physical cash is actually received or paid out. This contrasts to the other major accounting method, accrual accounting, which requires income to be recognized in a company's books at the time the revenue is earned (but not necessarily received) and records expenses when liabilities are incurred (but not necessarily paid for).

Riverside Public Utilities Fiscal Policies

Chart of Accounts

The Chart of Accounts is a list of all the accounts, or nominal codes as they are called in the general ledger, summarized in a systematic manner to represent the sequence on financial statements.

Contribution in Aid of Construction

Any amount of money or other property contributed by an outside agency or developer for the purpose of providing the expansion, improvement, or replacement of the utility's water or electric infrastructure.

Credit Rating

An assessment of the creditworthiness of a borrower in general terms or with respect to a particular debt or financial obligation. Credit assessment and evaluation for companies and governments is generally done by a credit rating agency such as Standard & Poor's, Moody's or Fitch. The highest rating is usually AAA, and the lowest is D.

Debt Service

The amount of money required to pay principal and interest on outstanding bonds.

Debt Service Coverage Ratio

The Debt Service Coverage Ratio is used as a benchmark to measure the Utility's ability to produce enough cash to cover its debt service payments.

Derivative

Any financial instrument, such as a futures contract, swap or option, which derives its value from the value of an underlying security or physical commodity.

Direct Debt

Direct Debt is the total amount of debt, including notes and short-term financing issued by Riverside Public Utilities as a department of the City.

Encumbrance

Encumbrance is the name given to funds that have been reserved when a purchase requisition is finalized and encumbered. When a requisition is processed, funds are placed aside for that transaction. Those funds are no longer available for use in other transactions. The purpose and main benefit of encumbrance accounting is avoiding budget overspending.

Enterprise Risk

Potential events that may affect an entity's ability to achieve its strategic and financial objectives.

Federal Energy Regulatory Commission (FERC)

Independent agency within the Department of Energy. FERC is vested with broad regulatory authority. Virtually every facet of electric and natural gas production, transmission, and sales conducted by private investor-owned utilities, corporations or public marketing agencies is placed under the commission's purview through either direct or indirect jurisdiction, if any aspect of their operations are conducted in interstate commerce.

Generally Accepted Accounting Principles (GAAP)

The accounting principles, rules, conventions, and procedures that are used for accounting and financial reporting. GAAP for governments are set by the Governmental Accounting Standards Board (GASB), the accounting and financial reporting standards setting body for state and local governments.

Governmental Accounting Standards Board (GASB)

The independent organization that establishes and improves standards of accounting and financial reporting for U.S. state and local governments.

Riverside Public Utilities Fiscal Policies

Hedge

Hedges are utilized to reduce risk. It includes activities that reduce risk or that convert one type of risk to another deemed more tolerable. To qualify as Hedging, an activity should be expected to produce a measurable offset to risk relating to an asset, liability, committed transaction, or probable forecasted transaction. Such offset should be measured against changes in market values or cash flows (e.g., marked-to-market).

Indirect Debt

Indirect debt is debt that is issued on behalf of the City or RPU by another entity which is normally associated with a joint capital project within a joint powers agency like Southern California Public Power Authority, Intermountain Power Agency, etc.

Interest Rate Risk

The possibility of unexpected rise in interest cost.

Internal Controls

Methods put in place by a company to ensure the integrity of financial and accounting information, meet operational and profitability targets and transmit management policies throughout the organization.

Investment Risk

Probability that an actual return on an investment will be lower than the investor's expectations. All investments have some level of risk associated with it due to the unpredictability of the market's direction.

Leverage

The use of various financial instruments or borrowed capital to acquire additional assets.

Long-term Debt

Bonds, loans, and any other debt with a maturity of longer than one year. Long-term debt is used mainly to fund the Utility's capital improvement plan, buildings and other long-term assets.

Revenue Requirement

The reasonable level of revenue required for a utility to operate and maintain its system, and meet its financial obligations. The revenue requirement provides the basis for determining the amount of revenue to be collected through rates.

Safekeeping of Securities

To protect against fraud, embezzlement, or losses caused by collapse of an individual securities dealer and to enhance access to securities and interest payments, all securities owned by the City shall be held in safekeeping by a third party bank trust department acting as agent for the City under the terms of a duly executed custody agreement. In connection with the City's annual independent audit, securities held in custody are audited to verify investment holdings. All exceptions to this safekeeping policy must be approved by the City Treasurer in written form and included in monthly reporting to City Council.

Short-term Debt

Any bond or other debt that must be repaid or refinanced within one year. Short-term debt is recorded on the balance sheet as a current liability.

Unencumbered Balance

The balance of an appropriation not yet committed for specific purposes.

Uniform System of Accounts

A chart of accounts with detailed instructions prescribed by a regulatory agency.

Riverside Public Utilities Fiscal Policies

Purpose

Overview

Riverside Public Utilities (RPU), pursuant to policies adopted by the City Council of the City of Riverside (City Council) and the Board of Public Utilities (Board), is responsible for managing RPU's finances. The fiscal policies are designed to establish guidelines for the fiscal stability of RPU and provide guidance to staff in carrying out their fiscal responsibilities.

Goals

These policies are guidelines and goals that provide a framework for the financial management of RPU. Strong fiscal policies are the cornerstone of sound financial management. These goals include:

- Promote long term financial stability by establishing clear and consistent financial reporting guidelines.
- Ensure that RPU will maintain its financial health in order to meet its strategic goals.
- Development of cash reserve and budgeting policies.
- Provide guidelines for capitalization of RPU assets.
- Provide funds to maintain and invest in its utility infrastructure.
- Enhance short and long-term financial credit quality by helping to achieve the highest possible credit and bond ratings.
- Provide guidance and controls for effective investment of RPU funds in accordance with City investment policies and State law.
- Provide the Board and City Council with a framework for measuring fiscal performance of RPU against established parameters and guidelines.
- Link long-term financial planning with day-to-day operations.
- Document the Board and City Council philosophy for effective ratemaking and recovery of RPU costs of electric and water service.

These policies will be updated at a minimum once every three years to reflect needed changes in policy.

Riverside Public Utilities Fiscal Policies

Financial Reporting

In accordance with the City's policies and procedures, RPU shall maintain a strong system of internal controls, with appropriate segregation of duties, to ensure reliable financial reporting, effective and efficient operations, and compliance with applicable state and federal laws and regulations. RPU shall maintain its accounting records on an accrual basis and report on its financial condition and results of operations in accordance with Generally Accepted Accounting Principles (GAAP) as promulgated by the Governmental Accounting Standards Board (GASB). RPU shall establish its electric chart of accounts following the Uniform System of Accounts prescribed by the Federal Energy Regulatory Commission (FERC) and its water chart of accounts following the Uniform System of Accounts prescribed by the California Public Utilities Commission (CPUC). The electric and water utilities are not subject to the regulations of FERC and CPUC, respectively. RPU shall follow electric and water industry practices in accounting for operations.

RPU shall prepare monthly financial reports for the Board in accordance with the requirements of Section 1202 of the City Charter. RPU shall annually prepare full-accrual financial statements, including the Management's Discussion and Analysis and the accompanying Notes to the Financial Statements.

Internal and External Audits

RPU's Finance Division with the approval of the General Manager may arrange for periodic internal audits which will be performed by City Internal Audit Division staff as needed.

RPU's Finance Division shall also participate in the auditing and monitoring of joint power agencies and joint projects in which RPU shares an interest or entitlement.

RPU's annual financial statements shall be subject to an audit by independent auditors from a certified public accounting firm whose report shall be included as part of RPU's annual report. These statements shall be prepared within six months of the close of the previous fiscal year, and will be presented to the Board and City Council.

Cash Reserves

Properly designed reserve policies send a positive signal to ratepayers, investors, and regulatory and credit rating agencies that the City is committed to maintaining the long-run fiscal strength of RPU. Strong and transparent financial policies, including maintaining prudent reserves for emergencies, rate stability, working capital and capital improvements are consistent with best practices in the utility industry and are important to RPU as they help to:

- Maintain the short-term and long-term financial health of RPU.
- Maintain stable rates for customers and help ensure manageable rate increases.
- Provides funding unanticipated cost contingencies.
- Ensure funds exist for system improvements.
- Ensure cash exists for the timely payment of bills.
- Act as a significant positive credit factor in bond ratings.

The Cash Reserve Policy describes the following reserves:

- Restricted Reserves,
- Unrestricted, Designated Reserves, and
- Unrestricted, Undesignated Reserves.

The policy sets target (minimum) and maximum levels for the unrestricted, undesignated reserves.

Riverside Public Utilities Fiscal Policies

RPU's Cash Reserve Policy was approved by the City Council on March 22, 2016. Please refer to Appendix A for the approved Cash Reserve Policy. It can also be found at [2016 RPU Cash Reserve Policy](#) on RPU's website.

Operating and Capital Budgeting

Sound budgeting processes are needed to provide a control framework for management, governance oversight of the operation of RPU, and transparency to our customers. Budget processes allow for proper planning and accountability for meeting spending targets and key performance indicators.

RPU shall prepare two-year operating and five-year capital budgets, which shall serve as RPU's revenue and expenditure plan. These budgets shall be prepared in accordance with existing City Management, Board, and City Council policies, procedures, and guidelines.

Operating Budget

Budget Development

RPU shall strive to maintain a balanced budget in which operating revenues shall fully cover operating expenditures and debt service. In the event a balanced budget is not attainable, and the cause of the imbalance is not expected to last for more than one year, the planned use of undesignated, unrestricted reserves to balance the budget is permitted. In the event that a budget shortfall is expected to continue beyond one year, the planned use of these reserves must be developed as part of a corresponding strategic financial plan to close the gap through revenue increases and/or expenditure decreases. Staff will also adhere to withdrawal and replenishment of reserve guidelines as outlined in the Cash Reserve Policy.

Operating budgets shall be developed to meet the strategic goals and mission of RPU. The budget shall provide for adequate maintenance of capital plant and equipment, and funding for their orderly replacement within the approved rate plan. RPU will avoid using temporary revenues to fund ongoing operating expenses, programs, or services. Using RPU'S rate plan and guidance provided by the City's Finance Department, RPU's Finance Division shall prepare and distribute budget targets to the various divisions to assist with preparing their individual budgets. Any amounts exceeding budget targets will require adequate justification for approval by the General Manager to be included in the Department's proposed budget submittal to City Finance.

Supplemental appropriations must be approved by the Board and City Council in the event expenditures in a fiscal year are expected to exceed the approved budget. RPU is prohibited from exceeding its City Council authorized expenditures.

As appropriate, performance measurements shall be included in the annual budget to gauge the effectiveness of programs and identify areas for improvement.

Approval Process

The General Manager shall review the budget and recommend approval of the base budget and supplemental items exceeding targets to the City Manager and the Board before forwarding to the City Council for adoption.

Budget Monitoring

RPU shall maintain a budgetary control system to ensure adherence to the amounts authorized by the City Council. Operating budget versus actual expenditure reports shall be prepared monthly. Budget variances shall be provided in the monthly and quarterly report to the Board with a written explanation of the variance.

Riverside Public Utilities Fiscal Policies

The use of unencumbered prior year operating budget balances (e.g., carryovers) shall be scrutinized and carefully limited, primarily for one-time expenditures, mainly capital expenditures. Operating budget carryovers, in most cases, shall be re-budgeted in the following fiscal year. Per City Charter, all appropriations lapse at fiscal year-end except for capital projects. City Council action is required to carry over the balance of appropriations for all ongoing special programs, grants, and other restricted balances.

Budget Transfers

As per Administrative Manual Policy 06.003.00 Budget Execution and Expenditure Control, transfers between operating and capital accounts are permitted with authorization from the City Finance Budget Division after a written request from management.

Cost Allocations

Annually, a cost allocation plan will be updated by City Finance to document overhead costs of the shared City services to be charged to RPU based on industry standards and Federal Office of Management and Budget (OMB) guidelines and actual costs. In turn, RPU will update annually their cost allocation for shared services of the Electric and Water funds to be allocated to internal RPU divisions and other City Departments, as appropriate.

Operating Grant Applications and Use of Grant Funds

RPU shall actively pursue federal, state and other grant opportunities when deemed appropriate. Before accepting any grant, RPU shall obtain Board and City Council approval and thoroughly consider ongoing obligations that will be required in connection with acceptance of said grant. All grant accounting should follow City grant accounting policies and procedures.

Expenditures and Board Authority

On November 2, 2004, the voters in the City passed Measure MM (Measure) which became effective upon approval of the City Council on May 17, 2005. The Measure amended the City Charter provisions and granted the authority to award bids and authorize procurement contracts exceeding \$50,000 to the Board. The effect of the Measure streamlines the process for procurement approvals by eliminating the need for City Council approval, assuming funding authority exists in RPU's budget, as adopted or amended by the City Council. Contracts that are subject to the Measure are public works, goods, non-professional and professional services. Contracts related to property acquisition/dispositions, power and transmission and other negotiated agreements are not affected by the Measure and are approved by the City Council after review and recommendation by the Board.

Capital Budget

RPU will prepare a Capital Improvement Plan (CIP) based on internally developed financial targets and established priorities.

Budget Development

Capital improvement budgets shall be developed to meet the strategic goals and mission of RPU. The CIP is prepared every two years in conjunction with the operating budget. This is a multi-year plan forecasting annual capital improvements for a minimum of the next five years. This budget shall be prepared in accordance with existing Board and City Council policies, procedures, guidelines, and any requirements included in the California Government Code.

Riverside Public Utilities Fiscal Policies

The plan will identify expected funding sources for the budgeted costs, with the goal of minimizing rate impacts over the long term. Funding options include recovery through rates, contributions in aid of construction, use of reserves, and/or borrowing. RPU will strive to fund no less than 10% of the current budget year CIP through the use of rates or current revenues such as contribution in aid of construction or other reimbursements.

As part of the biennial CIP, budgeted capital projects of over \$50,000 shall include a brief report on the need for the project, funding source, description, prioritization, and impact on strategic goals of RPU, water and electric customer service and system reliability.

Approval Process

The CIP shall be reviewed and approved by the Board and City Council biennially, with the first two years of said plan included in the City Council adopted two-year operating budget.

Budget Monitoring

RPU shall maintain a budgetary control system to ensure adherence to the amounts authorized by the City Council. Budget versus actual expenditure reports shall be prepared monthly and provided to managers. For projects over \$200,000, monthly reports showing budget versus actual, percentage of completion, and status shall be provided to the Board.

Completed capital projects should be closed out timely. Unencumbered balances of capital projects should be reviewed at year-end for appropriateness and scrutinized to ensure any carryover balances into the following fiscal year are appropriate.

On completion, a final report of capital projects over \$200,000 shall be prepared for management and Board review. The report shall detail the actual and budgeted project costs, provide analysis for final project costs with explanations, and include final comments regarding the impact to customer service and system reliability.

Asset Capitalization

Capitalization policies establish the minimum cost that shall be used to determine the capital assets that are to be recorded in RPU's annual financial statements.

As a policy, assets with an acquisition value of \$5,000 or more and a useful life of more than one year are capitalized, except for those assets that are capitalized at lower amounts due to industry standards, such as electric and water meters, and transformers. Acquisition value includes the cost of the equipment and any associated costs incurred to make the equipment ready for service in the purpose for which it was intended, including installation costs. Intangible assets, such as software, that cost more than \$100,000 with useful lives of at least three years are capitalized at cost.

The costs of improvements and replacements are capitalized if they meet at least one of the following criteria:

1. The useful life of the asset is extended.
2. The quantity of services provided by the asset is increased.
3. The quality of services provided by the asset is enhanced.

Riverside Public Utilities Fiscal Policies

Debt Management

The Debt Management Policy outlined in Appendix B shall govern, except as otherwise directed by the City Charter, the issuance and management of all debt and lease financings funded in the capital markets. While adherence to this policy is desired, the City and RPU recognize that changes in the capital markets as well as unforeseen circumstances may, from time to time, produce situations that are not covered by the Debt Management Policy and may require modifications or exceptions to achieve RPU and City goals. Exceptions to the policy will be approved by the City's Finance Director, Board, and City Council.

The City's Finance Director, with the assistance of RPU's Assistant General Manager - Finance, will have the responsibility and authority for structuring, implementing, and managing RPU's debt and financing program, in accordance with Board and City Council authorizations and the City's debt management guidelines and policies.

Credit Ratings

Maintaining high credit ratings from the major rating agencies, such as Standard and Poor's (S&P), Fitch Ratings, and Moody's, is crucial in meeting RPU's goal of providing utility services to the citizens of Riverside at the most economical cost. Higher ratings equate to reduced borrowing cost and greater financial flexibility particularly in unstable financial markets; consequently, maintaining or improving the electric and water credit ratings is a high priority.

RPU shall maintain an open dialog, communicate any significant events to the rating agencies and investors, and provide annual audited financial statements within prescribed deadlines.

RPU seeks to minimize financing costs to its ratepayers by maintaining the highest possible credit ratings for all categories of short- and long-term debt that can be attained without compromising delivery of services and achievement of adopted RPU policy objectives and goals. RPU recognizes that external economic, natural, or other events may, at times, affect the creditworthiness of its debt. Nevertheless, RPU is committed to ensuring that actions within its control are prudent.

Minimum Bond Ratings

RPU will seek a minimum investment grade rating of "A+" or greater on any direct debt and will seek credit enhancements such as lines and letters of credit or insurance when necessary for marketing purposes, while considering such factors as availability and cost-effectiveness.

RPU will maintain lines of communication with the rating agencies to ensure that it has a focus on some of the main ratings drivers used in developing a bond rating. An example from Moody's as to the areas of focus is in the following table:

Riverside Public Utilities Fiscal Policies

Rating factor	Influences
Cost recovery framework	<ul style="list-style-type: none"> • Monopoly power • Service area characteristics • Customer base stability
Cost recovery willingness	<ul style="list-style-type: none"> • Political risks • Timeliness of recovery and history • Local government supportiveness • General fund transfer policy
Management of generation risks	<ul style="list-style-type: none"> • Diversity of supply • Reliability and cost of supply & distrib • Resource planning
Competitiveness	<ul style="list-style-type: none"> • Rate competitiveness
Financial strength	<ul style="list-style-type: none"> • Liquidity (reserves) • Leverage (debt ratio) • Operating resiliency (debt service coverage)

Determination of the Number of Ratings and Selection of Rating Services

In the planning stage of a bond issuance, the City Finance Director in conjunction with the Assistant General Manager – Finance and RPU financial advisors shall determine the number of credit ratings and which credit rating services are desired on an issuance-by-issuance basis.

Investments

Investment Policy overview

RPU's cash and investments, except for cash and investments with fiscal agents, are invested in a pool managed by the City Treasurer. RPU does not own specific, identifiable investments of the pool. Cash accounts of all City funds are pooled for investment purposes to enhance safety and liquidity, while maximizing interest earnings. The pooled interest earned is allocated monthly to RPU by the City based on RPU's month-end cash balances.

Prudent investing will allow the City to generate returns that can be used as a revenue source, while allowing for safety of principal for its future use.

As outlined in the City of Riverside Investment Policy (Investment Policy), the primary objectives of the City's investment activities, in accordance with California Government Code Sections 53601 through 53659 include:

Safety: Safety of principal is the foremost objective of the investment program. Investments of the City shall be undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio.

Liquidity: The City's investment portfolio will remain sufficiently liquid to enable the City and RPU to meet all operating requirements which might be reasonably anticipated.

Return on Investments: The City's investment portfolio shall be designed with the objective of attaining a rate of return commensurate with the City's investment risk constraints and the cash flow characteristics of the portfolio.

Riverside Public Utilities Fiscal Policies

The Investment Policy requires the “prudent investor” standard, defined as: *“Investment shall be made with judgment and care, under circumstances then prevailing, which persons of prudence, direction and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the probable safety of their capital as well as the probable income to be derived. Generally investments are limited to an average maturity of the portfolio of three years, with maximum maturities of any one security limited to five years”*.

The [City's Investment Policy](#) is reviewed annually by the City Council Investment Committee and approved by Resolution by the City Council.

General oversight of investments

The Riverside City Charter grants the City Treasurer authority for investing unexpended cash in the City Treasury. The Investment Policy applies to all financial assets of the City of Riverside as accounted for in the Comprehensive Annual Financial Report—including those of RPU. Actual investment performance is monitored continually by the City Treasurer with statistics and activity reports presented at least quarterly to the City Manager and the City Council.

The City Treasurer shall meet monthly (or as otherwise agreed) with the Assistant General Manager – Finance to review the performance of RPU's investments, RPU's short- and long-term cash flow forecasts and the investing of RPU unexpended funds in investments to meet RPU cash flow needs. The Assistant General Manager - Finance may offer investment recommendations to the City Treasurer. The City Treasurer has the final authority for the investment decisions as stated in the City's Investment Policy.

The Investment Policy also contains guidelines for performance evaluation, delegations of authority, investment committee, ethics and conflicts of interest, safekeeping of securities, internal controls, reporting, qualified brokers, collateral requirements, authorized investments, derivative investments, legislative changes, allocation of investment earnings, limitations of market value erosion, and portfolio management activity.

The Investment Policy requires that annual revisions be adopted via resolution of the City Council. For additional details, refer to the [City's Investment Policy](#).

Risk Management

Managing enterprise risk is a control measure for ensuring that assets and operations are safeguarded and that proper mitigation plans are in place for the sustainability of RPU.

RPU's assets will be protected by maintaining adequate insurance coverage through commercial insurance carriers, by maintaining adequate RPU reserves, or via the City's self-insurance fund administered by the Risk Management Division of the City's Finance Department. Annually coverage needs are evaluated by the City's Risk Manager with the assistance of the RPU Finance Division.

Investment risks shall be mitigated via the City's Investment Policy, and are administered by the City's Finance Department.

Interest rate and other risks associated with RPU's debt portfolio will be addressed under Debt Policies.

Risks associated with wholesale power markets, including purchases and sales of wholesale energy and other transactions with the California Independent System Operator's balancing authority area shall be mitigated via RPU's Power Resources Risk Management Policies. This set of policies includes the Energy Risk Management Policy, Wholesale Counterparty Risk Management Policy and Authorized Energy Transactions Policy. The Board will review and recommend City Council approval of substantive

Riverside Public Utilities Fiscal Policies

modifications to the Power Resources Risk Management Policies. Substantive modifications and amendments require approval of the City Council prior to becoming effective.

Except for periods of peak demand or system emergencies, the water utility provides 100% of its retail customer demand from entitlements in local groundwater, which is subject to federal and state water quality standards concerning maximum contaminant levels. RPU will proactively pursue potentially responsible parties for negative impacts due to their contamination of these sources and seek financial protection to avoid imposing these costs on RPU ratepayers.

RPU operates in a continually evolving regulatory environment. In order to help mitigate the negative impacts to RPU and its ratepayers, RPU shall monitor regulations that both negatively and positively impact RPU's rates and advocate or influence legislation and/or regulation that is most beneficial to RPU's ratepayers.

Forecasting and Financial Planning

Long-range forecasting is an integral part of developing RPU strategic objectives and ensuring that user rates will support current operations and long-term goals.

RPU shall prepare a five-year financial plan for electric and water operations to be used for internal planning purposes. The financial plan for each utility (i.e., electric and water) shall contain projections for future expenditures (all operating expenses, forecasted capital improvements and debt service) and forecasted revenues and other funding sources. The financial plan should be updated quarterly for use in reporting to the City's Finance Department and other needs, such as rating agency monitoring, etc.

The financial plans shall calculate future key performance indicators (including coverage ratios, liquidity levels, leverage, reserve requirements, and operating ratios) and will be used to compare forecasted financial performance with internal benchmarks and industry trends. The financial plans can be used to project future rate adjustments and develop rate plans necessary to maintain or improve the financial strengths of each utility.

Revenue Development and Monitoring of Customer Rates

Ratemaking Principles

RPU rate structures will be designed to provide a transition to rates that align with the transformational changes occurring in the electric and water industries. RPU's rates shall be designed to achieve the following goals:

- Achieve full recovery of costs.
- Equitably allocate costs across and within customer classes.
- Encourage efficient use of water and electricity.
- Provide rate stability.
- Offer flexibility and options.
- Maintain rate competitiveness in region.
- Be simple and easy to understand.

Riverside Public Utilities Fiscal Policies

Development of customer rates for RPU electric and water services

Rates will be established by developing a cash basis revenue requirement for electric and water services that recovers these RPU cash outflows:

1. Operation and maintenance expenses
2. Rate funded capital improvements
3. Debt service
4. Contributions to the City and other obligations of RPU

Retail rates for water and electric services shall be cost-based and consistent with industry practices and California law. Rate studies shall be conducted periodically to ensure that water and electric rate structures are equitable and adequate to meet RPU's revenue requirements.

Revenue Monitoring

Revenues shall be monitored regularly, with monthly reporting to the Board showing variances between current revenues, prior-year amounts, and amounts currently budgeted. If projections show that actual results will fall below financial targets, RPU will develop plans necessary to improve the Utility's financial strength and report to the Board and City Council.

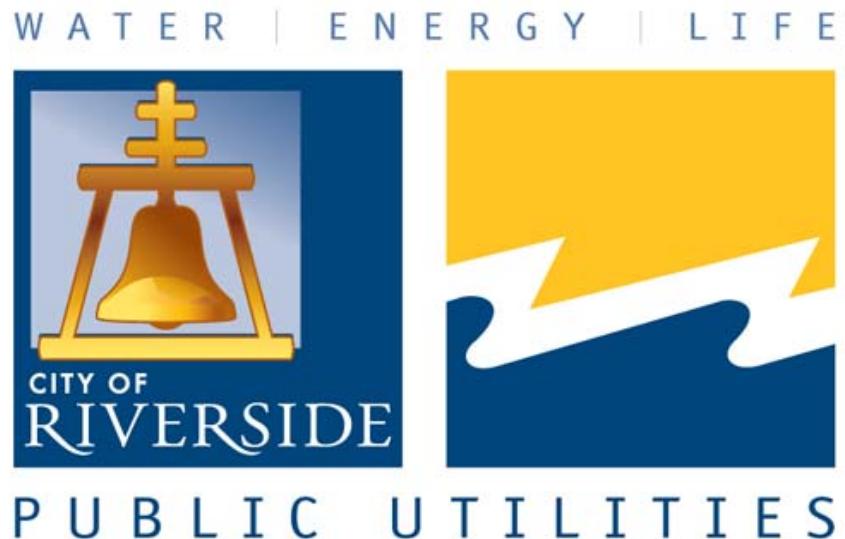
RPU will establish internal controls to ensure that all revenues are collected in a timely manner. Delinquent customer accounts and miscellaneous invoices shall be collected in compliance with collection procedures outlined in the established Rules and Rates Schedules and/or City Administrative Policies.

One-time revenues received from the sale or disposal of a long-term asset, such as land, shall not be used for ongoing operations, but will be segregated to be used for the acquisition of other long-term assets. Proceeds from any sale should be placed in the designated Property Reserve as discussed in the Cash Reserve Policy.

APPENDIX A

CASH RESERVE POLICY

Riverside Public Utilities
Appendix A- Cash Reserve Policy
(Approved by City Council 3/22/16)



Cash Reserve Policy

Adopted on March 22, 2016

Riverside Public Utilities
Appendix A- Cash Reserve Policy
(Approved by City Council 3/22/16)

Table of Contents

<u>1.</u>	<u>Introduction & Purpose</u>	21
<u>2.</u>	<u>Definitions</u>	21
<u>3.</u>	<u>Unrestricted, Undesignated Reserve Policy</u>	23
<u>4.</u>	<u>Withdrawal & Replenishment of Reserves</u>	26
<u>5.</u>	<u>Reporting and Oversight</u>	26
<u>6.</u>	<u>Conclusion</u>	27

Riverside Public Utilities
Appendix A- Cash Reserve Policy
(Approved by City Council 3/22/16)

Introduction & Purpose

Riverside Public Utilities (“RPU”) is a department of the City of Riverside and manages the City’s water and electric utilities. RPU provides high quality and reliable services to over 109,000 metered electric customers and approximately 65,000 metered water customers throughout the City of Riverside.

RPU is governed by the City Council and the Board of Public Utilities (the “Board”). The City Council sets financial management policies, as recommended by the Board. This Cash Reserve Policy (the “Policy”) is designed to establish guidelines to ensure the fiscal stability of RPU and provide guidance to RPU staff in the management of RPU’s finances.

Properly designed reserve policies send a positive signal to ratepayers, investors, and regulatory and credit rating agencies that the City is committed to maintaining the long-run fiscal strength of RPU. Strong and transparent financial policies, including maintaining prudent reserves for emergencies, rate stability, working capital and capital improvements, are consistent with best practices in the utility industry and are important to RPU as they help to:

- Maintain the short-term and long-term financial health of RPU.
- Maintain stable rates for customers and help ensure manageable rate increases.
- Fund unanticipated cost contingencies.
- Ensure funds exist for system improvements.
- Ensure cash exists for the timely payment of bills.
- Act as a significant positive credit factor in bond ratings.

This Cash Reserve Policy describes the following reserves:

- Restricted Reserves,
- Unrestricted - Designated Reserves, and
- Unrestricted, Undesignated Reserves.

The policy sets target (minimum) and maximum levels for the unrestricted, undesignated reserves.

Definitions

RPU’s reserves are classified into three categories:

- Restricted Reserves,
- Unrestricted - Designated Reserves, and
- Unrestricted, Undesignated Reserves.

Riverside Public Utilities
Appendix A- Cash Reserve Policy
(Approved by City Council 3/22/16)

A. Restricted Reserves

Restricted reserves are established and utilized for narrowly defined purposes as specified by legal restrictions, bond covenants, and other regulations or ordinances. Current Restricted Reserves include:

- Decommissioning Fund for San Onofre Nuclear Generating Station (“SONGS”)
- Regulatory Requirements Reserve (Cap and Trade auction proceeds)
- Unspent Bond Proceeds
- Bond Redemption Reserve
- Electric Public Benefit Fund
- Water Conservation Fund

B. Unrestricted - Designated Reserves

Unrestricted, designated reserves are that portion of unrestricted reserves that meet specific purposes set aside by the Board and City Council. Designated reserves may be held for specific capital and operating purposes. Current unrestricted, designated reserves are as follows:

- ***Customer Deposits*** (electric and water funds) – Monies held on behalf of the RPU’s customers as required to be utilized if a customer fails to pay their utility bill. The amount held equals amounts collected from electric and water customers based on Board and Council adopted Electric and Water Rules.
- ***Additional Decommissioning Liability Reserve*** (electric fund only) – Established to accumulate funds for the uncertainty of costs associated with the SONGS Decommissioning activities. These funds are in addition to RPU’s funded trust held by the trustee (restricted reserve). The amount of decommissioning funds held in the restricted reserve are equal to RPU’s proportionate share of the independent Decommissioning Cost Estimate (“DCE”). If the DCE is increased, RPU will need to fund additional monies for decommissioning. Annual funding currently is \$1.6M which equaled the amount contributed annually to meet RPU’s proportionate share of the restricted decommissioning trust. This amount can be evaluated and adjusted as needed.
- ***Electric Reliability Fund*** (electric fund only) – Established to accumulate amounts received from retail customers through the Reliability Charge for the purpose of funding debt service for transmission and internal generation projects. Funding for this reserve will inherently fluctuate based on revenue received from customers, offset by approved debt service payments on transmission and internal generation projects.
- ***Mission Square Improvement Fund*** (electric fund only) – Established to accumulate funds for future major improvements to the Mission Square facility. Initial year will be funded by electric utility reserves in the amount of \$240,000,

Riverside Public Utilities
Appendix A- Cash Reserve Policy
(Approved by City Council 3/22/16)

and future funding will be built with an annual contribution equal to 2% of the building value up to a maximum reserve equal to 25% of the building value.

- ***Capital Repair/Replacement Reserve*** (electric and water funds) – Established to accumulate amounts for repairs and replacement of facilities, vehicles, and technology outside of the Capital Improvement Program. Examples would be roof replacement, vehicle replacement, desktop technology replacement, etc. Funding for this reserve will be built over a three year period based on a historical 10-year averages of replacement costs.
- ***Recycled Water Reserve*** (water fund only) – Established to set aside funds for a recycled water program. Initial funding was from a legal settlement from the City.
- ***Property Reserve*** (electric and water funds) - Established to accumulate all proceeds from surplus property sales to be used in the future for the purchase of property needed for operations, or for other long-term capital assets/projects. Funding is from accumulated and future proceeds from the sale of surplus property.

RPU will use designated reserves to mitigate the impacts of known and impending exposures. The withdrawal and replenishment of Council/Board approved designated reserves and their allowable uses will be tracked individually, but the specific use of designated reserves falls outside the scope of this policy and is subject to Board and Council approval.

C. Unrestricted, Undesignated Reserves

Undesignated reserves are the remaining unrestricted reserves that may be used for any lawful purpose and have not been designated for specific capital and operating purposes. The following Unrestricted, Undesignated Reserve Policy addresses the levels, use and replenishment of this type of unrestricted reserves.

Unrestricted, Undesignated Reserve Policy

The Cash Reserve Policy outlines the appropriate types and target (minimum and maximum) levels of unrestricted, undesignated reserves as prescribed below.

Overall Policy Statement

RPU will have sufficient unrestricted, undesignated reserves to maintain or improve its credit ratings, ensure that operating and maintenance costs will be paid in a timely manner, to pay debt service obligations, and to invest in needed capital improvements and equipment replacement on a timely basis. In addition, RPU will maintain sufficient reserves to minimize rate increases due to market volatility, weather impacts on demands, emergencies (such as natural disasters), and regulatory changes.

Operating (Working Capital)

Riverside Public Utilities
Appendix A- Cash Reserve Policy
(Approved by City Council 3/22/16)

- **Definition and Purpose:** Ensures sufficient resources to pay budgeted operating and maintenance expenses, including power supply costs, recognizing the timing differences between payment of expenditures and receipt of revenues.
- **Target (Minimum) Level:**
 - Electric: Equal to 60 days of operating and maintenance expenses, including power supply costs, based on the most recent audited financial statements.
 - Water: Equal to 60 days of operating and maintenance expenses based on the most recent audited financial statements.
- **Maximum Level:**
 - Electric: Equal to 90 days of operating and maintenance expenses, including power supply costs, based on the most recent audited financial statements.
 - Water: Equal to 90 days of operating and maintenance expenses based on the most recent audited financial statements.
- **Events or Conditions Prompting Use of the Reserve:** This Reserve may be routinely used by RPU to cover temporary cash flow deficiencies caused by timing differences between revenues and incurring expense obligations and unexpected increases in operating expenses.

Rate Stabilization

- **Definition and Purpose:** Mitigates rate shock due to temporary and transitional regulatory changes, loss of a major resource, sharp demand reduction or market volatility.
- **Target (Minimum) Level:**
 - Electric: 10% of operating revenues, reflecting the low-end of the risk quantification for power cost uncertainties due to load reduction, market energy price fluctuations, unit contingencies, transmission costs, and regulatory mandates.
 - Water: Equal to 7% of operating revenues, reflecting the low-end of historic fluctuations in retail sales from year to year due to unforeseen events (e.g., recession, drought).
- **Maximum Level:**
 - Electric: 20% of operating revenues, reflecting the high-end of the risk quantification for power cost uncertainties due load reduction, market energy price fluctuations, unit contingencies, transmission costs, and regulatory mandates.
 - Water: Equal to 15% of operating revenues, reflecting the high-end of projected fluctuations in retail sales from year to year due to unforeseen events (e.g. recession, drought).
- **Events or Conditions Prompting Use of the Reserve:** This Reserve may be used to cover unexpected decreases in operating revenues and increases in operating costs to reduce year-over-year volatility in needed rate increases, as approved by Board and City Council.

Riverside Public Utilities
Appendix A- Cash Reserve Policy
(Approved by City Council 3/22/16)

Emergency Capital

- **Definition and Purpose:** Provides funds to ensure ability to repair system after an emergency or natural disaster such as a flood, earthquake or major windstorm
- **Target (Minimum) Level:** Equivalent to approximately 1% of the value of depreciable capital assets for the Electric and Water Utility, as reported on the most recent audited financial statements.
- **Maximum Level:** Equivalent to approximately 2% of the value of depreciable capital assets for the Electric and Water Utility as reported on the most recent audited financial statements.
- **Events or Conditions Prompting Use of the Reserve:** An emergency event requiring the need to fund necessary capital expenditures (e.g. natural disaster causing treatment facility closure, conveyance disruption, loss of substation or generating asset, etc.) as approved by Board and City Council.

System Improvements Capital

- **Definition and Purpose:** Provide funds to ensure continuity of construction over fiscal years to be reimbursed by bond proceeds or other resources.
- **Target (Minimum):** 6 months of the following years approved capital improvement expenditures for each Utility.
- **Maximum Level:** 9 months of the following years approved capital improvement expenditures for each Utility.
- **Events or Conditions Prompting use of the Reserve:** This Reserve may be used to fund capital expenditures during the year as funding resources are acquired (e.g., bond proceeds, capital contributions, revenues, etc.), as approved by Board and City Council

Debt Service

- **Definition and Purpose:** Ensures ability to make debt service payments in an extreme event that may impact RPU's ability to provide services, thus impacting revenues at a time critical infrastructure repairs are needed to restore systems. The Debt Service Reserve is intended to prevent an event where RPU would be unable to pay its debt service obligations during such emergencies, or extreme market disruptions.
- **Target (Minimum) and Maximum Level:** The maximum debt service payment (semi-annual) in the upcoming fiscal year for each Utility.
- **Events or Conditions Prompting the Use of the Reserve:** The Debt Service Reserve may be utilized in the event RPU is otherwise unable to pay its debt service obligations. It is not anticipated that RPU would ever utilize these reserves absent a significant disaster or extreme market disruption, and only with the approval of Board and City Council.

Riverside Public Utilities
Appendix A- Cash Reserve Policy
(Approved by City Council 3/22/16)

General Provisions

While these areas of consideration were evaluated in order to determine the appropriate size of the reserves, RPU will maintain such monies pooled in each utility's unrestricted, undesignated reserve. These reserve allocations are consistent with industry standards for similarly rated electric and water utilities. Each component of the reserves is sized at less than the maximum possible exposure for each component because it is unlikely several of the risks each enterprise faces would materialize simultaneously.

Withdrawal & Replenishment of Reserves

RPU will treat the targeted reserve levels as practical minimums and allow reserves to increase or decrease as necessary within the minimum and maximum levels prescribed above.

To the extent that unrestricted, undesignated reserves are above the target and below the maximum, the Board and Council have the flexibility to direct staff to utilize those available funds to pay for capital projects (reducing the need for future debt), pay down unfunded liabilities such as pension obligations, defease outstanding debt, or fund other strategic objectives. No other action by RPU would be required if reserves are between the minimum and maximum level unless directed by the Board and City Council.

If reserve funds exceed the Maximum level, RPU would seek Board and City Council approval to use the excess to finance capital improvements on a pay-as-you-go basis, pay down existing debt, offset other long-term liabilities such as pension obligations, reduce rates or for other strategic purposes.

Reserve levels below the minimum targeted reserves would leave RPU exposed to significant operational risks. Should RPU draw down reserves below the minimum targeted level, RPU will implement plans to return reserves to their minimum targeted levels within three years. Such plans will be provided within twelve (12) months.

Reporting and Oversight

Reserve levels will be monitored during the fiscal year and reported in the monthly and quarterly financial reports. Reserve target (minimum) and maximum levels will be analyzed annually and an over/under reserve determination shall be made in conjunction with year-end financial results. These results will be reported to the Board and City Council as part of the year-end financial report presentation. Should unrestricted designated or undesignated reserve levels need adjustment due to new risk factors due to changes in the industry, these will be brought to the Board and City Council as part of the year-end report.

Riverside Public Utilities
Appendix A- Cash Reserve Policy
(Approved by City Council 3/22/16)

The Policy will be reviewed annually, and updated (at a minimum once every three years) if there are material changes in the risk exposures or new conditions that require changes in reserve levels.

Conclusion

This Policy provides directives to RPU management and staff for decisions and recommendations related to the financial profiles of RPU.

In its most abbreviated form, the Policy sets targets for reserve balances based on the risk profiles of the Electric and Water utilities individually and establishes tolerable maximums. The Policy also provides recommended actions when reserves deviate from the target levels.

APPENDIX B

DEBT MANAGEMENT POLICY

RIVERSIDE PUBLIC UTILITIES APPENDIX B – DEBT MANAGEMENT POLICY

Overview

Riverside Public Utilities (RPU) goals in debt management are to:

- 1) Achieve the lowest cost of capital to fund RPU's Capital Improvement Plan (CIP),
- 2) Maintain high credit ratings,
- 3) Assure access to credit markets, and
- 4) Preserve long-term financial flexibility.

Debt should be used to finance long-term projects in the most cost effective manner to RPU to ensure the benefit and the cost of those assets are appropriately shared between existing and future ratepayers. The repayment schedule for debt financed infrastructure should match the useful life of the asset financed.

RPU shall monitor its system leverage (ie. debt ratio) in comparison to other similarly sized and rated utilities and report such information to the Board at least quarterly.

RPU management shall monitor, on a regular basis, the adequacy of construction funds for budgeted capital projects to determine the need to initiate the issuance of additional debt. Not more than 90% of the current budget year capital improvement plan will be funded with debt. Additionally, RPU management will monitor the entire debt portfolio in conjunction with the economics of cash management strategies to identify the opportunity to defease currently outstanding bonds and extinguish debt early based on regular communication with investment bankers and financial advisors. Budgeted borrowing amount should be included in the CIP budget.

Once management has determined to issue new debt, refund outstanding bonds or extinguish debt, a financing plan is presented to the Board and City Council for approval. After approval, management will outline a preliminary financing schedule which normally takes 1-2 months to complete the bond sale and receive funds. See the following key activities for the preliminary financing schedule:

- Draft key documents including, preliminary official statement, resolution, purchase contract, etc. by the financing team: City and RPU staff, financial advisor, underwriters, Bond Counsel and Underwriter's Counsel.
- Meeting to review purchasing contracts.
- Revised drafts of documents to rating agencies/ insurers by Bond Counsel.
- Meeting with RPU Board and City Council to approve, preliminary official statement.
- Meeting with Moody's, S&P, and/or Fitch.
- Finalized preliminary official statement.
- Mailing of preliminary official statement for pricing.
- Signing of Bond Resolution and Purchase Contracts.

Prohibited use of debt proceeds/Use of Interfund loans

The issuance of debt to fund operating deficits is not permitted. Except for long-term capital leases for equipment, current operations will not be funded with the proceeds of borrowed funds.

Upon approval by the Board and City Council, loans to other funds may be made. Such loans will bear interest at not less than the average market yield of the City's investment portfolio. Loans to other funds should ideally be repaid within the same fiscal year as issued if practicable.

RIVERSIDE PUBLIC UTILITIES

APPENDIX B – DEBT MANAGEMENT POLICY

Repayment of debt issues and setting of utility rates

The revenues generated by RPU must be sufficient to meet the minimum coverage ratios of principal and interest. RPU's Revenue Bonds will not be secured by any pledge of ad valorem taxes or general fund revenues of the City and will be payable solely from the Electric or Water Fund.

The Board will make necessary adjustments to, and the City Council shall approve rate structures and rate plans relating to, revenues pledged to a bond issue, if necessary to meet bond covenants.

In determining the affordability of proposed revenue bonds, RPU will perform an analysis comparing proposed annual net revenues to estimated annual debt service. For the City to issue new revenue bonds, RPU net revenues (as defined in the resolution authorizing the revenue bonds in question) shall be at least 110% and 125% of average annual debt service for electric and water bonds, respectively, and for the year in which the payment requirements are scheduled to be the greatest.

However, for planning purposes, and in order to maintain RPU's favorable credit ratings, RPU will target annual net revenues at 200% of average annual debt service for direct debt, and 130% of average annual debt service including indirect debt. In addition, estimated net revenues will be targeted at a minimum of 175% of the maximum annual debt service for financial projection purposes. Should financial planning indicate dropping below the minimum target, RPU will implement plans to return the annual debt service coverage to their minimum targeted levels within three years. Such plans will be provided to the Board and City Council within twelve (12) months.

Use of variable and fixed rate debt

Bonds may be issued with fixed or variable rate provisions, or a combination thereof, in accordance with approved City Council Resolutions and guidelines for bond issuance.

The type of debt financing shall be based upon a number of criteria, including, RPU's existing debt portfolio (including RPU's proportional share of its project entitlement debt at the Southern California Public Power Authority and Intermountain Power Agency), interest rate levels (for municipal bonds, synthetic interest rates, and forward yield curves), term of financing, overall variable rate exposure, liquidity levels, availability and cost of credit/liquidity facilities, and interest rate spreads between taxable and tax-exempt debt.

RPU may use variable rate to create synthetically fixed rate obligations to reduce interest costs. In addition, RPU may use variable rate debt as part of its debt portfolio to help diversify interest rate exposure and reduce overall debt costs. Variable rate debt may have nominal maturities of up to 30 years. RPU shall not have more than 20% of its debt in the form of unhedged variable rate debt (that is, variable rate debt that is not hedged with an interest rate swap). Further, RPU shall not have more unhedged variable rate debt than is offset by short-term investments. Such balance sheet matching provides risk mitigation against changing short-term interest rates.

Use of taxable versus tax-exempt debt

Issuing tax-exempt debt is generally preferred since it is typically more economical, providing the use of the proceeds are consistent with Internal Revenue Service (IRS) guidelines and are within the safe harbor Private-Use provisions. RPU may issue taxable debt [such as Build America Bonds whereby RPU issues taxable debt and the IRS issues a payment to RPU for 35% (which may be adjusted by legislation) of the interest payments] or other qualified municipal financing vehicles when the net financing costs are estimated to be lower than strictly tax-exempt debt, or when the planned use of proceeds from tax-exempt debt is inconsistent with IRS guidelines regarding tax-exempt bond issuances.

RIVERSIDE PUBLIC UTILITIES

APPENDIX B – DEBT MANAGEMENT POLICY

Use of derivatives

Interest rate swaps and options are appropriate debt management tools that help meet important financial objectives. Properly used, these instruments can increase financial flexibility, provide opportunities for interest rate savings, and reduce interest rate risk through better matching of assets and liabilities.

RPU may, from time to time, choose to enter into contracts and financing agreements involving derivatives as authorized under state law, the City Charter and the City's Master Swap Policy. RPU will consider the use of derivative products on a case-by-case basis.

RPU shall not use derivative products that are speculative or create extraordinary leverage or risk, lack adequate liquidity, provide insufficient price transparency, or are used as investments. RPU shall only transact with highly rated counterparties or counterparties whose obligations are supported by highly rated parties.

The decision to issue such securities will be determined by the Bond Financing Team (typically consisting of the City's Finance Director/Treasurer, RPU's Assistant General Manager - Finance, Underwriter, Bond Counsel and Financial Advisor) and approved by the General Manager, the Board and the City Council.

Use of debt service reserves

Determining whether to fund a debt service reserve will be made on an issuance by issuance basis, considering such factors as: interest rates, yield restrictions, arbitrage, impacts to debt service, liquidity levels, marketing, and potential credit rating implications.

Use of credit enhancement

RPU shall seek to use credit enhancement (lines or letters of credit, bond insurance, surety bonds, etc.) when such credit enhancement proves cost-effective. Credit enhancement may be used to improve or establish a credit rating on an RPU debt obligation even if such credit enhancement is not cost effective if, in the opinion of the Financing Team, the General Manager, Board and City Council the use of such credit enhancement meets the RPU's debt financing goals and objectives.

Use of short-term debt

RPU shall use short-term debt instruments (lines or letters of credit, commercial paper, other bank loans) when it is determined to be cost effective and meets RPU's debt financing goals and objectives.

Use of Competitive versus Negotiated Sales

RPU shall conduct financing on a competitive basis unless the financing team determines that a negotiated sale is most effective.

In a competitive sale, the RPU's bonds shall be awarded to the bidder providing the lowest true interest cost as long as the bid adheres to the requirements set forth in the official notice of sale.

RPU recognizes that certain transactions are best sold through a negotiated sale in which RPU and the City will retain an underwriter or underwriting team to market and sell the securities. RPU and the City will consider the following when determining the appropriate method of sale:

- 1) A complex structure that may require a strong pre-marketing effort,
- 2) Size of the issue which may limit the number of potential bidders, and
- 3) Market volatility is such that the City would be better served by flexibility in timing its sale in changing interest rate environments.

RIVERSIDE PUBLIC UTILITIES

APPENDIX B – DEBT MANAGEMENT POLICY

Advanced refunding and current refunding of debt

Periodic reviews of all outstanding debt will be undertaken to determine refunding opportunities. RPU may issue current refunding or advance refunding bonds, as defined for federal tax law purposes, when advantageous, legally permissible, prudent, and aggregate net present value savings, expressed as a percentage of the par amount of the refunding bonds, equals or exceeds 5 percent. In the case of advance refundings, RPU and the City will also evaluate escrow efficiency (the percent of negative arbitrage in a refunding escrow divided by the total of net present value savings and negative arbitrage) to ensure that an advance refunding achieves at least 70% efficiency, helping to ensure RPU does not utilize the one advance refunding opportunity prematurely. After determination that a refunding opportunity that meets the parameters set forth above exists, additional maturities may be added to the financing transaction with concurrence of the Bond Financing Team.

RPU also may choose to refund outstanding indebtedness when existing bond covenants or other financial structures impinge on prudent and sound financial management. Savings requirements for current or advance refunding undertaken to restructure debt may be waived by the City's Finance Director/Treasurer and RPU's Assistant General Manager - Finance, upon a finding that such a restructuring is in RPU's overall best financial interest.

Other Debt Management Practices

RPU will maintain good, ongoing communications with bond and credit rating agencies about its financial condition. The RPU will follow a policy of full disclosure in its annual financial report, each bond prospectus (Official Statement) and annual disclosure requirements. RPU will provide all needed information to ensure that the City complies with its continuing disclosure commitments in a timely manner.

Proceeds of bond sales will be invested until used for the intended project in order to maximize utilization of the public funds. All revenue bond proceeds shall be invested in accordance with bond covenants, the City's Investment Policy and state and federal laws.

RPU will monitor diligently its compliance with bond covenants, and tax regulations, including its compliance (through the City's Finance Department) with federal arbitrage regulations and any requirements associated with State Revolving Fund loans and/or other State/Federal grants.