Redding Electric Utility

Financial Management Policy Whitepaper

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1. Introduction

Redding Electric Utility (REU or Utility) is a publicly-owned community asset for the City of Redding (Redding or City) that seeks to provide safe, reliable, competitively-priced electric service to all of its customers. As a community asset, and in consideration of its mission, REU, with the help of its financial advisors, prepared the REU Financial Management Policy (Policy) with the intent of establishing guidelines for prudently managing the financial profile of the Utility for current and future customers.

This accompanying whitepaper on the Policy is divided into six sections: Purpose, Defining Financial Strength, Historical Practices, Recommended Debt Service Coverage Policies, Recommended Reserve Policies, and Interaction Between Coverage, Reserves, and Rates. Also, part of this whitepaper on the Policy is a set of Definitions and two Appendices with information about REU's peer utilities and about the financial metrics generally applicable to public power enterprises of different rating levels.

The Policy is intended to replace REU's existing Rate Reserve Policy (Reserve Policy) and it is also intended that to maintain relevance, REU will revisit the Policy periodically or more often if there is a material change in the risk exposures or conditions.

2. Purpose

The purpose of the Policy is to provide a set of guidelines for prudently managing the financial profile of the Utility for current and future customers. Like any enterprise, the Utility manages cash flow to cover expenditures and holds Reserves to address anticipated and unanticipated funding requirements. Unlike for-profit enterprises, however, the Utility must balance its own financial strength with the financial implications for the customers who are ultimately the Utility's most critical stakeholders.

The Policy is based upon the understanding that the following factors are important to the community and to the Utility's customers, and should serve as the relevant goals of the Policy.

1. That REU can continue to serve its mission statement.
2. That REU manages rates to avoid significant year-over-year rate adjustments.
3. That REU should strive to maintain and invest in the system consistent with prudent utility practices.
4. That REU maintain Reserves for financial exposures related to the system consistent with prudent utility practices.
5. That REU be able to cost-effectively obtain funds to maintain and invest in its system for future generations of customers.

The Policy as described herein is in accordance with industry best practice and the Policy is expected to serve as a public representation of REU's objectives in relation to its financial profile. The Policy further is intended to offer the Redding City Council (City Council) guiding directives to REU management and staff for decisions and recommendations related to the financial profile of the Utility, and provides guidelines for balancing objectives related to the financial profile of the Utility.

The Policy is not prescriptive in terms of how the Utility sets rates; however, there is a nexus between the rates that the Utility charges and the financial profile of the Utility and, as such, the Utility's rate setting practices will be coordinated with the Policy. The Policy, likewise, will be consulted in concert with enterprise risk management policies and procedures. While the Policy attempts to recognize the balance between enterprise risk management, financial risk management, and rate setting, the Policy cannot resolve conflicts between competing objectives and so it instead provides guidelines for the financial management of the Utility to be considered by the City Council, the Electric Utility Commission (EUC), and REU management and staff in coordination with other considerations.

3. Defining Financial Strength

REU is a provider of retail electric service in California. While REU faces limited traditional competitive pressures, the growth in distributed generation is creating new competitive considerations. Moreover, the Utility's business is complex and subject to a number of significant environmental, market, and regulatory considerations on national, state, and local levels. The determination of financial strength is subjective, but it ultimately relates to the expectation that the Utility can continue to meet the primary financial goals in the context of the macro considerations that REU faces.

Anticipated Financial Considerations

Some of the key financial considerations for REU, at this time, include the following:

- Customer accounts have grown modestly in number but energy sales have fallen slightly since the beginning of the Great Recession due to energy conservation and efficiency improvements.
- Operating Expenses/Maintenance and Operation (M&O) expenses have averaged ~$150 million for the past five years.
- REU maintains ~$160 million of outstanding direct debt.
- REU has payment obligations for ~$70 million of debt at Transmission Agency of Northern California (TANC), and M-S-R Public Power Agency (M-S-R PPA).
- REU has obligations to buy gas under a long-term variable price natural gas contract with the M-S-R Energy Authority.
- REU has obligations to buy power through long-term contracts and REU buys a significant amount of power through short-term purchases.
- REU has exposure to natural gas markets particularly for the Redding Power Plant.
- REU has exposure to weather and environmental considerations that can impact the hydroelectric generating capacity to which REU has access.
- The State of California has adopted Renewables Portfolio Standards that require REU to provide increasing percentages of sales from renewable sources.
- Federal mandates from the Federal Energy Regulatory Commission and North American Electric Reliability Corporation, etc.
- The rise of distributed generation as a competitive pressure.
- The State of California has implemented a Cap-and-Trade Program that puts a price on CO_2 emissions and places limits on those emissions.
- Other regulations such as net-metering pass additional costs on to REU.
- REU makes a payment in-lieu of taxes to the City.
- REU is legally obligated to generate Net Revenues (inclusive of the balance of Reserves) equal to 1.10x direct debt service.

Unanticipated Financial Considerations

One of the characteristics of REU's financial strength is the ability to clearly and timely meet all of its obligations associated with the anticipated considerations above. Another characteristic of REU's financial strength is its ability to address unanticipated considerations including, but not limited, to the following:

- An unanticipated general reduction in customer demand.
- One or more operational events that could dramatically increase costs or reduce resource options.
- The loss of one of more large customers.
- A transmission or wholesale power market disruption that curtails wholesale net revenues.
- Loss of supplies of fuel or purchased power or increase cost of fuel or purchased power that affects REU's ability to service its native load.
- A market disruption that increases the cost of borrowed funds.
- A failure of one of REU's counterparties to perform on a contract.
- A change in regulatory or environmental regulations that would have an impact on how REU serves customers.
- An unanticipated increase in compensation costs.

While such considerations are by nature, unanticipated, the Policy recognizes that the financial strength of the Utility is at least partially related to the ability to address such considerations should they arise while continuing to meet the primary financial goals of the Utility.

Ratings as Indicators of Financial Strength

As of August 2014, REU maintained an A2/Stable credit rating from Moody's Investors Service and an A/Stable credit rating from Fitch Ratings. While such credit ratings are important yardstick indicators of financial strength, the Policy is not focused on maintaining credit ratings. Ratings are very important for transactions with financial counterparties and REU's credit ratings are referenced in a number of existing contracts that REU is party to. REU's credit ratings also have an impact on contracts to which TANC, the M-S-R PPA, and REU's credit rating is important for the Utility's wholesale purchases and sales of power, natural gas, and other resources.

REU's expectation is that by following the guidelines of the Policy, the Utility will maintain strong credit ratings. If REU follows the guidelines of the Policy, it is expected that REU will be able to maintain A2/A category ratings and will be able to make a strong case for A1/A+ category ratings.

4. Historical Practices

REU's historical financial management policy, called the Reserve Policy, began its formal evolution in 1988 under the guidance of the former EUC. The impetus for a formal policy was the former Commission's perception that it would be helpful to have a set of consistent parameters to review when considering a rate adjustment.

The Reserve Policy

The City Council ultimately adopted the Reserve Policy by Resolution 89-94 during its regular meeting on March 21, 1989. The Policy, most importantly, requires REU to consider a rate adjustment under the following conditions:

A rate increase should be considered if any of the following conditions is projected:

- Debt Service Coverage (DSC) ratio is less than the minimum required by bond covenants (currently 1.10x).
- End-of-year Reserves will be less than 20 percent of total M&O costs.
- The following year's rate increase would be greater than 6 percent.
- A major expenditure is expected.

A rate decrease should be considered if none of the four conditions discussed above is projected and if any of the following conditions are projected:

- DSC ratio will be greater than 1.40x.
- End-of-year reserve will be greater than 30 percent of M&O costs.

Debt Service Coverage

A history of REU's DSC covenants also holds relevance to the Policy. Between 1996 and 2002, REU did not issue debt. The applicable DSC covenants were established in the Series 1993A and Series 1992A bond documents. The 1993A and Series 1992A bonds had DSC covenants of 1.20x. In the late 1990s, in anticipation of partial deregulation in the California energy markets, and in the early 2000s, as a result of partial deregulation, most utilities, including REU, took steps to afford greater flexibility in operations. Between 1999 and 2002, REU used cash to fund escrows to pay off much of the debt that REU had outstanding and in 2002, simultaneous with the financing of Redding Power Plant Unit 5, REU paid off obligations associated with the Series 1993A and Series 1992A bonds. This effort allowed REU to set new DSC requirements—the same requirements that are in effect presently.

Key Metrics 2003-2007					
Fiscal Year	**2003**	**2004**	**2005**	**2006**	**2007**
DSC w/Available Reserves	4.51x	7.96x	5.07x	8.46x	6.23x
DSC w/o Available Reserves	1.19x	3.17x	1.36x	2.90x	1.43x
Reserves as % of M&O Expenses	34.4%	39.4%	25.0%	40.8%	34.6%
% Rate Change	6.90%	4.00%	4.00%	0.00%	5.85%

The DSC covenants of the Series 2002 bonds included two important changes relative to the DSC requirements of the Series 1993A and Series 1992A bonds: 1) the DSC covenants were lowered from 1.20x to 1.10x, and 2) the numerator for the DSC ratio calculation was revised to "Adjusted Annual Revenues." The Adjusted Annual Revenues definition includes "Available Reserves" that includes unrestricted funds in the Electric Revenue Fund. The Adjusted Annual Revenues definition further allows for recognition of the same Reserves for DSC calculation from year-to-year (versus a true Rate Stabilization Fund where each dollar of Annual Revenues may be recognized at most once in the DSC calculation).

Financial Results 2008-2013

The changes to the DSC requirements were strategic and those changes proved valuable to REU particularly in 2009, for example, when DSC under the Series 1993A and Series 1992A bond documents would have been calculated as 0.02x (well below the 1.20x requirement), while the DSC under the Series 2002 bond documents was calculated at 8.28x (well above the 1.10x requirement).

Key Metrics 2008-2013						
Fiscal Year	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
DSC w/Available Reserves	5.91x	8.28x	4.43x	3.91x	4.59x	5.22x
DSC w/o Available Reserves	1.08x	0.02x	0.52x	1.17x	1.70x	1.75x
Reserves as % of M&O Expenses	23.6%	20.3%	18.0%	14.0%	17.0%	23.0%
% Rate Change	5.85%	7.84%	7.84%	7.84%	7.84%	7.84%

Because the DSC ratio calculation allows unrestricted Reserves to be included in the numerator, it is possible to show high DSC even when the Utility is not generating revenues sufficient to pay expenses. Under such a circumstance, the Utility would need to pass significant rate increases and/or draw upon Reserves. This exact scenario played out from 2007-2014 and REU as a result passed six consecutive years of 7.84 percent rate increases beginning in 2009.

REU was able to smooth out needed rate increases over six years by using Reserves. Under the old bond covenants, smoothing out rating increases would not have been possible. The DSC ratios in 2008, 2009, 2010, and 2011 were all under the 1.20x that was formerly required and rate increases would have needed to be higher and more sudden without the flexibility established in the new bond covenants.

The combination of: 1) the Reserve Policy target of managing end-of-year Electric Utility Reserves (Reserves) between 20-30 percent of total M&O costs; and 2) the revised DSC covenants after 2002 have served REU well, however, they leave REU's customers exposed to a concern of possible significant rate changes under certain circumstances. The events in 2006-2008 that preceded the need for consecutive 7.84 percent rate increases were unique, but these circumstances exposed a weakness that the Policy is intended to address.

5. Recommended Debt Service Coverage Policies

As described above, REU has historically managed its financial profile primarily by focusing on the balance of Reserves, but the Policy recommends managing primarily to DSC while maintaining a focus on Reserves as well. The Policy is intended to facilitate that by advising on policy levels for DSC intended to accomplish REU's revised management goals.

Current Rate Covenant

The Current Rate Covenant states that "Pursuant to the Installment Sale Agreement, the City has covenanted to fix, prescribe, and collect rates and charges for services, facilities, and electricity of the Electric System during each Fiscal Year that will be at least sufficient to yield Adjusted Annual Net Revenues for such Fiscal Year equal to at least 110 percent of the Adjusted Annual Debt Service for such Fiscal Year." The Adjusted Annual Revenues definition includes "Available Reserves" that include unrestricted funds in the Electric Revenue Fund. The Rate Covenant acts as a minimum legal requirement but as discussed, does not ensure that the Utility is producing cash flow sufficient to pay costs.

Practical Approach to Debt Service Coverage

A practical minimum DSC is 1.00x Without Reserves because at 1.00x the Utility is paying operating costs and debt service on a cash flow basis. For REU, however, there are below-the-line cash outflows that also should be considered. In 2013, REU generated $24,252,104 of net revenue and had $13,834,475 of debt service and thus produced a 1.75x DSC Without Reserves.

Had REU produced a 1.00x DSC ratio, there would not have been any funds available for two critical below-the-line purposes: 1) In-Lieu of Tax Payment to the General Fund ($6,027,400); or 2) Revenue Funded Capital Investment. This latter item changes from year-to-year but, as a minimum, it makes sense to estimate the amount of capital investment needed to maintain the system (not improve the system) by looking to the amount of depreciation. In 2013, REU had depreciation of $13,548,833. As such, simply to cover costs, REU needed to generate about $33 million in net revenue (~$14 million for debt service, ~$6 million for payment in-lieu, and ~$13 million for capital investment to offset depreciation).

Even at a coverage ratio of 1.75x, REU did not generate $33 million in net revenue. In order for REU to have generated $33 million in net revenue, 2013 would have had to be 2.41x DSC Without Reserves.

Direct Debt Service Coverage Policy

The Policy recommends REU maintain a DSC of 1.80x for direct debt. This level maintains a cushion above the technical 1.10x requirement. At 1.80x DSC, REU can

reliably use cash flow to pay for its operations including the payment in-lieu of tax. The 1.80x DSC would leave adequate cash funding available to invest in general system improvements; however, significant capital improvements or additions would probably have to be financed with debt. This strikes a balance between funding capital through higher rates paid by current customers and funding capital through bond financing paid by future customers.

Full Obligations Coverage Policy

Rating agencies and investors monitor simple DSC ratios but both also monitor the "Full Obligations Coverage Ratio" and "Fixed Obligation Charge Coverage Ratio" that enterprises generate. The concept behind these two ratios is that many enterprises, like REU, have some financial obligations associated with off-balance sheet debt (or debt-like obligations) and transfer obligations to general funds. REU has debt at TANC and M-S-R for which the Utility is obligated and that debt is off-balance sheet. REU also makes a transfer to the General Fund. For REU to calculate a "Full Obligations Coverage Ratio," REU would do the following calculation:

Full Obligations Coverage Ratio = (Net Revenue – In-Lieu of Tax Payment to the General Fund + Off-Balance Sheet Debt Service) / (Debt Service + Off-Balance Sheet Debt Service).

For Fiscal Year 2013, this calculation would be ($24,252,104 - $6,027,400 + $9,741,000) / ($13,834,475 + $9,741,000) = 1.19x.

Tracking the Full Obligations Coverage Ratio is a more laborious and less transparent effort and so the Policy does not set a precise target for this ratio. In general, the Policy recommends that the Full Obligations Coverage Ratio be targeted no less than 1.20x so that all of REU's debt holders (both on- and off-balance sheet) can see ample cash flow to meet the payment obligations that are owed.

Rolling Coverage Using Reserves

The Policy recommends that REU calculate DSC Without Reserves. Although, REU as well as most of its peers (Alameda Municipal Power, Modesto Irrigation District, Palo Alto Combined Utilities, Roseville Electric, Sacramento Municipal Utility District, Silicon Valley Power, Turlock Irrigation District), technically allow for DSC calculation with Reserves (also referred to as with rolling coverage), this ability is only applied in practice for the minority of enterprises for which it is permitted. The use of rolling coverage in calculating DSC is very useful for legal compliance purposes but it is not recommended for operating and financial management purposes.

6. Recommended Reserve Policy

REU's practice of sizing the Reserves in aggregate has served REU well over the years, and REU should continue to maintain this practice.

Reserves are important to the Utility for a variety of reasons including the following:

- Helps ensure cash exists for timely payment of bills.
- Maintains the short-term and long-term financial health of the Utility.
- Helps to maintain stable rates for customers.
- Funds unanticipated cost contingencies.
- Helps ensure funds exist for system improvements.
- Significant factor in bond ratings.
- Helps identify when financing should be procured.
- Helps identify the need for rate actions.

The most common approach to sizing Reserves is by number of days of expenses. Public power utilities of roughly the equivalent size to REU typically have Reserves of at least 90-180 days. The former 20-30 percent target band amounts to 75-100 days of expenses and is an appropriate bare minimum range given the size of the Utility's revenue base. Reserves of approximately 150 Days' Cash would be more typical for A1/A+ rated utilities and would be more appropriate to match the risks that REU manages.

As part of drafting the Policy, REU and its financial advisors took a closer look at the funds that REU holds and at some of the risk categories that REU faces.

Operating Risk Management

REU uses Reserves to handle fluctuations and adjustments in every day expenses including: power purchases, natural gas purchases, Joint Power Agency (JPA) cash calls, operating materials and supplies, payroll, revenue funded capital, in-lieu, etc.

It is recommended that REU maintain approximately 45 days' worth of Operating Expenses as one subcomponent of the Reserves (approximately $13 million for the current budget). Such Reserves would, amongst other things, be intended to cover timing issues with regard to payments (e.g., Accounts Receivable in the summer months), fluctuations in purchased power costs, fluctuations in natural gas prices (and inventories), and other operational issues. REU can experience $8-15 million fluctuations in cash balances within a year simply as a result of the timing of revenues and expenses (particularly driven by the seasonality of sales). Some of the fluctuations REU needs to anticipate managing may not necessarily be "costs," but may nevertheless impact the availability of funds. For example, REU has in the past been required to post almost $10 million of cash as margin for contracts. In consideration of these fluctuations in cost and cash requirement, 45 Days' Cash for regular operation management is a modest first component of the recommended Reserves.

It is also recommended that REU reserve funds for increased costs for the system that are significant and not purely timing related. The two primary exposures are hydroelectric conditions and unanticipated outages.

- REU cannot control, hedge, or predict hydroelectric conditions that have a significant impact on the system. Costs associated with a "dry" vs. "normal" vs. "wet year" can have a $4-8 million annual impact on Net Revenues. REU should set aside Reserves equivalent to at least 20 Days' Cash for such unfavorable hydroelectric conditions.

- An unanticipated resource outage (generator, transmission line, power sales contract, resource, etc.) can also create significant increases in cost for REU. Depending upon the duration of an outage, the cost impact to REU could easily be $2 million to replace this lost resource. REU should set aside Reserves equivalent to at least 10 Days' Cash for purchased power costs associated with unanticipated resource outages.

In total, it is recommended that the Reserves sized for operating risk management be targeted to at least 75 Days' Cash.

System Critical Failure

REU should consider maintaining a portion of the Reserves that is for a single emergency event (e.g., turbine failure, substation fire, etc.). Such amount should equal approximately $5 million and could be used for unanticipated events that require immediate payment. REU estimates that single emergency events could easily have a cost of $10 million.

In total, it is recommended that the Reserves set aside for system critical failure is equivalent to at least 30 Days' Cash.

Rate Stabilization

In addition to addressing managing operating and maintenance issues, Reserves serve two other important purposes for REU's stakeholders: 1) Reserves act as a shock absorber for REU's ratepayers; and 2) Reserves offer security to REU's debt holders. If an unusual financial or operating event leaves REU short of cash, Reserves can be used to avoid an immediate increase in rates to cover the shortfall.

Reserves sized for rate stabilization also afford security in meeting REU's bond covenants in regard to the minimum DSC. In the 1990s, REU's practice was to maintain a portion of Reserves sized equal to REU's maximum annual debt service for any current or future year. Keeping some Reserves for rate stabilization would allow REU to ensure that under virtually no circumstance would the Utility face an Event of Default situation within a single year, and that the City Council would have the year to contemplate ways to prevent investors from enforcing rate actions on REU's customers.

For such reasons, it is advisable that REU target Reserves sized for rate stabilization at REU's maximum annual debt service for any current or future year that is equivalent to 45 Days' Cash.

Other Uses for Reserves

The aforementioned categories are those that most clearly merit the allocation of Reserves, but those are by no means the only categories of financial exposure that REU needs to manage with Reserves. REU has significant Pension and Other Post-Employment Benefit liabilities that could generate a cash requirement. REU is planning for the decommissioning of the San Juan Generating Station that will involve a yet-to-be-determined cost. Other risk categories such as interest rate exposure are relatively small and do not need to be reserved for separately, but are real risks to the Utility and those risks would be managed with Reserves.

Reserve Policy

Based upon current conditions and recent results, these recommendations would suggest that the following would be the appropriate Reserves for REU:

- Operating Risk Management: 75 Days' Cash
- System Critical Failure: 30 Days' Cash
- Rate Stabilization: 45 Days' Cash
- Total Reserves: 150 Days' Cash

While these areas of consideration were evaluated in order to conceptualize the appropriate size of the Reserves, REU intends to maintain a single Reserve without separate buckets. These Reserve allocations are neither abnormally high nor low for industry standards or for REU's peer utilities. Each component of the Reserves is sized at less than the maximum possible exposure to REU for each component because there is a recognition that it is unlikely that several of the risks REU faces would materialize simultaneously. For a similar reason, REU has identified and targeted only the more significant and discrete risks that the Utility faces without reserving for the smaller or less likely risks.

Building and Drawing Upon Reserves

REU is targeting Reserves of 150 Days' Cash, however, it is not REU's intention to set rates to maintain Reserves equal to 150 Days' Cash. The purpose of Reserves is to address the financial impacts of revenue and expense fluctuations and unanticipated events. As such, REU would allow Reserves to increase or decrease as necessary within limits. In particular, REU considers 75 Days' Cash to be the practical critical minimum Reserve balance and considers 180 Days' Cash to be the practical maximum. Reserves below 75 Days' Cash would leave REU exposed to significant operational risks, and Reserves above 180 Days' Cash would be in excess of REU's 150 Days' Cash target

while affording a small cushion relative to the prudent target level. The general philosophy of the proposed range is that REU should target 150 Days' Cash, should tolerate Reserves slightly higher (180 Days' Cash) than the target 150 Days' Cash, and should be willing to absorb significant decreases in Reserves except to the extent that Reserves are budgeted/projected to be below the critical minimum of 75 Days' Cash.

REU's Reserves would increase or decrease depending upon many factors for a given year; however, to the extent that REU achieves the DSC Policy target of 1.80x, REU's Reserves would remain fairly stable. Reserves would increase or decrease under the following conditions:

- Net Revenues Available for Debt Service are higher or lower than budgeted/projected as a result of higher or lower Revenues and Expenses.
- Debt Service is higher or lower than budgeted/projected.
- Payment in-lieu of taxes is higher or lower than budgeted/projected.
- Capital investment in the system from Net Revenues is higher or lower than budgeted/projected.
- Debt issued for capital investment is greater or less than budgeted/projected.

7. Interaction Between Coverage, Reserves, and Rates

The intent of the Policy is to provide guidelines for prudently managing the financial profile of the Utility. It is not the intent of the Policy to support higher than necessary rates or to unnecessarily withhold Reserves from being returned to the customers in the form of lower rates. For reasons described in sections above, the Policy targets 1.80x DSC Without Reserves and targets Reserves sized at 150 Days' Cash. However, the Policy anticipates that in practice there is a range of acceptable results and a balance between cash flow and reserve levels is warranted. As was the case for the former Reserves Policy, the Policy recommends that the City Council consider different rate adjustments under different conditions.

A rate increase should be considered if any of the following conditions (the "Rate Increase Conditions") are projected in the five-year forecast:

- DSC Without Reserves will be less than 1.80x.
- End-of-year Reserves will be less than 75 Days' Cash.
- Any rate increase would be greater than six percent.
- A major expenditure is expected.

Rate increases indicated by the above conditions that would exceed six percent in any one year can be spread over multiple years provided that doing so does not reduce Reserves in any forecast year below 100 Days' Cash.

No rate increase should be considered if DSC Without Reserves is projected (for both years in the two-year budget) to be greater than 1.00x and Reserves (for both years in the two-year budget) are projected to be greater than 180 Days' Cash.

A rate decrease may be considered if none of the Rate Increase Conditions discussed above are projected, and if all of the following three conditions are projected in the five-year forecast:

- DSC Without Reserves will be greater than 2.00x.
- End-of-year Reserves will be greater than 180 Days' Cash.
- No rate increase would be greater than three percent (after accounting for any rate decrease under consideration).

Lastly, it is important to note that recommendations in the Policy are associated with projected financial conditions for Fiscal Year End of future years. Actual results will vary based on weather, market conditions, etc. In addition, Reserves and cash flow may be more or less robust within a Fiscal Year, relative to the Fiscal Year End but considering such fluctuations within a year would overly complicate monitoring with only marginal benefit.

8. Definitions

Adjusted Annual Revenues – Net Revenues plus the amount of Available Reserves.

Available Reserves – The amount of Unrestricted Reserves in the Electric Revenue Fund. Also known as "Reserves."

Days' Cash – Unrestricted Reserves for a given Fiscal Year divided by a ratio equal to M&O Expenses for the same Fiscal Year divided by 365, calculated thus as Unrestricted Reserves/(M&O Expenses/365) .

Debt Service Coverage – Adjusted Annual Revenues for a given Fiscal Year divided by Debt Service for the same Fiscal Year.

DSC Without Reserves – Net Revenues for a given Fiscal Year divided by Debt Service for the same Fiscal Year.

Full Obligations Coverage Ratio – (Net Revenue – In-Lieu of Tax Payment to the General Fund + Off-Balance Sheet Debt Service) / (Debt Service + Off-Balance Sheet Debt Service). The Full Obligations Coverage Ratio also is referred to with different terms by different rating agencies (e.g., Moody's calls this ratio "Fixed Obligation Charge Coverage Ratio").

Maintenance and Operation Expenses (M&O Expenses) – The following costs (but not exclusive of other costs): (a) all costs of electric energy and power generated or purchased, costs of transmission, fuel supply and water supply in connection with the foregoing; (b) all expenses of management and repair and other expenses necessary to maintain and preserve the Utility in good repair and working order; (c) all administrative costs that are charged directly or apportioned to the operation of the Utility such as salaries, wages, and benefits of employees, overhead, and insurance premiums; (d) transfers to Major Maintenance and Rolling Stock; (e) any other cost or expense that, in accordance with Generally Accepted Accounting Principles, is to be treated as a cost of operating or maintaining the Utility, but excluding in all cases depreciation, replacement, and obsolescence charges or Reserves therefore and amortization of intangibles, the payment in-lieu of taxes, and any capital investment.

Net Revenues – Revenues less the M&O Expenses.

Reserves – The amount of Unrestricted Reserves in the electric revenue fund. Also known as "Available Reserves."

Revenues – All gross income and revenue received or receivable by the City from the ownership or operation of the Utility, including all rates and charges received by the City for the Utility and the other services and facilities of the Utility, all proceeds of insurance covering business interruption loss relating to the Utility, and all other income and revenue howsoever derived by the City from the ownership or operation of the Utility or

otherwise arising from the Utility, but excluding refundable deposits made to establish credit and advances or contributions in aid of construction and line extension fees.

Unrestricted Reserves – Total Cash Reserves less funds set aside for various purposes including, but not limited to: deposits, long-term maintenance funds, rolling stock funds, restricted revenues, encumbrances, accrued principal and interest payable on REU's direct debt obligations, and any proceeds of a bond issue except to the extent that such proceeds are intended and permitted to be used to fund Reserves. Also referred to as "Available Reserves" or "Reserves."

9. Conclusion

The Policy was drafted with the intent of providing the EUC review and the City Council approve guiding directives to REU management and staff for decisions and recommendations related to the financial profile of the Utility, and is intended to support REU's mission statement for the benefit of present and future generations of customers.

The Policy is a fairly incremental change from the Reserves Policy established in 1989. Relative to the Reserves Policy, the Policy clarifies and adjusts targets for cash flows available for debt service (previously essentially 1.20x DSC Without Reserves), and adjusts targets for sizing of Reserves (previously essentially 75-90 Days' Cash). The Policy also attempts to better define relevant reference terms associated with REU's targets.

In its most abbreviated form, the Policy targets 1.80x DSC Without Reserves, targets Unrestricted Reserves sized at 150 Days' Cash, establishes ranges around those targets, and suggests that REU also attempt to monitor the Total Debt Obligations Coverage Ratio that incorporates off-balance sheet debt. The Policy also provides recommended conditions for rate actions when cash flows and/or Reserves deviate from the targets.

If followed, it is expected that the Policy will enable REU to maintain an A2/A category rating and to make a strong case for an A1/A+ category rating.

The Policy is intended to be revisited and updated periodically if there is a material change in the risk exposures or conditions.

Finally, and perhaps most importantly, the Policy is ultimately intended to serve as a guide and it in no way restricts the ability of the City Council to review proposed rate actions, debt issuances, or other actions of substance to the Utility.

10. Appendix I – Peer Utility Financial Management and Reserves

Peer Utility Comparables (Data from Fitch Ratings for 2013)								
Utility	Redding Electric Utility	Alameda Municipal Power	Modesto Irrigation District	Palo Alto Combined Utilities	Roseville Electric	Sacramento Municipal Utility District	Silicon Valley Power	Turlock Irrigation District
Ratings (M/S/F)	A2/ /A	/A+/A+	A2/A+/A	Aa2/AAA/	A2/A+/A+	A1/AA-/A+	A1/A+/A+	A2/AA-/A+
Total Revenues ($000)	160,294	56,044	366,601	111,624	159,002	1,428,395	298,751	350,395
Retail Electric Customers	43,551	34,405	113,931	29,684	54,948	610,185	52,904	100,271
Total Debt ($000)	159,001	31,147	557,493	84,000*	248,496	3,048,222	199,676	1,209,812
Debt Service Coverage (x)	2.06	4.27	1.71	10.50*	2.61	1.65	1.05	1.38
Coverage of Full Obligations (x)	1.60	1.40	1.38	4.60*	1.27	1.47	1.00	1.31
Days' Cash on Hand	113	244	239	500*	166	232	244	261

*Combined utilities (electric, gas, water, wastewater, and storm water).

11. Appendix II – Rating Agency Approach, Metrics, and Medians

While all three rating agencies take a different approach to assigning credit ratings, all heavily weigh a utility's financial strength in determining a credit rating and in its evaluation of financial strength DSC and Days' Cash on hand feature heavily. All three rating agencies look at on-balance sheet as well as off-balance sheet debt like obligations in determining DSC ratios. Since REU is rated by both Moody's and Fitch, included are discussions of their methodologies.

Moody's Investors Service

Of the three rating agencies, Moody's has the most formulaic way of assigning ratings. Financial Strength (Rating Factor 5) is given a weight of 30 percent in its methodology. Of this 30 percent, one-third of the weight is given to the Adjusted DSC or Fixed Obligation Charge Coverage Ratio.

Adjusted DSC Ratio – Moody's makes a standard adjustment to the traditional DSC ratio called the "Adjusted Debt Service Coverage Ratio," which recognizes that most public power utilities transfer a portion of their surplus revenues to a municipal government, typically to a city or county at an agreed upon level. Moody's Adjusted DSC Ratio treats the transfer as an operating expense, whereas the traditional or bond ordinance DSC ratio does not. The proposed REU Policy also uses this calculation.

Fixed Obligation Charge Coverage Ratio – When applicable, Moody's makes another adjustment to the adjusted DSC ratio to incorporate "debt like" obligations related to the ownership of generation assets through JPA under take-or-pay contracts. This new adjusted ratio is called the "Fixed Obligation Charge Coverage Ratio."

Adjusted Debt Service Coverage or Fixed Obligation Charge Coverage Ratio (3 year average) (x) (10% weight)				
Aaa	Aa	A	Baa	Ba
More than 2.50x	2.00 to 2.49x	1.50 to 1.99x	1.10 to 1.49x	Below 1.10 x

For "A" category ratings these metrics fall between 1.50x and 2.00x.

Of the 30 percent weight given to Financial Strength (Rating Factor 5), one-third of the weight is given to the Adjusted Days Liquidity on Hand Ratio (which is almost identical to Days' Cash).

Adjusted Days Liquidity on Hand Ratio – The assessment of liquidity is a key element in the financial analysis of public power electric utilities, and includes the ability to generate cash from internal sources, as well as accounting for the availability of external sources of liquidity. The sources of funds are compared to the Utility's operating cash flow needs over the next year and beyond. This assessment considers the ability to pass through costs that tend to be an immediate drain on liquidity, including fuel and purchased power costs.

Adjusted Days Liquidity on Hand (3 year average) (days) – (10% weight)				
Aaa	Aa	A	Baa	Ba
More than 250 days	150 days to less than 249 days	90 days to 149 days	30 days to 89 days	less than 30 days

For "A" category ratings this metric falls between 90 to 150 days.

Fitch Ratings

Fitch takes a less rigid approach when it comes to its ratings.

Cash Flow – Cash flow indicators, particularly as they pertain to DSC, provide a measure of financial cushion to meet obligations to bondholders. Fitch primarily considers two measures of DSC to compare utilities that own generation versus purchase power. The standard DSC ratio measuring funds available for debt service to total debt service applies to all utilities.

Liquidity – Liquidity measures, such as Days' Cash on hand and days liquidity on hand, provide an estimate of an issuer's ability to meet unplanned operating or other capital expenses. Certain utilities, including many cooperatives, rely heavily on committed bank revolvers or lines of credit and commercial paper programs for access to short-term capital. As such, days liquidity on hand, reflecting undrawn short-term borrowing arrangements and unused commercial paper capacity, is also an important measure of financial flexibility. Fitch assesses the diversity and credit quality of liquidity providers, the ability to extend and replace bank agreements, the adequacy and terms of the liquidity support, and a borrower's short-term market access.

Attributes: Select Financial Metrics — Retail Systems		
Debt Service Coverage	Coverage of Full Obligations	Days' Cash on Hand
Stronger		
Coverage of consistently more than 2.0x provides solid cash flow and bondholder protection.	Coverage of consistently more than 1.5x provides solid cash flow and bondholder protection.	More than 120 Days' Cash on hand indicates solid financial flexibility to meet unforeseen spending needs.
Midrange		
Many utilities target coverage in the 1.5x–2.0x range.	Many utilities target coverage in the 1.2x–1.5x range.	Many retail systems target approximately 60–120 days operating cash.
Weaker		
Consistently less than 1.5x coverage provides limited cushion for unexpected revenue shortfalls.	Consistently less than 1.2x coverage provides limited cushion for unexpected revenue shortfalls.	Less than 60 Days' Cash indicates less financial flexibility, but can be adequate if a system is subject to less cash flow volatility.

Midrange rated credits fall between 1.50x – 2.00x DSC and 1.20x – 1.50x full obligations coverage, and 60-120 days of Days' Cash on hand.