

## **AGENDA**

CITY COUNCIL OF THE CITY OF MORENO VALLEY
MORENO VALLEY COMMUNITY SERVICES DISTRICT
CITY AS SUCCESSOR AGENCY FOR THE
COMMUNITY REDEVELOPMENT AGENCY OF THE CITY OF
MORENO VALLEY
MORENO VALLEY HOUSING AUTHORITY

June 4, 2013

STUDY SESSION - 6:00 P.M.

**City Council Study Sessions** 

First & Third Tuesdays of each month – 6:00 p.m.

**City Council Meetings** 

Second & Fourth Tuesdays of each month – 6:00 p.m.

**City Council Closed Session** 

Immediately following Regular City Council Meetings and Study Sessions, unless no Closed Session Items are Scheduled

## City Hall Council Chamber - 14177 Frederick Street

Upon request, this agenda will be made available in appropriate alternative formats to persons with disabilities, in compliance with the Americans with Disabilities Act of 1990. Any person with a disability who requires a modification or accommodation in order to participate in a meeting should direct such request to Mel Alonzo, ADA Coordinator at 951.413.3705 at least 48 hours before the meeting. The 48-hour notification will enable the City to make reasonable arrangements to ensure accessibility to this meeting.

Tom Owings, Mayor

Marcelo Co, Mayor Pro Tem Jesse L. Molina, Council Member Richard A. Stewart, Council Member Victoria Baca, Council Member

#### **AGENDA**

# CITY COUNCIL OF THE CITY OF MORENO VALLEY MORENO VALLEY COMMUNITY SERVICES DISTRICT CITY AS SUCCESSOR AGENCY FOR THE COMMUNITY REDEVELOPMENT AGENCY OF THE CITY OF MORENO VALLEY MORENO VALLEY HOUSING AUTHORITY

#### \*THE CITY COUNCIL RECEIVES A SEPARATE STIPEND FOR CSD MEETINGS

STUDY SESSION - 6:00 PM JUNE 4, 2013

CALL TO ORDER

PLEDGE OF ALLEGIANCE

**INVOCATION** 

**ROLL CALL** 

**INTRODUCTIONS** 

## PUBLIC COMMENTS ON MATTERS UNDER THE JURISDICTION OF THE CITY COUNCIL

There is a three-minute time limit per person. Please complete and submit a BLUE speaker slip to the City Clerk. All remarks and questions shall be addressed to the presiding officer or to the City Council and not to any individual Council Member, staff member or other person.

#### SPECIAL ORDER OF BUSINESS

- 1. PRESENTATION OF LONG TERM FINANCIAL CHALLENGES ISSUES AFFECTING GENERAL FUND RESERVES (STAFF REPORT/POWERPOINT) (FMS/20 MIN)
- 2. INTRODUCTION OF MVU 10 YEAR RESOURCE PLAN (POWERPOINT) (PW/20 MINS)
- CITY COUNCIL REQUESTS AND COMMUNICATIONS

AGENDA June 4, 2013 (Times shown are only estimates for staff presentation. Items may be deferred by Council if time does not permit full review.)

Oral Presentation only – No written material provided

\*Materials related to an item on this Agenda submitted to the City Council/Community Services District/City as Successor Agency for the Community Redevelopment Agency/Housing Authority after distribution of the agenda packet are available for public inspection in the City Clerk's office at 14177 Frederick Street during normal business hours.

#### **CLOSED SESSION**

A Closed Session of the City Council, Community Services District, City as Successor Agency for the Community Redevelopment Agency of the City of Moreno Valley or Housing Authority will be held in Conference Room C, First Floor, City Hall. The City Council will meet in Closed Session to confer with its legal counsel regarding the following matter(s) and any additional matter(s) publicly and orally announced by the City Attorney in the Council Chamber at the time of convening the Closed Session.

• PUBLIC COMMENTS ON MATTERS ON THE CLOSED SESSION AGENDA UNDER THE JURISDICTION OF THE CITY COUNCIL

There is a three-minute time limit per person. Please complete and submit a BLUE speaker slip to the City Clerk. All remarks and questions shall be addressed to the presiding officer or to the City Council and not to any individual Council member, staff member or other person.

The Closed Session will be held pursuant to Government Code:

1 SIGNIFICANT EXPOSURE TO LITIGATION PURSUANT TO PARAGRAPH (2) OR (3) OF SUBDIVISION (D) OF SECTION 54956.9

Number of Cases: 5

2 SECTION 54956.9(d)(4) - CONFERENCE WITH LEGAL COUNSEL - INITIATION OF LITIGATION

Number of Cases: 5

#### REPORT OF ACTION FROM CLOSED SESSION, IF ANY, BY CITY ATTORNEY

#### ADJOURNMENT

#### **CERTIFICATION**

I, Jane Halstead, City Clerk of the City of Moreno Valley, California, certify that the City Council Agenda was posted in the following places pursuant to City of Moreno Valley Resolution No. 2007-40:

City Hall, City of Moreno Valley 14177 Frederick Street

AGENDA June 4, 2013 Moreno Valley Library 25480 Alessandro Boulevard

Moreno Valley Senior/Community Center 25075 Fir Avenue

Jane Halstead, CMC, City Clerk

Date Posted: May 29, 2013

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APPRO	DVALS
BUDGET OFFICER	<budgetofficer></budgetofficer>
CITY ATTORNEY	<cityattorney></cityattorney>
CITY MANAGER	<citymanager></citymanager>
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## Report to City Council

TO: Mayor and City Council

FROM: Richard Teichert, Chief Financial Officer

**AGENDA DATE:** June 4, 2013

TITLE: LONG TERM FINANCIAL CHALLENGES - POTENTIAL ISSUES

AFFECTING GENERAL FUND RESERVES

#### **RECOMMENDED ACTION**

Recommendations: That the City Council:

1. Receive the presentation and provide direction as necessary.

#### ADVISORY BOARD/COMMISSION RECOMMENDATION

N/A

#### **BACKGROUND**

The City Council has requested a series of study session topics that explore the City's long term financial challenges. This presentation, on potential financial issues that may impact the General Fund, will complete the requested topics.

The General Fund has experienced structural deficits for several budget cycles. These deficits have significantly reduced the fund balance as one time monies were used to close the gap. Specific background details have been presented in several recent forums and are addressed in the proposed two year budget for FY 13/14 and FY 14/15. The purpose of this presentation is to discuss potential impacts on the General Fund fund balance that may occur as a result of activity in other funds. The General Fund acts as a final backstop if sufficient resources are not available for expenditures reported in the various fund types used to account for the City's financial activities.

#### **DISCUSSION**

The General Fund fund balance is comprised of several components. The total balance projected at the end of FY 2012/13 is \$34.4 million. Of that amount \$22.7 is considered unassigned and is available for whatever use is deemed appropriate by City Council action. Primarily, with the fund balance having been drawn down significantly during the past four years, the remaining fund balance is needed for working capital (cash flow) purposes and to address unexpected emergencies that the City must be prepared to mitigate. The remaining \$11.7 million is either reserved or designated for specific purposes.

The unassigned balance serves as the General Fund operating and emergency reserve. It provides cash flow during the first six months of the year and provides for unexpected or unfunded expenditures that occur. This may also mean that General Fund resources are advanced to pay for expenditures in other funds when resources are not sufficient or available. In this regard the General Fund acts as the final backstop for City financial activity. Examples of payments that may require General Fund assistance are debt service, liabilities that have not been funded as they accrue or annual operating impacts in other funds that have insufficient funding. The budget process has discussed the latter issue in some detail. This report will focus primarily on debt service and unfunded liabilities.

The fund types that contain potential future impacts on the General Fund include: Internal Service Funds (ISFs), Development Impact Funds (DIFs), Community Service District Zone A (Zone A) and the Electric Utility Fund (MVU). In addition there are known unfunded liabilities that will be discussed and recommended for ISF treatment in order to begin the accumulation of resources to pay for future costs.

The ISFs are a group of funds created to charge fees to operating funds to accumulate resources to pay for the operating costs and replacement of activities that are shared citywide. These include such activities as Technology Services, Equipment and Facilities and Insurances. The primary exposure to the General Fund at this time is the potential operating expenditure impact that may occur as the allocation of these common costs are studied. Recent analysis has been underway to look at the fund balances in the ISFs to determine their sufficiency. Preliminary results indicate that although some reallocation is necessary there is little expectation that reserves exist that are not required for the purpose they have been set aside. A cost allocation study is currently in the planning stages to review and create new models for the allocation of each of these cost centers. Staff will bring the results of this study and any budget impacts to City Council at the completion of the project, which is expected before midyear FY 2013/14.

The DIFs are funds created to account for revenues and expenditures of payments required of new development to pay for impacts on existing City infrastructure. There are currently four of these funds that may impact the General Fund. The first is the police facility DIF. It has a negative fund balance projected to be approximately \$3 million at the end of FY 12/13. This has resulted from annual debt service payments on

a debt issuance that was used to upgrade the City's police facility. Unfortunately the expected amounts of DIF have not been realized due to slowdown in development. Therefore, the annual debt payments of approximately \$650,000 have been creating the negative balance. The General Fund will ultimately be responsible for these amounts to the extent future DIF payments are insufficient. Currently the cash flow for these payments is provided by the General Fund. A negative fund balance of approximately \$160,000 exists for the animal shelter DIF. This occurred when a parcel of land was purchased adjacent to the existing shelter facility to provide for possible future expansion needs. Again, absent future DIF payments this will be a General Fund responsibility. Finally, two DIF balances were loaned to provide funding for street related capital projects. The Library and Corporate Yard DIFs provided \$4 million and \$2.5 million respectively. The intended repayment source is Gas Tax funds, Measure A funds and available DIF funds for arterial streets. However, if for any reason sufficient funds are not available in a timely fashion, the General Fund will have to provide the repayment.

Staff intends to bring current loan agreements to the City Council this month to reaffirm each of these DIF funding arrangements.

Unfunded liabilities are potentially the greatest threat to the General Fund due to the fact that there is no specific mechanism in place to provide for their funding. Although the amounts are calculated and reported in annual financial reports, the City has not set up an ongoing method to fund them. The primary liability for consideration is unfunded compensated leave balances for employees. The current amount for the General Fund is approximately \$5 million. There are similar potential impacts in other operating funds of the City. Currently, leave payouts are paid for on a pay as you go basis when employees leave employment. This has impacts on the fund balances. Best practices for financial planning would suggest that the City attempt to fund these liabilities as they occur. If this had been done the General Fund unassigned balance would be \$5 million less. Staff is recommending that an ISF be created to begin collecting ongoing payments from funds to accumulate the necessary resources. This will provide financial stability for the City in the long term with many benefits to this strategy in the future.

There are three final areas that have been identified as having potential impacts on the General Fund. First is the situation where any fund may deficit-spend and not have sufficient resources. An example of this has been identified in the proposed budget. Zone A provides Parks and Recreation services to residents. The next two year budget contains proposed deficits of approximately \$400K/year. Although staff intends to revisit the Zone A budget during the coming months and recommend deficit reductions, the General Fund could be responsible for any overspending that may remain. As has been discussed in the proposed budget, the General Fund already provides some funding assistance to Zone A and other funds. Another example of an impact that can affect the General Fund has already been set aside in the General Fund reserves. There is \$2.6 million available to help with working capital requirements of the City's Electric Utility if necessary after a required payment is made in January 2014. This payment to the City's contract operator, ENCO, will seriously deplete the existing utility cash position.

This is a perfect example when General Fund balances act as a backstop for City activities occurring in other funds. Although the intent will be to repay any funds needed, the balances will not be available for other potential General Fund uses.

Finally, there has been a trend during the severe actions taken to alleviate the General Fund deficit to shift employees and other expenditures to other funds consistent with statutory provisions. Although this helped maintain services, it has created some potential future difficulties. The most obvious example of this has been the transfer of expenditures to the Gas Tax and Measure A funds. These funds are special revenue funds that provide for ongoing street maintenance and construction projects. The ability to perform maintenance and provide project funding has been reduced. Eventually deferred maintenance issues may be required to be funded by the General Fund. The actual impacts or amounts have not been estimated at this time. Future analysis will be required to determine long range funding for these issues.

## **ALTERNATIVES**

N/A

#### **FISCAL IMPACT**

This study session will not create any specific fiscal impact.

## **ATTACHMENTS**

Attachment 1 – PowerPoint presentation on potential General fund impacts.

Prepared By: Richard Teichert Chief Financial Officer/City Treasurer

Council Action		
Approved as requested:	Referred to:	
Approved as amended:	For:	
Denied:	Continued until:	
Other:	Hearing set for:	



# CITY OF MORENO VALLEY

# Issues Affecting General Fund Balance City Council Study Session

June 4, 2013

# **Budget Information Meetings**

March 5, 2013	Slow Growth in Major General Fund Revenue Sources
March 19, 2013	Annual Increases in Public Safety Costs
April 2, 2013	Unfunded Liabilities – Public Employees' Retirement
	System and Retiree Medical
April 30, 2013	Presentation of the General Fund Budget
May 7, 2013	Presentation of Non-General Fund Budgets
May 13-18, 2013	Council District Budget Presentations
May 21, 2013	Presentation of Capital Improvement Program
June 4, 2013	Increased Demands on General Fund Reserves and
	Unfunded Liabilities
June 11, 2013	Proposed Adoption of the 2-Year Budget and CIP

## **Overview**

- Examine potential impacts of financial issues in various funds and how they may impact the General Fund
- General Fund has structural deficit issues and acts as the final backstop for other funds
- Issues to be discussed involve:
  - operating impacts, debt service payments, unfunded liabilities, and the policies involved in the ultimate use of fund balances

## **General Fund**

- General Fund has structural operating deficit that impacts fund balance
- FY 12-13 deficit estimated to be \$6.5 million
  - Unassigned fund balance will reduce to \$22.7 million
- FY 13-14 proposed budget is balanced
- FY 14-15 is projected to have a \$1 million deficit

Department/Fund	Projected Fund Balance June 30, 2013	Projected Fund Balance June 30, 2014
General Fund		
1010 GENERAL FUND	22,748,180	22,814,577

## **General Fund**

- Fund balance has been used since FY 08-09 in the amount of \$23 million to offset deficit spending
- The General Fund interacts with many other funds' financial activity
- The General Fund is the ultimate backstop for needs in funds without the resources to pay

# **General Fund**

## Reserve Summary

	Y 2012/13 Projected Balance
General Fund	
Unassigned	22,748,180
Nonspendable: Notes and Loans	5,330,589
Restricted For Debt Service	1,000,000
Committed To Revolving Line of Credit	2,600,000
Assigned To GASB 31, Cont. Approporiations, Other (est.)	2,721,655
Total Fund Balance	\$ 34,400,424

## **Other Funds**

- City has over 100 separate Funds
- Internal Service Funds
  - These funds receive allocated amounts from operating accounts to provide services and equipment replacement
- Development Impact Funds
  - These funds collect payments for the impacts of new development
- CSD Zone A
  - This is the major fund in the Community Service Districts that provides parks and recreation to residents

## **Other Funds**

- Electric Utility Fund
  - Enterprise Fund created to account for the City's electric utility
- Impact of unfunded compensated absences and other unfunded liabilities on all operating funds

- Funds are paid to the various ISFs based on cost allocations methods
- There is a need to complete a new cost allocation
  - The selection process for a consultant is in process
- Cost allocations may increase or decrease which could affect the annual expenditure budgets
- Funds currently being analyzed:
  - Technology Services
  - Equipment Replacement
  - General Liability Insurance

- Facilities Maintenance
- Workers Comp.

- Technology Services and Facilities Maintenance
  - Balances split between operating and replacement/project reserves
  - Initial analysis indicates that reserves are justified for each fund

Department/Fund	Projected Fund Balance June 30, 2013	Projected Fund Balance June 30, 2014
InternalServiceFunds		
7210 TECHNOLOGY SERVICES	8,190,703	7,396,777
7310 FACILITIES MAINTENANCE	12,033,134	11,704,710

- Equipment and Facilities Replacement Reserves
  - Under analysis to determine amounts specifically associated with existing equipment and facilities
  - Existing reserves are sufficient to cover accumulated depreciation

Department/Fund	Projected Fund Balance June 30, 2013	Projected Fund Balance June 30, 2014
InternalServiceFunds		
7410 EQUIPMENT MAINTENANCE	117,779	126,950
7510 EQUIPT REPLACEMENT RESERVE	20,306,797	21,092,599

- General Liability and Workers Comp
  - A cost allocation study will be completed in FY 2013/14
  - Fund balance analysis in process

Department/Fund	Projected Fund Balance June 30, 2013	Projected Fund Balance June 30, 2014
InternalServiceFunds		
7010 GENERAL LIABILITY INSURANCE	48,050	(630,639)
7110 WORKERS' COMPENSATION	2,074,466	2,156,881

- Unfunded compensated absences
  - Include compensated leave balances and future post-retirement benefits
  - Currently funded on a pay-as-you-go basis
  - Possible new ISF being considered
  - The General fund has an exposure of approx. \$5 million
  - Each time a payout is required it affects the fund balance

## **Development Impact Fees (DIF)**

- Development Impact Funds collect revenues
   associated with payments made to offset the impacts
   of new development
- These Special Revenue Funds are controlled by State Law (AB 1600)

## **Development Impact Fees (DIF)**

- Police Facilities and Animal Services DIF
  - The police station upgrade was completed with bond funding
    - Fund balance is approximately \$3 million negative
    - Annual \$650,000 debt service payments
  - Purchased land adjacent to the existing Animal Services facility
    - Fund balance is approximately \$165,000 negative
  - Any insufficiency will be backstopped by the General Fund

Department/Fund	Projected Fund Balance June 30, 2013	Projected Fund Balance June 30, 2014
Special Revenue Fund		
2904 DIF - POLICE	(3,002,717)	(3,681,317)
2913 DIF-ANIMAL SHELTER	(166,424)	(160,324)

## **Development Impact Fees (DIF)**

- Library and Corp Yard DIF
  - Fund balances were loaned to complete street projects
  - The repayment of these amounts (\$4 million to Library and \$2.5 million to Corp Yard) are anticipated to be repaid from street maintenance funds
  - Any amount not repaid would be the responsibility of the General Fund
  - Loans will be brought to City Council in the near future

Department/Fund	Projected Fund Balance June 30, 2013	Projected Fund Balance June 30, 2014
Special Revenue Fund		
2908 DIF-LIBRARY	431,126	529,826
2910 DIF-CORPORATE YARD	88,056	104,556

## **CSD Zone A**

## Zone A

- Largest of the Community Service Districts
- Provides Parks and Recreation services
- The proposed two year budget shows an annual deficit of approximately \$400K per year
- Analysis during this fiscal year will be done to identify alternatives to close the deficits

Department/Fund	Projected Fund Balance June 30, 2013	Projected Fund Balance June 30, 2014
CommunityServicesDistrict		
5011 ZONE A PARKS	2,580,946	2,134,698

## **Gas Tax / Measure A Funds**

- Street maintenance
  - Funding reduced as personnel and normal operating costs have been moved from the General Fund to the Gas Tax and Measure A funds
  - Eventually deferred maintenance issues may be required to be paid by the General Fund
  - Analysis during this fiscal year will be done to examine potential impacts

Department/Fund	Projected Fund Balance June 30, 2013	Projected Fund Balance June 30, 2014
Special Revenue Fund		
2000 GAS TAX	1,354,925	1,246,983
2001 MEASURE A	16,087,434	24,287,033

## **Electric Utility Fund**

- Electric Utility Fund
  - Revenue now sufficient to cover operating costs and debt service
  - Need to establish reserves for replacement and Rate Stabilization as revenues increase
  - Approximately \$2.5 M payment due in January 2014 to ENCO
    - Cash reserves available
    - GF reserves exists (\$2.6 M) for cash flow if needed by MVU

# **Electric Utility Fund**

Department/Fund	Projected Fund Balance June 30, 2013	Projected Fund Balance June 30, 2014
ElectricUtility		
6010 ELECTRIC	3,966,102	6,772,571
6020 2007 TAXABLE LEASE REVENUE BONDS	(1,834,883)	(3,670,027)
6030 2005 LEASE REVENUE BONDS	(318,338)	(641,101)
Reserved for Payment to ENCO	(1,812,881)	(687,119)
Net Fund Balance	-	1,774,324

## **Summary**

- The General Fund has declining fund balances and will be further impacted to the extent that structural deficits are not cured
- Other funds currently have financial issues that may further impact the General Fund
- CA Dept. of Finance continues to impact Successor Agency revenues
- The General Fund available balance is considered minimal for an operating budget of approximately \$78 million
- Deficits and other impacts could place the General Fund in a crisis position

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CITY MANAGER	()
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## Report to City Council

TO: Mayor and City Council

**FROM:** Ahmad R. Ansari, P.E., Public Works Director/City Engineer

**AGENDA DATE:** June 4, 2013

TITLE: INTRODUCTION OF 10-YEAR RESOURCE PLAN

#### **RECOMMENDED ACTION**

Recommendation:

1. Review the proposed Ten-Year Resource Plan for Moreno Valley Utility.

#### **ADVISORY BOARD/COMMISSION RECOMMENDATION**

N/A

### **BACKGROUND**

An electric utility Resource Plan considers future demand for electricity and provides guidance on the optimal mix of energy resources to purchase to meet that demand. The recommended mix of resources is a combination of energy efficiency efforts, demand response programs, renewables, and conventional energy sources. Prudent utility planning calls for the development of Resource Plans that will ensure that the energy needs of a community will be met reliably and affordably.

#### **DISCUSSION**

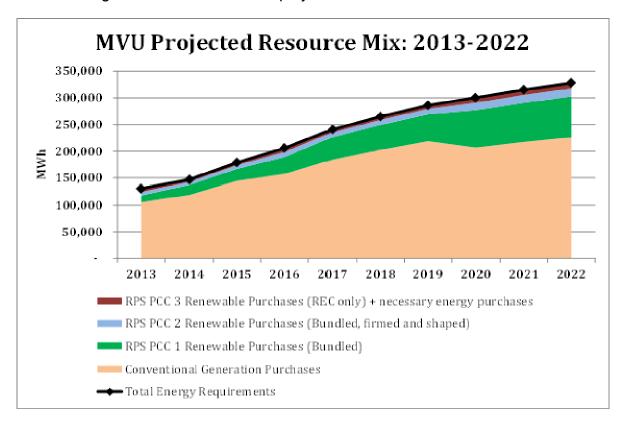
The Resource Plan for Moreno Valley Utility covers a ten-year period, from 2013 – 2022. There are three main goals for the Resource Plan:

Quantify the electric needs over the planning period

- Prioritize resource preferences and establish other relevant energy procurement policies
- Provide guidance on the power procurement process

Development of the Resource Plan starts with a forecast of electric demand (load) over the planning period. Minimum resource planning criteria is identified, such as compliance with mandates for planning reserve margin (firm peak resource capacity in excess of projected demand), and targets for renewable energy procurement and energy efficiency savings. Any existing resources are considered in the determination of additional purchases of energy required to meet the forecasted electric needs. The design of the recommended resource portfolio must take into account the financial requirements of the utility, minimize risk, and honor existing policies to maintain rate competitiveness with Southern California Edison and promote economic development in the City.





MVU's resource portfolio will consist of a combination of power purchase agreements with varying terms and varying start dates. This portfolio risk management approach means that MVU will be seeking low cost power supply and also seeking a diversified portfolio of resources in terms of technologies, production profiles, generation project sizes, project locations, and counterparties in an effort to minimize costs to both the utility and the ratepayers. The renewable portion of the resource portfolio will consist of

longer term contracts from a variety of renewable energy technologies, with the goal of providing cost stability and consistency with MVU's load shape.

#### **ALTERNATIVES**

N/A

#### **FISCAL IMPACT**

This study session will not create any specific fiscal impact. Staff will be seeking approval of the 10-Year Resource Plan on June 11, 2013.

#### CITY COUNCIL GOALS

**Positive Environment**. The diversified portfolio of the City's power supply resources will foster a positive environment and potentially help contribute to the reduction of the State's reliance on fossil-fueled generation.

### **ATTACHMENTS**

Attachment 1: Draft 10-Year Resource Plan

Attachment 2: PowerPoint presentation on the 10-Year Resource Plan

Prepared By: Jeannette Olko Electric Utility Division Manager

Department Head Approval: Ahmad R. Ansari, P.E. Public Works Director/City Engineer

Council Action	
Referred to:	
For:	
Continued until:	
Hearing set for:	

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## Moreno Valley Electric Utility

10-Year Resource Plan – 2013 Update

May 2013 - DRAFT

## Moreno Valley Electric Utility 10-Year Resource Plan: 2013 Update

### Draft: 5-15-2013

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#### **EXECUTIVE SUMMARY**

The Moreno Valley Electric Utility ("MVU" or "Utility") is a California municipal utility that provides retail electric services to more than 5,600 customers within its service area. Over the 10-year planning horizon addressed by this document, the Utility anticipates significant customer and electric load growth resulting from planned development activities within the City, particularly the addition of energy-intensive commercial accounts focused in the logistics and data storage/warehouse industries. This 10-Year Resource Plan (the "Plan" or "Resource Plan") describes MVU's procurement policies related to electric supply, which will promote the delivery of reliable, cost-competitive electric service to Utility customers, as well as key ancillary benefits, during the planning period, which includes calendar years 2013 through 2022.

As discussed in this Plan, there are several noteworthy considerations that will need to be addressed during the 10-year planning period:

- Administration of the Utility's Renewable Energy Resources Procurement Plan ("RE Procurement Plan") will require the evaluation and possible procurement, subject to applicable cost containment provisions, of renewable energy volumes and products specified therein. Effective administration of the RE Procurement Plan will promote MVU's compliance with California's Renewables Portfolio Standard legislation. A copy of the RE Procurement Pan is attached hereto as Appendix B.
- Administration of the Utility's Resource Adequacy ("RA") Program, which specifies the Utility's RA
  procurement targets for the 2013 calendar year and beyond, will require the evaluation and
  procurement of necessary capacity reserves. Successful administration of this Program will likely
  require the completion of a related solicitation by MVU staff to secure specified reserve capacity
  from qualified suppliers. A copy of documentation describing the RA Procurement Program is
  attached hereto as Appendix C.
- Expiring supply agreement: MVU's primary supply agreement with Shell Energy North America ("SENA") will expire on June 30, 2014 the upcoming expiration of this agreement will require the Utility to begin addressing anticipated shortfalls in supply that will occur on July 1, 2014 (and beyond). Due to timelines typically required to identify qualified suppliers and negotiate/approve related supply agreements, MVU should allow up to 12 months for this process. Looking ahead throughout the 10-year planning period, MVU will endeavor to assemble and manage a supply portfolio of various contracts and/or resources (with non-coincidental term expirations/lengths) that will be structured in a manner to avoid the planning and market risks associated with resource "cliffs".
- Development and administration of complimentary energy programs, including energy efficiency, demand response, energy storage and distributed generation. While many details related to these programs have yet to be developed, it is MVU's intent to advance these programs as key components of the Utility's overall resource planning responsibility.

Based on existing supply agreements, MVU projects to serve the following accounts and customer energy requirements during the planning period.

FIGURE ES 1: MORENO VALLEY ELECTRIC UTILITY CUSTOMER ACCOUNTS AND RETAIL ELECTRICITY SALES, 2013-2022

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Total Projected MVU Customer Accounts	5,800	6,000	6,600	7,500	8,300	9,000	9,500	9,800	10,100	10,400
Total Projected MVU Retail Electricity Sales	123,101	138,858	168,574	194,366	227,408	250,149	270,161	283,669	297,852	309,766
Percentage of Accounts w/in Residential Class	88%	88%	88%	87%	87%	87%	87%	87%	87%	87%
Percentage of Retail Sales w/in Residential Class	28%	26%	24%	23%	22%	21%	21%	21%	20%	20%

It is noteworthy that the significant growth reflected in these projections is substantially dependent upon local development activities within the City. Over the 10-year planning horizon, anticipated development is expected to promote a doubling of accounts served by MVU and approximately 250% growth in local electricity sales. These expectations are based on aggressive occupancy projections, which assume that tenant interest will keep pace with local commercial build-out, leaving minimal vacancy rates within new developments. To the extent that planned build-outs and/or commercial occupancy rates differ substantially from expectations, the Utility will need to revise its sales projections to avoid over-procurement.

This Resource Plan also identifies differences between MVU's existing electric supply agreements and anticipated customer energy use. To the extent that such differences represent supply shortfalls, this Plan describes the Utility's procurement policies for addressing these circumstances over the near-, medium- and long-term planning horizons. The following table identifies MVU's projected energy requirements, which have yet to be addressed through purchase agreements – this energy requirement is also referred to as MVU's "open position".

FIGURE ES 2: MORENO VALLEY ELECTRIC UTILITY OPEN POSITIONS BY RESOURCE TYPE, 2013-2022

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Open Position, Conventional Energy (GWh)	12,382	75,097	149,761	164,428	189,544	208,498	225,178	216,050	226,852	235,926
Open Position, Renewable Energy (GWh, Physical Energy Requiremen	18,465	23,563	28,606	41,228	51,075	56,182	60,677	84,098	88,303	91,835
Subtotal: Open Position, Physical Energy (GWh)	30,847	98,661	178,367	205,657	240,618	264,680	285,855	300,147	315,155	327,761
Open Position, Renewable Energy Certificates	6,155	4,158	5,048	7,276	5,675	6,242	6,742	9,344	9,811	10,204
Total: Open Position, All Energy Requirements	37,002	102,819	183,415	212,932	246,293	270,923	292,597	309,492	324,966	337,965
Percentage Open, Conventional Energy	11%	61%	100%	100%	100%	100%	100%	100%	100%	100%
Percentage Open, All Energy (includes renewable energy and certifica	24%	67%	100%	100%	100%	100%	100%	100%	100%	100%

Through the practices and policies discussed in this Plan, MVU will be well positioned to address the ongoing energy requirements of its customers in a deliberate and responsible manner, avoiding the need to engage in disproportionately large procurement arrangements at any single point in time. This Plan will also promote MVU's compliance with internal procurement policies, such as those specifically focused on resource adequacy and renewable energy, as well as legislative mandates and regulatory requirements imposed on the Utility. Going forward, MVU will perform annual reviews of the customer and electric load projections included in this Plan to ensure that such projections accurately build upon observed historical trends and incorporate any changes to planned development activities that may impact future projections.

#### Introduction

MVU is a California municipal utility that provides retail electric services to customers within its service area, which generally includes the southern and eastern portions of the City of Moreno Valley located in northwestern Riverside County. MVU began serving its first customers in February 2004. At present, MVU serves more than 5,600 customers in both the residential and commercial/industrial sectors. MVU is focused on delivering several key benefits to its customers, including rate competitiveness, economic development incentives to attract and retain local businesses, direct control over utility decision making, delivery of special services to customers (such as low income rate assistance and energy efficiency programs) and service reliability. With these benefits in mind, MVU plans for its electric distribution system and secures electric supply commitments from qualified electric service providers to reliably meet its customers' current and anticipated electric energy needs. This 10-Year Resource Plan describes MVU's electric supply procurement policies, resource requirements and preferences, customer programs and other considerations that will apply during the 10-year planning period, which includes calendar years 2013 through 2022. Any future updates to the Plan will be discussed and adopted by the City Council at duly noticed public meetings. Planning for MVU's distribution system is addressed in a separate report prepared by MVU's distribution system operations and maintenance contractor.

#### Purpose of Resource Plan

The Resource Plan has three primary purposes. These are to: 1) quantify resource needs over the 10-year planning period; 2) set forth relevant energy procurement policies and programs as well as prioritize resource preferences; and 3) provide guidance to the electricity procurement process undertaken by Utility management. In practical terms, the plan documents the energy procurement policy guidelines established by the City of Moreno Valley's governing Council to which MVU management adheres in its day-to-day execution of activities involving electric supply. Going forward, MVU's resource plan will be reviewed, updated, as necessary, and approved on an annual basis by the City Council.

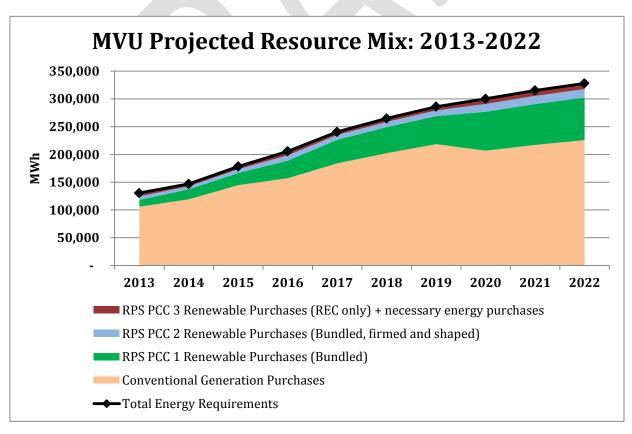
Highlights of the resource plan include the following:

- MVU's energy requirements are substantially addressed through June 2014:
  - o MVU entered into a five-year, fixed-price, block supply agreement with Shell Energy North America ("SENA") that will remain in effect through June 2014 (the "SENA Agreement").
  - Any residual energy requirements of the Utility that are not served through the SENA Agreement (the "net short") will be provided under an agreement with Noble Americas Energy Solutions ("Noble"), which also serves as MVU's scheduling coordinator.
- ➤ MVU's resource adequacy ("RA"), or reserve capacity, requirements will be planned for and procured consistent with the Utility's adopted RA Program (December 2012), which specifies the Utility's RA procurement targets for the 2013 calendar year and beyond.
- ➤ MVU's renewable energy requirements will be planned for and procured consistent with the Utility's RPS Procurement Plan, which is currently under development and discussed in further detail within this Plan. As drafted, the RPS Procurement Plan reflects pertinent requirements imposed by Senate Bill 2 in the 2011-2012 First Extraordinary Session ("SB 2-1X") and incorporates applicable Renewables Portfolio Standard ("RPS") procurement percentages for the Utility, subject to a cost containment provision (which limits customer rate impacts and may limit renewable energy volumes and products procured by the Utility).
- ➤ The City Council recently discussed and approved updated energy efficiency and demand response targets for MVU (February 2013). According to this policy, annual energy efficiency and demand reduction savings will be targeted at 0.18% of retail electric sales through 2023.

- MVU will procure its energy needs through various appropriate methods, including bilaterally negotiated agreements and formal solicitation processes, such as requests for proposals and/or requests for offers.
- Specific authorities for entering into energy procurement contracts are allocated to the Electric Utility Manager, consistent with Resolution No. 2008-105 (adopted on September 9, 2008), subject to power purchase expenditure limits for six discrete fiscal years ending with 2013/14. Going forward, the City Council will need to consider establishing future expenditure limits (in consideration of projected energy requirements) and extending related procurement authorities for upcoming fiscal years.

Figure 1 illustrates the projected resource mix during the 10-year period covered by this Resource Plan. The projected mix is illustrative; actual resource utilization will depend upon market conditions and resource availability, as well as the application of MVU's cost containment policy related to renewable energy, at the time MVU engages in additional energy procurement. For purposes of this figure, specific resources that may be used to satisfy the Utility's RPS (renewable energy) procurement obligation have not been identified; instead, the figure identifies targeted volumes within each Portfolio Content Category ("PCC"; there are three PCCs defined in the RPS), a term defined in California's RPS that requires/restricts the use of certain renewable energy products for use in demonstrating regulatory compliance, that have been identified for purchase within MVU's RPS Procurement Plan. When procuring renewable energy products within each PCC, the Utility will have considerable flexibility when selecting eligible fuel sources (e.g., solar, wind, biomass and geothermal), delivery profiles (e.g., on-peak, baseload and off-peak) and project locations among other project/product attributes. Following the completion of procurement activities, the Utility may choose to update its resource mix in consideration of the specific resources placed under contract.

FIGURE 1: MORENO VALLEY ELECTRIC UTILITY RESOURCE MIX, 2013-2022



#### GENERAL RESOURCE PLANNING PRINCIPLES

MVU's resource planning efforts take into consideration three distinct planning horizons: 1) the long-term planning horizon represents plans to serve load – i.e., the electric energy requirements of MVU customers – during the next ten years or longer; 2) the medium term planning horizon represents planning during the next five years; and 3) the short term planning horizon represents the plan for meeting load during the next twelve months. In contrast, the operating horizon represents the period of time extending from the next hour to approximately 90 days into the future – during this period all or virtually all resource commitments have been made and only adjustments are necessary to address short term operating variability related to weather and other uncertainties. Under MVU's agreement with Noble, necessary adjustments will be made without the need for action by MVU's management or staff. While long term plans will have a combination of firm resource commitments and unfilled or "open" resource needs that have been identified, resource commitments should increasingly become firm as the operating horizon approaches – during this time contracted energy commitments should align with planned resource needs.

City/MVU policy, established by the City of Moreno Valley's Council, guides the resource plan and the ensuing resource procurement activities that are conducted in accordance with the plan. The key policies are as follows.

#### MVU will:

- Maintain competitive electric rates and increase control over energy costs through management of a diversified resource mix.
- Promote local economic development through the availability of special incentives within MVU's service territory, investment in local energy infrastructure and related programs.
- Help customers reduce energy consumption and electric bills through investment in and administration of locally-focused conservation and energy efficiency programs, cost effective distributed generation and other demand-side programs.
- Enhance system reliability through investment in local distribution infrastructure, use of qualified energy suppliers/contractors, implementation of demand-side resources and focused investment in locally situated generation resources.

This plan translates these broad policy objectives into more specific plans for the use of various types of electric resources, taking into consideration MVU's projected customer needs and MVU's existing resource commitments.

#### **ELECTRIC SALES FORECAST**

MVU's long term sales forecast is primarily influenced by the number of customers receiving service from the Utility. The primary drivers of customer growth and energy sales include the potential for local development efforts/projects that would directly increase electricity requirements and peak demand as well as indirect increases in electricity requirements that may result from new employment opportunities within the City (which could translate into increased energy requirements within Moreno Valley's residential sector). The long term load forecast incorporates customer growth projections as well as seasonal electricity consumption patterns of MVU's customer base. Short term load impacts relating to weather and other changes in consumption patterns are considered in MVU's short term operational load forecasts used for monthly scheduling of load and resources (which are completed, per contract, by Noble). MVU and Noble are in the process of transitioning to a daily scheduling protocol, which will minimize scheduling deviations and related imbalance costs – in prior years, the use of a template monthly schedule was effective, but recent customer

and sales growth has necessitated the consideration of a more frequently administered scheduling process to address increased load volatility (and related costs imposed by the California Independent System Operator).

#### **CUSTOMER COMPOSITION**

MVU currently serves approximately 5,600 customer accounts. Of these accounts, approximately 5,000 are served under residential rate schedules while the remaining 600 accounts are served under commercial or industrial schedules. Despite the disproportionate share of residential accounts (over 89%), approximately two thirds of all electric use is associated with the commercial and industrial account designations. The effects of any additional development projects on resource procurement activities would be addressed during the time that such projects are being considered; any projected impacts to customer energy use, peak demand and/or renewable energy requirements would be reflected in a future update to this Resource Plan.

Figure 2 shows the number of active customers within MVU's service area for calendar years 2011 through 2022. The account totals for calendar years 2011 and 2012 reflect actual customer counts while calendar years 2013 through 2022 reflect projections that are substantially influenced by the planned occupancy of new commercial development projects and related increases in residential account growth. MVU will monitor projected and actual account totals to determine if certain adjustments may be necessary in future updates to this Plan.

12,000

10,000

Historical Data (2011 and 2012)

Planned increase in customer accounts due to occupancy of new commercial development projects and related residential growth

2,000

And 2012 2013 2014 2015 2016 2011 2018 2019 2010 2011 2011

FIGURE 2: MORENO VALLEY ELECTRIC UTILITY CUSTOMERS

#### PLANNED GROWTH AND DEVELOPMENT

The City is anticipating significant future growth due to planned commercial and industrial development activities and related job creation. In particular, the City expects to complete development of the World Logistics Center, a complex consisting of 41.6 million square feet of logistics warehouse facilities and associated infrastructure located in the eastern portion of the City, during a phased development/construction schedule that is expected to occur over a ten-year period coinciding with the planning horizon addressed in this Resource Plan. According to the project's Environmental Impact Report,

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the World Logistics Center is expected to have a peak demand (following full build-out) of 70 MW¹ with annual energy use approximating 380,000 MWhs/year. At full occupancy, the projected level of energy consumption at the World Logistics Center would result in a 3.5 times increase in MVU's current electric load (based on 2013 projections of approximately 130,000 MWhs/year). A significant portion of this anticipated increase in incorporated in MVU's load forecast. However, to the extent that actual build-out and/or occupancy rates differ from expectations, the Utility's load forecast will need to be updated – MVU will monitor development progress at the World Logistics Center and other local projects to determine potential impacts to customer energy requirements.

As a result of this (and other) development activities within the City, average annual electric load growth is expected to be approximately 15% during this ten-year period. As previously noted, any deviations from the expected development schedule and/or occupancy rates will directly impact MVU's load projections. In the event that such changes are observed, MVU will incorporate necessary forecast adjustments in subsequent updates to this Resource Plan.

#### **BASELINE CUSTOMER AND CONSUMPTION FORECAST**

MVU's electricity forecast starts with a projection of customers by end-use classification (residential, commercial, etc.). Class-typical monthly energy consumption, derived based on historical data, is applied to yield a monthly energy forecast by customer class. Certain adjustments are then made to this base forecast to account for factors not reflected in the historical data. MVU makes explicit adjustments to this forecast to account for the load impacts of its energy efficiency, net energy metering and demand response programs. The following table identifies the Utility's projected retail energy requirements during the 10-year planning period.

TABLE 1: MORENO VALLEY ELECTRIC UTILITY RETAIL ENERGY REQUIREMENTS, 2013-2022

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Energy Requirements (MWh)										
Retail Load	123,101	138,858	168,574	194,366	227,408	250,149	270,161	283,669	297,852	309,766
Energy Efficiency and Distributed Generation	-	(250)	(303)	(350)	(409)	(450)	(486)	(511)	(536)	(558)
Retail Load (Net of EE/DG)	123,101	138,608	168,270	194,016	226,999	249,698	269,674	283,158	297,316	309,208
Distribution Line Losses and Unaccounted For Energy	7,386	8,316	10,096	11,641	13,620	14,982	16,180	16,989	17,839	18,553
Total Energy Requirements	130,487	146,925	178,367	205,657	240,618	264,680	285,855	300,147	315,155	327,761

<sup>&</sup>lt;sup>1</sup> World Logistics Center Environmental Impact Report – Assumes a "worst case" electrical demand of 147 Megawatts which reflects a maximum of 10 percent cold storage within the logistics warehousing space. This peak demand estimate was revised (reduced to 70 MW) in a technical memorandum, prepared by Utility Specialists on December 19, 2012.

#### **PEAK DEMAND**

The monthly peak demands of the MVU system determine the need for resource adequacy capacity that must be procured to meet the Utility's resource adequacy procurement policy and applicable standards established by the California Independent System Operator's ("CAISO"). Projected monthly (coincident) peak demands establish the basis for the overall resource adequacy requirements (system capacity plus local capacity), and peak demand during the month of August is used to derive the Local Resource Adequacy capacity requirements, which apply for all months during the year.

Monthly peak demand projections are based on the energy sales forecast and an analysis of hourly load profiles for the major customer classifications served by the Utility. Projected monthly peak demands are shown in Table 2.

TABLE 2: MVU MONTHLY PEAK DEMAND FORECAST

MVU Peak Demand, Loss Adjusted (MW)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2013	14	16	16	21	19	21	29	32	34	27	20	22
2014	16	18	18	24	22	24	32	36	38	30	23	25
2015	20	22	22	29	27	29	39	43	45	37	29	30
2016	23	26	26	33	31	33	45	50	52	43	33	35
2017	27	30	30	39	37	39	52	58	60	50	39	41
2018	30	33	33	43	40	43	57	63	66	55	43	45
2019	33	36	36	47	44	46	61	68	72	59	47	49
2020	34	38	38	49	46	49	64	71	75	62	49	51
2021	36	40	40	52	48	51	67	75	79	66	52	54
2022	38	41	41	54	50	53	70	78	82	68	54	56

#### LOAD REDUCTION PROGRAMS

The baseline energy and peak demand forecasts are adjusted for the effects of certain load reduction programs operated by the Utility. Currently planned programs include MVU's Energy Efficiency, Demand Response & Storage program and its Net Energy Metering program.

#### **ENERGY EFFICIENCY, DEMAND RESPONSE & STORAGE**

California Assembly Bill 2021 ("AB 2021") was signed into law in September 2006. AB 2021 requires that the California Energy Commission ("CEC"), in conjunction with the California Public Utility Commission ("CPUC"), and local Publicly-Owned Utilities ("POUs"), develop statewide estimates for energy efficiency targets in a public process. AB 2021 applies to all POUs in California, including MVU. Pursuant to the statute, POUs must: 1) Identify all potentially achievable, cost-effective energy efficiency savings; 2) Establish annual targets for energy efficiency savings and demand reduction over 10 years; and 3) Report targets, programs, expenditures, results and cost-effectiveness (including methodologies and independent evaluation) to governing members and to the CEC every three (3) years. POUs are mandated to consider energy efficiency as a preferred resource, estimate energy efficiency potential, and establish targets for achieving that potential.

In response to AB 2021, a total of 35 POUs, including MVU, collaborated to develop/update individual energy efficiency and demand response targets. As part of this effort, an independent consultancy was selected to develop the 2013 updates. Based on these updates, the City Council adopted energy efficiency and demand response targets in February 2013 which indicated that a reasonable long-term (through 2023) goal for such programs is to reduce overall annual energy consumption by approximately 0.18%. One key element of MVU's demand reduction program is the implementation of targeted thermal storage opportunities, which can be implemented to shift demand away from peak periods thereby reducing total service costs (by reducing peak energy purchases and total peak demand). Between the 2012/2013 and 2015/2016 fiscal years, the Utility expects to install approximately one megawatt of energy storage and demand response infrastructure, which will promote peak energy reductions and reduced reserve capacity requirements. As previously noted, the MVU electricity forecast has been adjusted in consideration of this savings target.

#### **NET ENERGY METERING PROGRAM**

Senate Bill 1 ("SB 1"; 2006, Murray) built upon the California Solar Initiative ("CSI") by targeting the installation of 3,000 megawatts of solar energy systems on new and existing residential and commercial sites. To achieve this target, SB 1 directed the expenditure of more than \$3.3 billion in solar incentives by 2017. The programs required to administer the distribution of these incentives are overseen by the CEC, CPUC and POUs, including MVU, which are required to establish eligibility criteria for incentive qualification consistent with the CEC's published Guidelines for California's Solar Electric Incentive Programs. The MVU Solar Program, which describes the eligibility criteria for solar incentives within the MVU service territory, has been developed in consideration of SB 1 and the CEC's Guidelines. Through the Solar Program, MVU's customers are eligible for certain rebates related to solar system performance or installed capacity and, following system installation, will participate in MVU's net energy metering ("NEM") program, which is referenced in MVU's Net Energy Metering Interconnection Agreement. Through MVU's NEM program, participating customers are billed for electricity in consideration of the metered difference between the amount of energy supplied to the customer and the amount of energy generated by the customer's solar system during discrete 12-month periods.

At present, MVU has approximately 31 NEM customers (both residential and commercial), which have installed local solar generating capacity totaling approximately 1,300 kilowatts (AC, alternating current). Over the 10-year planning horizon, MVU anticipates that NEM participation will increase to approximately 3,000 kilowatts.<sup>2</sup>

#### RESOURCES

This section discusses MVU's resource needs during the planning period taking account of the projected energy requirements of MVU's customers and the existing contractual resource commitments that MVU has secured to date. The MVU supply portfolio consists of two key agreements, which provide: 1) on-peak and off-peak block energy supply over a five-year term (ending in June 2014); and 2) any remaining energy needs (the net short) that are not fulfilled through the block purchase agreements. During the 10-year planning horizon, MVU will be required to seek new resource commitments in consideration of the expiring block purchase arrangements. Such resource commitments may be addressed through one or more agreements of various term lengths with one or more qualified suppliers. As discussed below, any procurement decisions will need to meet projected customer energy requirements while remaining responsive to MVU's expressed planning policies and relevant regulatory requirements governing MVU's operations.

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<sup>&</sup>lt;sup>2</sup> Based on assumed installation of one 5 kilowatt solar project per month throughout the 10-year planning period as well as one total megawatt of commercial solar capacity (from various project installations).

#### **EXISTING RESOURCE COMMITMENTS**

MVU has entered into three separate purchase agreements for conventional energy and unbundled renewable energy certificates ("RECs"). The existing resource commitments are described below.

#### SHELL ENERGY NORTH AMERICA (SENA), BLOCK ENERGY - ON-PEAK/OFF-PEAK

The SENA agreement and associated confirmations (2 confirmations) provides for SENA to supply fixed price, block energy deliveries to MVU during the five-year period beginning July 2010 and continuing through June 2014. The referenced confirmation agreements provide for fixed-quantity monthly volumes during on- and off-peak periods, respectively. In total, the SENA agreement provides for 64,288 MWhs of on-peak energy and 34,920 MWhs of off-peak energy per year during the five-year delivery period. Based on specified contractual volumes and projected customer energy use, MVU has secured approximately 76% of its expected energy requirements during the 2013 calendar year. However, with the confirmation term expiring on June 30, 2014, MVU's coverage ratio (i.e., the percentage of projected customer energy use that is addressed through forward contracts) drops to 33% in 2014. To address this future need, MVU will need to engage qualified service providers based on planning principles discussed in this Plan.

NOBLE AMERICAS ENERGY SOLUTIONS (NOBLE), SCHEDULING COORDINATOR SERVICES AND NET SHORT ENERGY The Noble agreement provides for Noble to supply scheduling coordinator services and net short (day ahead, priced at index) energy requirements for MVU over a four and one-half year term (including all automatic renewal periods), commencing on January 1, 2010. Consistent with the Noble agreement, MVU receives services, which include but are not limited to: 1) physical bidding and scheduling of interval usage with the CAISO; 2) physical scheduling of term and spot supply contracts with the CAISO; 3) settlement reconciliation with suppliers; and 4) reconciliation with the transmission provider. As reflected in this agreement, the applicable energy schedules do not reflect the recent customer load growth that has occurred within MVU's service territory. As such, Utility management is in discussion with Noble to refine/revise applicable energy schedules to more closely align with current customer energy use.

#### ENCO, DISTRIBUTION SYSTEM MAINTENANCE, BILLING AND CUSTOMER SERVICE

While not an agreement that addresses energy supply, MVU has entered into a long-term (15-year) contract with Enco to provide for necessary distribution system maintenance, billing and customer service. These services are critically important to the successful operation of any distribution utility, including MVU, and will be provided under this contract through December 31, 2018. Prior to the expiration of this agreement, the City may choose to evaluate the feasibility of transitioning certain responsibilities to staff or may continue to engage qualified contractors for such services.

#### IBERDROLA RENEWABLES, INC. (IBERDROLA), UNBUNDLED RENEWABLE ENERGY CERTIFICATES

The City entered into a Renewable Energy Credits Agreement with Iberdrola Renewables, Inc. on February 22, 2012 for the purpose of purchasing RECs that would facilitate the City's compliance with applicable provisions of SB X1-2. The Agreement specified delivery of 16,687 unbundled RECs (eligible for RPS Portfolio Content Category 3) produced by RPS-eligible wind generating facilities during the 2011 calendar year – consistent with applicable contract terms, the noted certificate volume was transferred to MVU's Western Renewable Energy Generation Information System account. As noted, the City entered into this Agreement in an effort to demonstrate measurable progress towards meeting California's RPS procurement target for Compliance Period 1. This certificate volume represents approximately 25% of the City's renewable energy procurement obligation for Compliance Period 1, which totals approximately 68,000 MWhs. As MVU continues to develop its RPS Procurement Plan in consideration of applicable legislation and regulations, such purchases will be applied to meeting MVU's stated procurement obligations.

#### RESOURCE NEEDS

MVU will procure additional resources to meet its anticipated resource targets. This section sets forth MVU's planned resource volumes and quantifies the net resource need, the "open position" or "net short", that remains after accounting for production from MVU's existing resource/contract portfolio. MVU has established procurement targets for conventional energy, capacity resources and renewable energy.

#### **CONVENTIONAL RESOURCES & SYSTEM PURCHASES**

MVU anticipates that the majority of its projected resource need will be met with energy produced by conventional generating resources, which primarily include those generators fueled by natural gas and hydroelectric power. These resource types, particularly natural gas, tend to be readily available and ensure a reliable energy supply for customers; inclusion of these resources also tends to support a least-cost approach to service delivery, as energy pricing for alternative generating technologies, such as those using qualifying renewable fuel sources, continues to be substantially higher in the current market. In consideration of MVU's expiring agreement with SENA, which addresses the majority of MVU's conventional resource need through June 2014, the Utility will need to address a meaningful open position for this resource type in the near future. The following table identifies the Utility's anticipated open position for conventional resources, net of anticipated renewable energy purchases.

TABLE 3: MORENO VALLEY ELECTRIC UTILITY OPEN POSITION FOR CONVENTIONAL RESOURCES, 2013-2022

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Net Open Position, Conventional Energy (GWh)	12,382	73,094	145,041	162,003	185,458	199,509	210,616	216,050	226,852	235,926
Conventional Requirements Coverage (%)	89%	40%	0%	0%	0%	0%	0%	0%	0%	0%

As indicated in the previous table, approximately 89% of the Utility's conventional energy requirements for the 2013 calendar year, or 76% of the Utility's total energy requirements (which includes planned renewable energy purchases that are not yet under contract), have been addressed through an existing power purchase agreement with SENA. This fixed-price, block energy purchase agreement limits the Utility's exposure to market price volatility without promoting conditions of over-supply (which can impose transaction costs when remarketing excess energy volumes). The balance of necessary electric energy not addressed by the SENA agreement will be provided by Noble through its scheduling coordination agreement with MVU. Looking ahead to the 2014 calendar year, the Utility's conventional energy coverage ratio decreases significantly (to approximately 40%, or 33%, including planned renewable energy purchases that are not yet under contract) due to the expiration of its energy supply agreement with SENA (which occurs on June 30, 2014). With this contract expiration in mind, MVU will need to begin planning for its post-June 2014 energy requirements in mid-2013.

With regard to conventional generating resources, there are two primary forward contracting conventions that can be used to secure such energy supplies: 1) portfolio service (various term lengths) – through a portfolio service arrangement the buyer secures necessary energy supply by contracting with a single entity that controls operation of one or more generators that will be used to produce and deliver requisite electricity volumes to the buyer; the buyer has little to no influence with regard to the generator(s) that may be used to produce such volumes; and 2) unit-contingent (generator-specific, various term lengths) purchases – through a unit-contingent purchase arrangement, the buyer will receive contracted energy volumes from a specific generating facility (or group of facilities) that is controlled by the seller; to the extent that a buyer is interested in procuring electric energy from a specific geographic region or facility, unit-contingent contracting arrangements provide such opportunities. Within each of these categories, there are various pricing mechanisms that may be applied to address the mutual risk and administrative preferences of the buyer and seller. More specifically, pricing for such purchases may be fixed at the time of contract

execution, may be tied to a published pricing index (which changes over time) or may be tied to the cost of inputs, such as fuel and variable maintenance, that are required to operate such facilities – these structures are typically defined as "tolling" arrangement. Any remaining energy requirements, after accounting for conventional resources and renewable energy supplies purchased under forward contracts, can be met with short term system energy (unspecified) purchases. MVU will consider a wide range of potential procurement options when addressing its future conventional resource needs.

#### **CAPACITY RESOURCES**

The Moreno Valley City Council recently adopted, through Resolution No. 2012-99 (December 2012), a Resource Adequacy ("RA") Program that addresses MVU's plans with regard to the procurement of capacity reserves. More specifically, MVU's RA Program is directly responsive to the CAISO Reliability Requirements Tariff, which specifies that all Load Serving Entities, including MVU, maintain a capacity reserve margin. Reserve capacity represents the amount of generating capacity over and above MVU's predicted Demand that is necessary to provide an adequate Operating Reserve and is consistent with general Good Utility Practice. The procurement of reserve capacity ensures that resources are available when and where they are needed.

A portion of MVU's capacity requirements must be procured from Local Reliability Areas (LA Basis and Big Creek/Ventura) as defined by the CAISO. MVU is required to demonstrate its local capacity requirement for each month of the following calendar year. The local capacity requirement is a percentage of the total (Southern California Edison service area) local capacity requirements adopted by the CPUC based on MVU's forecasted peak load. MVU must demonstrate compliance or request a waiver from the CAISO requirement as provided for in cases where local capacity is not available.

According to MVU's adopted RA Program, the Utility is designated responsibility for developing RA Plans to guide the procurement of capacity resources, including Local Capacity Area Resources as defined by the CAISO, adequate to serve the requirements of the City's customers.

On an annual basis, MVU shall prepare a RA Plan for the following calendar year. The Annual Resource Adequacy Plan shall identify capacity resources owned or contracted for by the City sufficient to meet 90% of the following target Reserve Margins:

TABLE 4: MORENO VALLEY ELECTRIC UTILITY'S TARGETED ANNUAL RESERVE MARGINS

RA Compliance Year	<u>Reserve Margin</u>					
2013	23% of forecast monthly peak loads					
2014	46% of forecast monthly peak loads					
2015	69% of forecast monthly peak loads					
2016	92% of forecast monthly peak loads					
2017 and subsequent years	115% of forecast monthly peak loads					

The annual RA Plan shall set forth the Local Capacity Area Resources, if any, procured by MVU. MVU shall present the annual RA Plan to the City Council by September 1 of each year and shall send the approved plan to the CAISO by September 30 of each year or as otherwise required by the CAISO Tariff and/or applicable CAISO Business Practice Manuals. MVU shall also prepare a monthly RA Plan by no later than the last business day of the second month prior to the month covered by the Plan (e.g., by February 28 for the month of April) or such earlier time as may be required by the CAISO Tariff and/or applicable CAISO Business Practice Manuals. The monthly RA Plan shall identify capacity resources owned or contracted for by the City sufficient to meet 100% of the specified reserve margins shown in Table 4.

The monthly RA Plan shall identify all resources, including Local Capacity Area Resources that MVU will rely upon to satisfy the applicable month's peak hour Demand of MVU as determined by pertinent Demand Forecasts and the applicable Reserve Margin. MVU shall provide each Monthly Resource Adequacy Plan to the CAISO in the format and to the extent required by the CAISO Tariff and/or applicable CAISO Business Practice Manuals.

To date, MVU has yet to contract for requisite reserve capacity but intends to initiate such efforts following the approval/adoption of a Resource Plan. The projected MVU reserve capacity needs are shown in Table 5 for total capacity and Table 6 for local capacity.

TABLE 5: MVU RESOURCE ADEQUACY CAPACITY PROJECTIONS (SYSTEM AND LOCAL, MW)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2013	3	4	4	5	4	5	7	7	8	6	5	5
2014	8	8	8	11	10	11	15	17	17	14	11	11
2015	14	15	15	20	19	20	27	30	31	25	20	21
2016	21	24	24	31	29	31	41	46	48	39	30	32
2017	31	35	35	45	42	45	60	66	69	57	45	47
2018	35	38	38	50	46	49	65	73	76	63	50	52
2019	38	41	41	54	50	53	71	78	82	68	54	56
2020	39	44	43	57	53	56	74	82	86	72	56	59
2021	42	46	46	59	55	59	77	86	90	75	59	62
2022	43	48	48	62	58	61	80	89	94	78	62	64

TABLE 6: MVU LOCAL RESOURCE ADEQUACY CAPACITY PROJECTIONS (MW)

Year	L.A. Basin (MW)	Big Creek/ Ventura (MW)
2013	2	1
2014	5	2
2015	9	3
2016	14	5
2017	20	8
2018	22	8
2019	24	9
2020	25	9
2021	27	10
2022	28	10

#### **RPS REQUIREMENTS**

On April 12, 2011, Governor Jerry Brown signed SB 2-1X, requiring public and private utilities to obtain 33% of their electricity from renewable energy sources by December 31, 2020 (California's Renewables Portfolio Standard, or "RPS"). This landmark legislation, which incorporated various reforms to California's RPS, expanded the role of the CEC in administering the RPS program for POUs and imposed additional compliance obligations on these organizations. In particular, the CEC was directed to: adopt regulations specifying RPS

enforcement procedures for POUs; certify and verify eligible renewable energy resources procured by POUs; and refer any compliance failures of POUs to the California Air Resources Board (CARB), which may impose penalties. <sup>3</sup> Unlike the previous 20 percent RPS, which required POUs to develop internal renewable procurement "standards" without specifically obligating these entities to comply with the 20 percent procurement mandate, the currently effective RPS requires the governing boards of each POU to effectively implement the 33 percent procurement standard. Violations of the procurement standard will be referred to CARB and penalties may be imposed.

Prior to the 2020 compliance deadline, the new legislation imposes certain interim procurement requirements, which include the following: jurisdictional entities will be required to procure an average of 20% of renewable energy for the period of January 1, 2011 through December 31, 2013 (Compliance Period 1); 25% by December 31, 2016 (the period beginning January 1, 2014 and extending through December 31, 2016 has been termed Compliance Period 2), and 33% by 2020 (the period beginning January 1, 2017 and extending through December 31, 2020 has been termed Compliance Period 3). Other elements of the new RPS program establish specific procurement categories for renewable products that may be used for RPS compliance and provide certain opportunities for flexibility in the event that renewable energy procurement would impose upward pressure on customer rates.

Consistent with statute and related regulations, the RPS requirements can be met with a variety of renewable resource technology types and procurement methods. Eligible resources currently include the following:

- Biodiesel
- Biogas
- Biomass
- Conduit hydroelectric
- Digester gas
- Fuel cells using renewable fuels
- Geothermal
- Hydroelectric incremental generation from efficiency improvements
- Landfill gas
- Municipal solid waste
- Ocean wave, ocean thermal, and tidal current
- Photovoltaic
- Small hydroelectric (30 megawatts or less)
- Solar thermal electric
- Wind

RPS compliance can be met with procurement from renewable resources located within or deliverable to the state ("Bucket 1"), and with certain quantity limitations, procurement of shaped and firmed renewable energy ("Bucket 2") and unbundled RECs from RPS qualifying resources ("Bucket 3").

As required by SB 2-1X, the City Council adopted the Renewable Energy Resources Enforcement Program ("RPS Enforcement Program") on January 10, 2012. Through the RPS Enforcement Program, the City Council established three compliance periods consistent with SB 2-1X, adopted RPS-eligible procurement goals for each of the three compliance periods and described the framework for how the City would implement the requirements and measures in SB 2-1X with respect to the RPS program. Section 10 of the RPS Enforcement Program directed the Electric Utility Manager to develop and present an RPS Procurement Plan to the City

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<sup>&</sup>lt;sup>3</sup> California Energy Commission website, RPS Proceeding overview: <a href="http://www.energy.ca.gov/portfolio/index.html">http://www.energy.ca.gov/portfolio/index.html</a>.

Council. As previously discussed, MVU's RPS Procurement Plan is currently under development and will be presented to the City Council for discussion and approval as soon as it has been completed.

#### RENEWABLE RESOURCES

MVU intends to comply with California's RPS subject to cost containment considerations that will be referenced when evaluating the effects of incremental renewable energy purchases on Utility costs and customer rates. With this in mind, MVU has identified the following renewable energy procurement targets that are generally consistent with current RPS procurement guidelines in each of the three defined compliance periods:

#### Compliance Period 1

As of the date of adoption of this RPS Procurement Plan the City has procured Eligible Renewable Energy Resources (as defined under the CEC Enforcement Procedures for the RPS for Local Publicly Owned Utilities) in an amount which satisfies approximately 25% of its total projected RPS procurement obligation for the three-year period beginning January 1, 2011 and ending December 31, 2013 ("Compliance Period 1"). Upon approval of this RPS Procurement Plan by the City Council, the City will act in good faith to purchase and schedule the maximum amount of Eligible Renewable Energy Resources that can be obtained through the end of Compliance Period 1, subject to cost limitation provisions described in the RPS Procurement Plan. The following table provides additional detail regarding the City's Compliance Period 1 procurement targets with regard to each of the Portfolio Content Category products that have been described in the RPS.

Compliance Period 1

January 1, 2011 - December 31, 2013

	2011	2012	2013	Total
Actual/Forecasted* Retail	106,430	108,078	123,101	337,610
Sales (Net of Energy				
Efficiency and Distributed				
Generation, MWh)				
Planned RPS Purchases (%	20%	20%	20%	20%
of Total)				
RPS Procurement	21,286	21,616	24,620	67,522
Obligation (MWh)				
Minimum Procurement of	10,643	10,808	12,310	33,761
Portfolio Content Category				
1 (MWh)				
Maximum Procurement of	5,322	5,404	6,155	16,880
Portfolio Content Category				
3 (Certificates)				
Residual Procurement from	5,322	5,404	6,155	16,880
Portfolio Content Category				
2 Resources (MWh)				

#### Compliance Period 2

For the three-year period beginning January 1, 2014 and ending December 31, 2016, MVU shall procure sufficient RPS-eligible resources to equal the sum of the following: (20 percent of 2014 retail sales) + (20 percent of 2015 retail sales) + (25 percent of 2016 retail sales), provided, however, that the amount of dollars expended on eligible renewable energy resources shall not exceed the applicable cost limitations described in the RPS Procurement Plan. MVU shall not be required to procure a specific quantity of RPS-eligible resources in any individual year during this compliance period. The following table provides additional detail regarding the City's Compliance Period 2 procurement targets with regard to each of the Portfolio Content Category products.

Compliance Period 2

January 1, 2014 - December 31, 2016

	2014	2015	2016	Total
Actual/Forecasted* Retail Sales (Net of Energy Efficiency and Distributed Generation, MWh)	138,608	168,270	194,016	500,895
Planned RPS Purchases (% of Total)	20%	20%	25%	21.9%
RPS Procurement Obligation (MWh)	27,722	33,654	48,504	109,880
Minimum Procurement of Portfolio Content Category 1 (MWh)	18,019	21,875	31,528	71,422
Maximum Procurement of Portfolio Content Category 3 (Certificates)	4,158	5,048	7,276	16,482
Residual Procurement from Portfolio Content Category 2 Resources (MWh)	5,544	6,731	9,701	21,976

#### **Compliance Period 3**

For the four-year period beginning January 1, 2017 and ending December 31, 2020, MVU shall procure sufficient RPS-eligible resources to equal the sum of the following: (25 percent of 2017 retail sales) + (25 percent of 2018 retail sales) + (25 percent of 2019 retail sales) + (33 percent of 2020 retail sales), provided, however, that the amount of dollars expended on eligible renewable energy resources shall not exceed the applicable cost limitations described in the RPS Procurement Plan. MVU shall not be required to procure a specific quantity of RPS-eligible resources in any individual year during this compliance period. The following table provides additional detail regarding the City's Compliance Period 2 procurement targets with regard to each of the Portfolio Content Category products.

## Compliance Period 3 January 1, 2017 - December 31, 2020

	2017	2018	2019	2020	Total
Actual/Forecasted* Retail Sales (Net of Energy Efficiency and Distributed Generation, MWh)	226,999	249,698	269,674	283,158	1,029,529
Planned RPS Purchases (% of Total)	25%	25%	25%	33%	27.2%
RPS Procurement Obligation (MWh)	56,750	62,425	67,419	93,442	280,035
Minimum Procurement of Portfolio Content Category 1 (MWh)	42,562	46,818	50,564	70,082	210,026
Maximum Procurement of Portfolio Content Category 3 (Certificates)	5,675	6,242	6,742	9,344	28,003
Residual Procurement from Portfolio Content Category 2 Resources	8,512	9,364	10,113	14,016	42,005

#### Subsequent Annual Compliance Periods

For each subsequent annual compliance period, MVU shall procure sufficient RPS-eligible resources to equal an average of 33 percent of retail sales, provided, however, that the amount of dollars expended on eligible renewable energy resources shall not exceed the applicable cost limitations described in the RPS Procurement Plan..

#### **RPS OPEN POSITIONS**

In an effort to better understand eligible renewable resource availability, pricing and transactional terms, the Small POU Group, which includes MVU, the Cerritos Electric Utility, the Corona Department of Water & Power, the Eastside Power Authority, the Rancho Cucamonga Municipal Utility and Victorville Municipal Utility Services, issued a Request for Information (RFI) focused on Eligible Renewable Energy Resources in October

2012. The RFI was issued for the purpose of gathering relevant information from renewable energy sellers sufficient to allow the POUs in the Small POU Group to develop renewable energy resource procurement plans pursuant to Public Utilities Code Section 399.30 (a), and to evaluate costs and options in connection with their respective obligations for compliance periods 1, 2 and 3 pursuant to Public Utilities Code Section 399.30(b).

In general terms, the Small POU Group received a highly robust RFI response which included many viable project opportunities proposed by qualified developers. Through these responses, the renewable energy market demonstrated that there is, depending on the outcome of negotiations and risk assessment, adequate supply to meet the near- and long-term renewable energy needs of the City.

With respect to RPS procurement, SB 2-1X identified three distinct Portfolio Content Categories ("PCCs"), or "Buckets", that may be used to satisfy the procurement obligations of jurisdictional entities. PCC 1 renewable procurement entails the use of energy from qualified renewable energy generators located within the state or from out-of-state generators that can meet strict scheduling requirements to ensure deliverability to California. Use of PCC 1 resources is unlimited in demonstrating RPS compliance. PCC 2 resources refer to "firming and shaping" transactions where the energy produced by the renewable resource is not necessarily delivered to California; however, an equivalent amount of energy from a different resource <u>is</u> delivered to California and bundled with renewable energy attribute, or RECs, produced by the eligible renewable generator. Finally, PCC 3 resource procurement relates to purchases of unbundled renewable energy certificates with no related physical energy delivery. SB 2-1X also references specific procurement guidelines for each PCC. These guidelines are summarized in the following table.

TABLE 7: SB 2-1X PROCUREMENT GUIDELINES FOR QUALIFYING RENEWABLE ENERGY PURCHASES

Portfolio Content Cate ("PCC" or "Bucket")	egory	Description	Usage Limits (% of Renewable Energy)				
PCC 1		In-state or dynamically	Minimum of 50% through 2013, 65% through				
		scheduled	2016, 75% beginning in 2017				
PCC 2		Firmed and shaped	Maximum of 50% through 2013, 35%				
			through 2016, 25% beginning in 2017				
PCC 3		Unbundled renewable	Maximum of 25% through 2013, 15%				
		energy certificates	through 2016, 10% beginning in 2017				

MVU has drafted its RPS Procurement Plan in consideration of the SB 2-1X procurement guidelines. To date, MVU has engaged in limited renewable energy transactions as it monitors the development of regulatory guidelines, proposed legislation (which may substantially change the renewable energy procurement obligations imposed on POUs), renewable energy resource availability and anticipated customer rate impacts. However, it is the intent of MVU to comply with applicable RPS procurement obligations through the administration of its RPS Procurement Plan. The following table shows MVU's renewable energy resource requirements, which has been quantified for the 10-year planning period.

TABLE 8: MORENO VALLEY ELECTRIC UTILITY RPS ENERGY REQUIREMENTS, 2013-2022

Renewable Energy Requirements( GWh)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Bucket 1 (Bundled, In-State)	12,310	18,019	21,875	31,528	42,562	46,818	50,564	70,082	73,586	76,529
Bucket 2 (Bundled, Firmed and Shaped)	6,155	5,544	6,731	9,701	8,512	9,364	10,113	14,016	14,717	15,306
Bucket 3 (REC Only)	6,155	4,158	5,048	7,276	5,675	6,242	6,742	9,344	9,811	10,204
Subtotal, RPS Renewable Energy Requirements	24.620	27.722	33.654	48.504	56.750	62.425	67.419	93.442	98.114	102.039

It is important to note that, due to typical project development timelines associated with renewable generator development, MVU's near-term renewable energy requirements will likely need to be served by existing

generators that have already qualified for California RPS eligibility. Looking forward, MVU may choose to contract with yet-to-be developed resources for renewable energy needs that have been identified in the medium- and long-term planning horizons. These planning horizons will allow sufficient time for necessary solicitation and contracting activities (to be completed by MVU) as well as new resource development. Based on recently completed renewable energy solicitations throughout the market, including the Small POU Group's recently administered RFI, there appears to be ample renewable energy supply available for interested buyers, although prices are above the cost of conventional energy purchases. As discussed in this Plan, before making firm purchase commitments for additional renewable energy supply, MVU will continue to evaluate the cost/rate impacts that would result from additional renewable energy procurement.

#### **PROCUREMENT**

MVU will procure its net open positions using a combination of power purchase agreements of various terms (short, medium, long) and demand-side programs. The potential for MVU owned generation projects is not specifically addressed in this Plan, as there is no eminent timetable for the development of such resources. Such discussion may be added in future updates to this Plan based on specific development opportunities that are being considered by the Utility. This section describes the types of resources MVU may procure and discusses various considerations that may influence MVU's procurement efforts.

#### System Resources and Specified Power Purchases

MVU may engage in purchases of unspecified system energy or unit specific purchases from natural gasfueled generation. Energy products may include peak, off-peak, baseload, and shaped energy. MVU may purchase energy and/or capacity at fixed prices, indexed prices or through tolling agreements. Under a tolling agreement, MVU would obtain the right to electricity produced by a natural gas generation facility, and MVU would deliver the natural gas to the facility for conversion into electrical energy. Purchases of system energy will typically be for short and medium terms (< 5 years). Unit-specific and tolling agreements may be for short, medium and long terms. Natural gas purchases associated with tolling agreements, if applicable, will typically be for short to medium terms.

MVU expects to contract with additional counterparties for supply of system energy and capacity in anticipation of the termination of the SENA agreement. Execution of master power purchase and sale agreements with multiple, credit-worthy counterparties in the near term will enable energy purchases through execution of transaction-specific confirmations at the appropriate time.

#### **CAPACITY RESOURCE PURCHASES**

MVU may engage in purchases or sales of resource adequacy capacity from generation resources that qualify to meet resource adequacy requirements in accordance with CAISO rules. Terms may range from 1 month up to ten years. Capacity is also often bundled with energy and RECs under long-term renewable energy power purchase agreements, which may be pursued by MVU consistent with its RPS Procurement Plan.

#### RENEWABLE RESOURCE POWER PURCHASES

MVU will use a portfolio risk management approach in its power purchasing program, seeking low cost supply as well as diversity among technologies, production profiles, generation project sizes, project locations, counterparty, length of contract and timing of market purchases. These factors are taken into consideration when MVU engages the market.

MVU will manage its forward load obligations and supply commitments with the objective of balancing cost stability and cost minimization, while leaving some flexibility to take advantage of market opportunities or technological improvements that may arise. MVU has identified its open position separately for renewable resources (by compliance category), conventional resources, and on a total portfolio basis. MVU endeavors to maintain portfolio coverage targets of up to 100% in the near-term (0 to 5 years) and leaves a greater portion open in the mid to long term, consistent with generally accepted industry practice.

Generally, the renewable portion of the portfolio is met with longer term contracts, providing cost stability for the supply portfolio. MVU's guidelines for long term, bundled renewable energy purchases are shown in Table 9. Note that such guidelines reflect the percentage of the Utility's renewable energy requirements that may be placed under contract during each of the identified time horizons; such percentages may be adjusted in consideration of cost limitation principles referenced in MVU's RPS Procurement Plan.

TABLE 9: MORENO VALLEY ELECTRIC UTILITY RENEWABLE ENERGY CONTRACTING GUIDELINES

Time Horizon	Contracting Guideline (Contracts/Total RE Need)
Current Year	90% to 100%
Years 2 - 3	70% to 90%
Years 4 - 5	50% to 75%
Beyond Year 5	40% to 60%

MVU's supply preference is for a mix of renewable energy technologies that will deliver energy in a pattern that is generally consistent with MVU's load shape. Preferred purchase volumes from baseload (e.g., biomass, landfill gas, renewable fuel cells) and peaking renewable technologies (e.g., solar PV or CSP) should be in rough proportion to the Utility's load profile, subject to adjustments for market conditions and technology price differentials that exist at the time of purchase. Recent market data suggests that peaking resources are likely to comprise a larger proportion of the renewable supply portfolio due to the recent rapid declines in prices for solar PV generation projects and the abundance of such projects in development. The actual renewable portfolio during the planning period will likely be more heavily weighted toward peaking energy production due to the prevalence of competitively priced solar projects. These observations were confirmed during the recent evaluation of responses that were received following distribution of the Small POU Group's RFI fir RPS-qualifying renewable energy supplies. MVU may also engage in purchases from as-available renewable generation (e.g., wind) to the extent that energy prices reflect a lower value due to their intermittency.

MVU has no explicit policy preference for any specific qualifying renewable energy technology, apart from the pricing and production profile considerations described above.

#### LOCAL RENEWABLE RESOURCE DEVELOPMENT

As part of its, renewable energy procurement strategy, the Utility may choose to independently develop locally situated, customer-sited renewable energy projects. City leadership has expressed an interest in developing these smaller-scale projects to the greatest extent practical. However, prices available in the current wholesale market for utility-scale renewable energy continue to decrease, resulting in price comparisons (relative to smaller-scale distributed generation) that place locally situated renewable generating capacity at a competitive disadvantage. Depending on project-specific details, pricing associated with certain locally-situated renewable capacity may exceed utility-scale alternatives by 50-100%. In some instances, the local economic and political benefits associated with local capacity installation(s) may outweigh the noted cost premium. However, as the operator of a relatively new utility, the City must remain

cautious when evaluating these tradeoffs to avoid imposing disproportionate rate impacts on its customers. Looking forward, the City may choose to pursue development of select, locally-situated renewable project opportunities to supplement purchases from utility-scale project alternatives and will continue to support customer-sited renewable projects through its MVU Solar Program.

#### UTILITY ENERGY PROGRAMS - MVU SOLAR PROGRAM

MVU has developed various customer-focused energy programs that are designed to reduce overall energy consumption and total service costs. Such programs are focused in the areas of energy efficiency, demand response/reduction and local distributed generation development. In particular, The MVU Solar Program provides certain financial incentives to MVU customers based on the installed capacity or system performance of locally installed solar projects ranging from one kilowatt to one megawatt in size. This program has been developed in consideration of SB 1 and CEC Guidelines focused on statewide solar deployment. As previously discussed, customers will participate in MVU's NEM service option following system installation. Customers who install solar electric generation systems 30 kW, or less, will qualify for MVU's Expected Performance Based Buydown ("EPBB") program which has a current rebate level of \$2.25 per AC watt installed. Customers installing solar electric generation systems larger than 30 kW will be subject to the Performance Based Incentive Rate ("PBI") which is paid over a 5 year period at a rate of 6 cents per kWh generated. MVU will own all the environmental attributes (RECs) produced for as long as the system exists. However, the customer may elect to retain the environmental attributes in exchange for a reduced incentive, which will consist of the PBI being paid over a 4 year period rather than 5 years. Stated rebate and incentive rates may change over time in consideration of various factors. Over the 10-year planning horizon, MVU anticipates that NEM participation will increase to approximately 3,000 kilowatts.

#### **KEY PROCUREMENT CONSIDERATIONS**

MVU may use a variety of procurement methods to ensure the availability and/or delivery of requisite energy and capacity products. Traditional procurement methods include bilaterally negotiated agreements, competitive solicitations (examples include: request for proposals and request for offers), and standard offer approaches, such as the MVU Solar Program. The applicability of each procurement method will depend on a range of factors, which include lead time (the amount of time before the desired product must be available and/or delivered), product/resource specificity (the extent to which MVU requires a highly specified product or resource type), required quantity, term of delivery and total anticipated cost. To the extent that certain purchases are required to meet the near-term needs of MVU customers, the Utility may elect to pursue direct, bilateral discussions with qualified suppliers, so that necessary transactions can be completed in a timely manner. For known resource needs that are not time-sensitive, such as the procurement of future renewable energy requirements, MVU may utilize competitive solicitations to ensure consideration of a broad range of project/product options that will provide the best portfolio fit and value for MVU customers.

Regardless of the chosen procurement method, it will be important for MVU to administer a program that "stages" procurement activities so that the Utility and its customers are insulated from market conditions that exist at any single point in time – while effectively timing market purchases may result in substantial cost savings for MVU customers, this procurement approach exposes the Utility to significant risk. By observing an ongoing, staged approach to energy procurement that attempts to diversify purchases across a broad range of contract term lengths (with different start dates), resource types and suppliers, the potentially adverse effects of a volatile energy market can be minimized. The remainder of this section addresses certain key considerations that will be observed by MVU to promote this diversified approach to energy procurement.

#### PROCUREMENT METHODS

For long term purchase commitments, MVU will typically use competitive solicitations which may take the form of an RFP or a similar process where a comparative analysis of proposals is made at a single point in time. A RFP may be used where a specific resource need has been identified, some degree of urgency exists in fulfilling the identified need, sufficient time exists to conduct an RFP, and management believes that an RFP would yield the most competitive outcome.

Bilaterally negotiated agreements in response to unsolicited proposals may be used for unique opportunities that are fleeting in nature such that timelines associated with an RFP would prevent MVU from engaging in beneficial procurement opportunities.

Short and medium term power purchases will typically be negotiated on a bilateral basis or via independent energy brokers, particularly in markets with sufficient market price transparency to ensure competitive procurement outcomes. These markets include 1) system energy at a defined CAISO trading hub for peak, offpeak, or baseload products; 2) unbundled RECs; and 3) short term resource adequacy capacity. This process allows for maximum operational flexibility to manage supply and demand imbalances in an efficient manner.

#### **PROCUREMENT AUTHORITIES**

Energy procurement authority varies depending upon the nature of the energy product being procured and the financial commitment associated with related agreements. MVU has adopted guidelines related to such purchases that balance the need for time-sensitive action and fiscal oversight. The appropriate procurement method and procurement authority are generally defined by the term of the energy product purchase, consistency with an approved resource plan, and whether capital financing is required.

The Moreno Valley City Council establishes procurement policies and objectives through adoption of the resource plan and related procedures. The Electric Utility Manager is authorized to execute certain contracts for energy products that are consistent with the approved resource plan, while other resource commitments require City Council pre-approval prior to execution.

For shorter term power purchases, it is appropriate for the Electric Utility Manager to have discretion in contracting, consistent with its responsibilities and expertise in efficiently operating the Electric Utility. Time is often of the essence in such transactions, and these transactions are unlikely to raise policy considerations that require Council input. For long-term commitments, it is appropriate for the City Council to exercise a greater degree of oversight. The various energy procurement authorities are as follows:

#### SHORT-TERM CONTRACTS

Power purchase agreements (energy, capacity, RECs) with terms of 12 months or less may be entered into on MVU's behalf by the Electric Utility Manager. The Electric Utility Manager will report all such contracts to the City Council on a monthly basis.

#### MEDIUM-TERM CONTRACTS

Power purchase agreements (energy, capacity, RECs) with terms of greater than 12 months and less than or equal to 5 years and which are made pursuant to a Council approved resource plan may be entered into on MVU's behalf by the Electric Utility Manager in conjunction with the City Manager, who will be consulted prior to execution of any medium-term contracts. The Electric Utility Manager will report all such contracts to the City Council on a monthly basis.

#### LONG-TERM CONTRACTS

Power purchase agreements (energy, capacity, RECs) with terms of greater than 5 years shall require City Council approval prior to execution.

#### **CAPITAL PROJECTS AND DEBT**

Contracts associated with MVU ownership of generation assets or the assumption of debt by MVU in support of generation projects or power purchase agreements require City Council pre-approval.

#### OTHER ENERGY PROCUREMENT

Any procurement of energy products that is inconsistent with or that is not addressed in the adopted resource plan requires City Council pre-approval.



### **DOCUMENT REVISIONS**

#### TABLE 10: MORENO VALLEY ELECTRIC UTILITY 10-YEAR RESOURCE PLAN - HISTORY OF DOCUMENT REVISIONS

Version	Approval Date	Description of Changes
1.0.D	NA	Initial Draft



### APPENDIX A: LOAD AND RESOURCE TABLES

#### Moreno Valley Electric Utility Resource Balance

May-13

	2013	2014	2015	<u>2016</u>	2017	2018	2019	2020	2021	2022
Energy Requirements (MWh) Retail Load	123,101	138,858	168,574	194,366	227,408	250,149	270,161	283,669	297,852	309,766
Energy Efficiency and Distributed Generation	0	-250	-303	-350	-409	-450	-486	-511	-536	-558
Retail Load (Net of EE/DG)	123,101	138,608	168,270	194,016	226,999	249,698	269,674	283,158	297,316	309,208
Distribution Line Losses and Unaccounted For Energy	7,386	8,316	10,096	11,641	13,620	14,982	16,180	16,989	17,839	18,553
Total Energy Requirements	130,487	146,925	178,367	205,657	240,618	264,680	285,855	300,147	315,155	327,761
Renewable Energy Content (%)										
RPS Qualifying	20%	20%	20%	25%	25%	25%	25%	33%	33%	33%
Bucket 1 Minimum Limits	50%	65%	65%	65%	75%	75%	75%	75%	75%	75%
Bucket 2 Maximum Limits	50%	35%	35%	35%	25%	25%	25%	25%	25%	25%
Bucket 3 Maximum Limits	25%	15%	15%	15%	10%	10%	10%	10%	10%	10%
Renewable Energy Requirements (GWh)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Bucket 1 (Bundled, In-State)	12,310	18,019	21,875	31,528	42,562	46,818	50,564	70,082	73,586	76,529
Bucket 2 (Bundled, Firmed and Shaped)	6,155	5,544	6,731	9,701	8,512	9,364	10,113	14,016	14,717	15,306
Bucket 3 (REC Only)	6,155	4,158	5,048	7,276	5,675	6,242	6,742	9,344	9,811	10,204
Subtotal, RPS Renewable Energy Requirements	24,620	27,722	33,654	48,504	56,750	62,425	67,419	93,442	98,114	102,039
Conventional Energy Requirements (includes energy bundled	112,022	123,361	149,761	164,428	189,544	208,498	225,178	216,050	226,852	235,926
Existing and Planned Renewable Resources (GWh)										
Subtotal Bucket 1	-	-	-	-	-	-	-	-	-	-
Subtotal Bucket 2 Subtotal Bucket 3	-	-	-	-	-	-	-	-	-	-
Subtotal, Existing and Planned RPS Renewable Resources	-	-	-	-	-		-		-	
Open Position, RPS Renewables (GWh)										
Bucket 1	12,310	18,019	21,875	31,528	42,562	46,818	50,564	70,082	73,586	76,529
Bucket 2	6,155	5,544	6,731	9,701	8,512	9,364	10,113	14,016	14,717	15,306
Bucket 3	6,155	4,158	5,048	7,276	5,675	6,242	6,742	9,344	9,811	10,204
Subtotal, Open Position, Renewables	24,620	27,722	33,654	48,504	56,750	62,425	67,419	93,442	98,114	102,039
Future Renewable Resources (GWh)										
Generic Renewables Bucket 1										
Bucket 2	-							-		
Bucket 3		-	-			-	-	-		
Subtotal Future RPS Renewable Resources (GWh)	-	-	-	-	-	-	-	-	-	-
Open Position, RPS Renewable Energy (GWh), Net of Future Gener	ic Renewah	les								
Bucket 1	12,310	18,019	21,875	31,528	42,562	46,818	50,564	70,082	73,586	76,529
Bucket 2	6,155	5,544	6,731	9,701	8,512	9,364	10,113	14,016	14,717	15,306
Bucket 3	6,155	4,158	5,048	7,276	5,675	6,242	6,742	9,344	9,811	10,204
Subtotal, Net Open Position, RPS Renewable Energy	24,620	27,722	33,654	48,504	56,750	62,425	67,419	93,442	98,114	102,039
RPS Renewable Requirements Coverage (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Existing and Planned Conventional Resources (GWh)										
SENA 2009 Peak	65,392	32,064	-	-	-	-	-	-	-	-
SENA 2009 Off Peak	34,248	16,200	-	-	-	-	-	-	-	-
Subtotal, existing Conventional Resources	99,640	48,264	-	-	-	-	-	-	-	-
Open Position, Conventional Energy (GWh)	12,382	75,097	149,761	164,428	189,544	208,498	225,178	216,050	226,852	235,926
Futrure Conventional Resources (GWh)										
Generic conventional resources	-	-	-	-	-	-	-	-	-	-
Net Open Position, Conventional Energy (GWh)	12,382	75,097	149,761	164,428	189,544	208,498	225,178	216,050	226,852	235,926
Conventional Requirements Coverage (%)	89%	39%	0%	0%	0%	0%	0%	0%	0%	0%
Total Energy Under Contract (GWh)	99,640	48,264	-	-	-	-	-	-	-	-
Net Open, All Physical Energy (GWh)	30,847	98,661	178,367	205,657	240,618	264,680	285,855	300,147	315,155	327,761
Total Energy Contract Coverage (%)	76%	33%	0%	0%	0%	0%	0%	0%	0%	0%

### APPENDIX B: RENEWABLE ENERGY RESOURCES PROCUREMENT PLAN



## APPENDIX C: RESOURCE ADEQUACY PROGRAM







# Moreno Valley Utility

03

10-Year Resource Plan June 4, 2013



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## Presentation Outline



- Introduction
- Rroject Overview
- **™** Executive Summary
- - Purpose
  - **Key Policies**
  - **8** Resource Mix
  - **MVU** Programs
  - Procurement Methods & Risk Management Strategies
  - Authorities
- Market Overview
- Near-term Action Items
- Questions and Answers

# **Executive Summary**



- MVU does not currently have a formal resource plan.
- Developing, adopting and maintaining a multi-year resource plan is consistent with standard utility management practices.
- Adopting a multi-year resource plan will:
  - Articulate applicable utility policy;
  - Communicate MVU's anticipated resource requirements;
  - Inform future procurement decisions and processes; and
  - Mitigate risk.
- ™ MVU must address contract expirations occurring in June 2014.
- Procurement effort should be initiated as soon as practical.

# Project Overview



- Develop 10-Year Resource Plan for MVU:
  - Identify key policy guidelines
  - Quantify expected future energy and capacity requirements
  - Assess current supply arrangements/contracts
  - Os Determine open supply positions
  - Identify complimentary energy programs potentially affecting future procurement obligations
  - Discuss procurement options and risk mitigation strategies
- Resources Procurement Plan (RPS compliance).
- Discuss draft Plan with City Council.

## Resource Plan



- □ Describes how MVU intends to supply its customers with electricity and related services consistent with the City's policy goals.
- Addresses a forward looking ten-year period (2013-2022):
  - Load forecast assumes considerable future growth.
  - Forecast should be reviewed (annually) and adjusted as necessary in relation to actual/observed growth trends.

# Purpose of Resource Plan



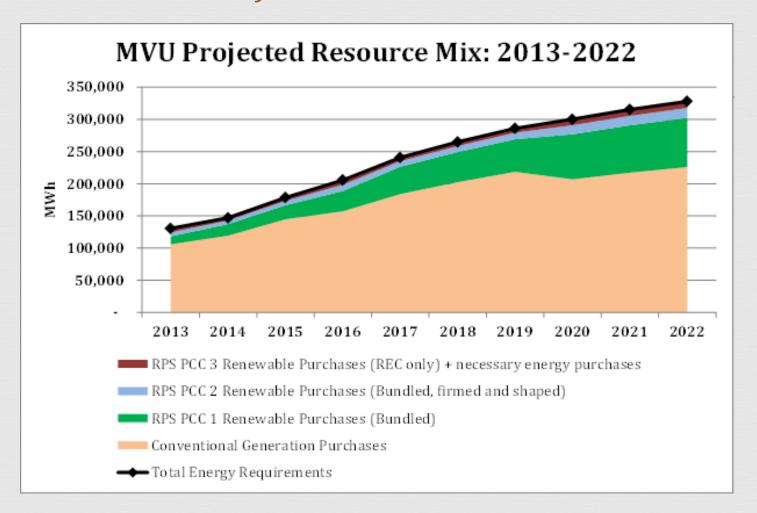
- Three primary purposes:
  - © Quantify resource needs over the planning period.
  - Prioritize resource preferences and establish other relevant power procurement policies.
  - Provide guidance to power procurement process undertaken by MVU management (and authorize certain transactions subject to consistency with the Plan).

# Key Resource Planning Policies



- Maintain competitive electric rates.
- Resure sufficiency and reliability of energy supply.
- Rromote energy conservation and efficiency.
- Establish procurement authorities.

## MVU Projected Resource Mix



# MVU Programs

- Currently managing 4 contracts for energy services:
  - O Distribution/billing/customer service ENCO
  - ✓ Block energy Shell
  - Scheduling coordination and shaped energy Noble
  - Renewable Energy Certificates Iberdrola
- MVU has contracted for most of its projected electricity needs through June 2014.
  - Additional renewable energy purchase arrangements should be consistent with the Renewable Energy Resource Procurement Plan.
  - Capacity procurement will be required to ensure consistency with MVU's Resource Adequacy Program.

# MVU Programs



- MVU to use portfolio management approach to meet procurement obligations:
  - Pursue low cost supply; and
  - Promote diversity among selected energy products/production profiles, counterparties, contract lengths and timing of market purchases.

### Procurement Administration

- Secure forward energy supplies to address future open position (post-June 2014).
  - Consider incorporating a variety of energy products.
  - ☑ Consider layering term lengths and products to avoid planning "cliff" and adverse cost/rate impacts.
  - ☑ Engage numerous prospective suppliers to ensure price competition.
  - Near-term requirements (1-2 years) should be substantially, if not entirely, addressed through contracted purchases.

# Procurement Administration (Cont.)

- ™ Implement capacity (resource adequacy) buying program.
  - RA requirements will steadily increase over a five-year implementation period (2013 2017).
  - Beginning in 2017, MVU will fully satisfy the 15% planning reserve margin required by the CEC/CAISO.
- - MVU's renewable energy procurement obligation will steadily increase to 33% in 2020.
  - A variety of renewable energy products can be procured to meet the Utility's RPS obligations.

### **Procurement Methods**



- Representation Procurement methods will include:
  - Bilaterally negotiated/brokered agreements used for short to medium term purchases of standardized products in markets with price transparency; also used for unique, fleeting opportunities.
  - Requests for proposal process used to address specific, medium to long term resource needs when timing is not constrained; RFP may likely produce most competitive outcome.
  - Seasonal procurement processes annual process used to address less urgent, longer term resource requirements; good source of market intelligence with moderate administrative burden.
  - Standard Offer/Feed-In-Tariff used for small, local projects, subject to programmatic limits

## Procurement Authority

- Distinguishes energy procurement authority based on nature of commitment being considered (timing, cost and need for financing).

# Proposed Procurement Authorities

Nature of Procurement	Approval Authority	Reporting
Procurement policies and objectives (annual RP review)	City Council	N/A
Capital projects and debt; i.e., generation asset ownership or financing	City Council	As Needed
Long-term energy contracts (>5 yrs.)	City Council pre-approval required	As Needed
Medium-term energy contracts (1 to 5 yrs.), if consistent with approved resource plan	City Manager	Monthly
Short-term energy contracts (<1 yr.), if consistent with approved resource plan	Electric Utility Manager with concurrence of Public Works Director/City Engineer	Monthly
Other energy procurement (not discussed in RP)	City Council pre-approval required	As Needed

### Market Overview

### 03

#### **○ General Observations:**

- Relatively low pricing is favorable for buyers
- G Forward price curve has flattened due to bullish expectations related to domestic natural gas production
- Production rigs are becoming more efficient
- 🗷 Energy pricing is substantially driven by natural gas market

#### **Natural Gas**

- Recent trades have occurred in the range of \$3.75 to \$4.50 per million btu (pricing levels remain historically low)
- Relatively low storage levels/injections impose some upward price pressure

# Market Overview - (Cont.)

### CS

#### **™** Electricity

- ☑ Forward, near-term monthly contracts are being traded in the range of \$45/MWh to \$60/MWh
- Flat annual blocks trading near \$50/MWh (On-peak near \$55/MWh; Off-peak near \$45)
- Bandwidth products (limited load variability) trading at/over \$55/MWh, depending on load shape/variability

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# Market Overview - (Cont.) (2)

- Renewable Energy (3 RPS-eligible products)
  - Abundance of contracting opportunities for interested buyers
  - Variety of product options and term lengths
  - Portfolio Content Category 1 (predominantly in-state): \$70/MWh to \$90/MWh, depending on resource type; long-term contract
  - Portfolio Content Category 2 (firmed/shaped products; out of state generators): market price plus \$10-\$20/MWh; short/mid-term contract
  - Portfolio Content Category 3 (unbundled/REC only product): \$1-\$3/REC; short-term contract

# Market Overview - (Cont.) (3)

### 03

#### Renewable Energy Cost Impacts

- Based on current renewable pricing, which is subject to change
- Prepared estimates reflect cost impact of renewable energy premium only
- CPP1 compliance cost estimate: \$1.2 million to \$2.0 million (\$400-\$700k/year)
- CPP2 compliance cost estimate: \$1.5 million to \$3.0 million (\$500k-\$1 million/year)
- CPP3 compliance cost estimate: \$3 million to \$6 million plus (note that CPP3 includes 4 calendar years; \$700k-\$1.5 million/year)

### Near-Term Action Items

- Regin discussions with qualified energy services providers (ESPs) to address post-June 2014 resource needs (within 3-6 months)
  - Development/execution of master agreement(s) will enable MVU to expeditiously/opportunistically transact for future energy requirements
  - Many well-known, qualified suppliers will be interested in working with MVU
  - G Formal solicitation is not likely necessary to achieve desired outcomes

# Near-Term Action Items (Cont.)



- - Consider administering a formal solicitation to address CPP2 and CPP3 requirements
  - Consider implementing a seasonal procurement process to address ongoing renewable energy requirements
- Begin discussions with qualified ESPs and/or Independent Power Producers to address near-term capacity needs (immediate need)

### 

# Questions

# MORENO VALLEY

#### **CITY ATTORNEY'S OFFICE**

#### MEMORANDUM

To: Mayor and City Council

From: Ahmad R. Ansari, P.E., Public Works Director/City Engineer

Date: June 4, 2013

Subject: CITY COUNCIL STUDY SESSION MEETING OF JUNE 4, 2013, ITEM 2 -

INTRODUCTION OF 10-YEAR RESOURCE PLAN

Attached is an updated slide presentation to the above mentioned item with revisions/format adjustments that were requested at the time the agenda was posted. Hard copies will also be made available for the public via the City Clerk's counter copies and at the meeting.

c: Michelle Dawson, City Manager
 Tom DeSantis, Assistant City Manager
 Ahmad R. Ansari, P.E., Public Works Director/City Engineer

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