

## **Renewable Energy Resources Procurement Plan**

This Renewable Energy Resources Procurement Plan (“RPS Procurement Plan”) shall apply to the City of Moreno Valley operating through its municipal electric utility (“City”).

### **Section 1: Definitions**

The definitions set forth in Public Resources Code (“PRC”) § 25741 and Public Utilities Code (“PUC”) § 399.12 are incorporated herein. Capitalized terms in this RPS Procurement Plan, as first identified in parentheses, shall have the meaning given to such term in the body of this RPS Procurement Plan

### **Section 2: Previous Adoption of the RPS Enforcement Program**

As required in Senate Bill 2 in the 2011-2012 First Extraordinary Session (“SB 2-1X”) with respect to California’s renewables portfolio standard (“RPS”), 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 City Manager to develop and present an RPS Procurement Plan to the City Council.

### **Section 3: Purpose**

This document comprises the City’s RPS Procurement Plan. This RPS Procurement Plan describes how the City will achieve its RPS procurement requirements consistent with optional compliance measures specified in SB 2-1X and applicable to the City’s status as a small publicly owned utility (“POU”).

### **Section 4: Specified RPS Procurement Targets**

SB 2-1X has the purpose of meeting the State’s RPS requirements of 33% for all utilities by 2020. In the RPS Enforcement Program, the City Council adopted general RPS procurement targets for each of the three Compliance Periods. Pursuant to PUC § 399.30(b) and (c), the City Council adopts and further specifies the RPS procurement targets, as follows:

#### 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; provided, however, that the additional costs incurred due to procurement of Eligible Renewable Energy Resources, determined as the difference in the projected cost of conventional energy resources and the projected cost of Eligible Renewable Energy Resources (“Incremental RPS Procurement Cost”) shall not exceed \$400,000, which, in addition to costs already incurred prior to approval of this RPS Procurement Plan, is the amount adopted by the City Council as the cost limitation for Compliance Period 1 as described hereunder in Section 7. 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 Sales (Net of Energy Efficiency and Distributed Generation, MWh)	106,430	108,078	123,101	337,610
Planned RPS Purchases (% of Total)	20%	20%	20%	20%
RPS Procurement Obligation (MWh)	21,286	21,616	24,620	67,522
Minimum Procurement of Portfolio Content Category 1 (MWh)	10,643	10,808	12,310	33,761
Maximum Procurement of Portfolio Content Category 3 (Certificates)	5,322	5,404	6,155	16,880
Residual Procurement from Portfolio Content Category 2 Resources (MWh)	5,322	5,404	6,155	16,880

Compliance Period 2

For the three-year period beginning January 1, 2014 and ending December 31, 2016 (“Compliance Period 2”) the City will act in good faith to procure and schedule sufficient Eligible Renewable Energy 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 Incremental RPS Procurement Cost shall not exceed the applicable cost limitations described in Section 7. 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 (“Compliance Period 3”), the City will act in good faith to procure sufficient Eligible Renewable Energy Resources to equal the sum of the following: (27 percent of 2017 retail sales) + (29percent of 2018 retail sales) + (31 percent of 2019 retail sales) + (33 percent of 2020 retail sales); provided, however, that the Incremental RPS Procurement Cost shall not exceed applicable cost limitations described in Section 7. The following table provides additional detail regarding the City’s Compliance Period 3 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)	27%	29%	31%	33%	30.2%
RPS Procurement Obligation (MWh)	61,290	72,413	83,599	93,442	310,743
Minimum Procurement of Portfolio Content Category 1 (MWh)	45,967	54,309	62,699	70,082	233,057
Maximum Procurement of Portfolio Content Category 3 (Certificates)	6,129	7,241	8,360	9,344	31,074
Residual Procurement from Portfolio Content Category 2 Resources	9,193	10,862	12,540	14,016	46,611

Subsequent Annual Compliance Periods

For each subsequent annual compliance period, the City will act in good faith to procure sufficient Eligible Renewable Energy Resources to equal an average of 33 percent of retail sales; provided, however, that the Incremental RPS Procurement Cost shall not exceed the applicable cost limitations described in Section 7.

**Section 5: Status of RPS Procurement Efforts**

A. Purchase of Unbundled Renewable Energy Credits

The City entered into a Renewable Energy Credits Agreement (“Agreement”) with Iberdrola Renewables, Inc. on February 22, 2012 for the purpose of purchasing renewable energy certificates/credits (“RECs”) that would facilitate the City’s compliance with applicable provisions of SB 2-1X. The Agreement specified delivery of 16,687 unbundled RECs produced by RPS-eligible wind generating facilities during the 2011 calendar year. 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.

B. Request for Information – RPS Procurement

Concurrent with development and adoption of this RPS Procurement Plan, the City Manager has commissioned the development of a 10-year resource plan, which describes the applicable policies, procurement processes and resource requirements to meet the City's current and future electric loads. The resource plan will evolve over time as additional information is obtained. Based on information contained in the current resource plan, the City Council makes the following findings:

- i. California's renewable energy market has been changing rapidly and may now provide more competitive opportunities for the City. Legislative mandates and implementing regulations, conditions of over-supply in the solar industry, the demonstration of near-term RPS compliance by California's investor owned utilities (the industry's largest renewable energy buyers), and many other factors have exerted significant downward pressure on prices associated with various utility-scale renewable energy projects/technologies.
- ii. Somewhat offsetting these downward pressures are planned procurement increases, which are specified in California's RPS, in the amounts of in-state renewable energy products that must be purchased by jurisdictional load serving entities, including the City – these regulatory requirements have lead some renewable energy suppliers and project developers to incorporate price increases in longer-term contracting proposals (for California-based generators), as there appears to be some uncertainty regarding planned resource availability (more specifically, the likelihood of success associated with various projects that are included in the interconnection queue/development pipeline) and future renewable energy pricing/value.
- iii. The California renewable energy market has attracted many relatively inexperienced project developers, which have viewed the current legislative/regulatory environment in a very opportunistic manner. As a result, contracting opportunities are plentiful but the ability of certain developers to successfully finance these projects is questionable. The City must carefully assess risk associated with any contracting opportunities and take appropriate measures to mitigate any such risk.
- iv. Photovoltaic solar has experienced the deepest price reductions over the past 18-24 months. During this time period, utility-scale solar energy pricing has dropped nearly 50%: prices have fallen from the \$150/MWh+ range to approximately \$70-\$85/MWh on a levelized basis.

- v. Wind pricing proposals continue to be received in the range of \$70/MWh to \$90/MWh; this intermittent resource may result in certain imbalance, system integration and/or congestion charges that will increase overall costs associated with project deliveries. Baseload renewable resources, such as biomass, biogas, and geothermal technologies, continue to price energy in the range of \$80/MWh to \$100/MWh, which captures the additional value associated with minimized production variation and reserve capacity.
- vi. Renewable energy contracting opportunities were not economically viable for the City during the initial months of Compliance Period 1 when renewable energy prices were much higher than they are today. However, relatively recent price reductions present new contracting opportunities for the City, and these recent price reductions require consideration relative to the cost limitations provisions identified in Section 7.
- vii. In an effort to better understand Eligible Renewable Energy Resource availability, pricing and transactional terms, in October 2012, the Small POU Group, which includes the City, 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 sellers of Eligible Renewable Energy Resources sufficient to allow the POU’s in the Small POU Group to develop renewable energy resource procurement plans pursuant to PUC 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 PUC Section 399.30(b). The Small POU Group received 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. Based on the results of the RFI, the incremental cost of RPS compliance is estimated in the following table. Note that these estimates are subject to change and broadly reflect of market conditions as of April 2013.

	Compliance Period 1			Compliance Period 2		
	2011	2012	2013	2014	2015	2016
Total RPS Compliance Cost - Low Range* (Premium Only - \$)	\$ 369,845	\$ 375,572	\$ 427,777	\$ 492,752	\$ 512,384	\$ 656,016
Total RPS Compliance Cost - High Range* (Premium Only - \$)	\$ 651,885	\$ 661,980	\$ 753,995	\$ 921,052	\$ 1,032,339	\$ 1,405,402

  

	Compliance Period 3			
	2017	2018	2019	2020
Total RPS Compliance Cost - Low Range* (Premium Only - \$)	\$ 740,583	\$ 702,277	\$ 697,782	\$ 883,028
Total RPS Compliance Cost - High Range* (Premium Only - \$)	\$ 1,693,976	\$ 1,751,010	\$ 1,830,414	\$ 2,452,856

## **Section 6: Application of Banking Rules**

Pursuant to PUC § 399.30(d)(1), and consistent with Section 8 of the RPS Enforcement Program, the City Council adopts the following rules for excess procurement:

- A. The City may apply excess procurement in one compliance period to a subsequent compliance period, subject to the following limitations: Electricity products that exceed the maximum limit for Portfolio Content Category 3, as specified in PUC § 399.16(c), must be subtracted from the calculation of excess procurement.
- B. The City may begin accruing excess procurement as of January 1, 2011.
- C. Excess procurement meeting these requirements may be applied to any future compliance period and shall not expire.

## **Section 7: Application of Flexible Compliance Mechanisms**

### **A. Cost Limitation**

- 1. *Relevant Factors.* The following factors are relevant to the City's adoption of cost limitations and potential application of cost limitations to reduce the amount of Eligible Renewable Energy Resources that the City may procure to meet its RPS obligation:
  - i. The City is one of the smallest POUs in California and has been in operation less than 10 years. The City incurred significant start up costs, including payment of exit fees to Southern California Edison, and the City may not be able to procure Eligible Renewable Energy Resources in volumes sufficient to satisfy its RPS targets without imposing disproportionate rate impacts on the City's customers.
  - ii. The City's rates cannot exceed those of Southern California Edison without creating a disproportionate rate impact on the City's customers.
  - iii. The City has conducted cost of service studies, and has adopted a resource adequacy policy. The City is beginning to establish financial reserves and rate stabilization funds consistent with prudent utility practices. Procuring Eligible Renewable Energy Resources in amounts which exceed cost limitations described below in Sections 7.A.3 and 7.A.4 could compromise the City's ability to accrue reserves and/or meet other procurement obligations focused

on grid reliability and sufficiency of supply (such as Resource Adequacy).

2. *Information Reviewed* – Pursuant to PUC § 399.30(d)(3), and consistent with Section 9 of the RPS Enforcement Program, the City Council has relied on the following information to establish a limitation on the Incremental RPS Procurement Costs for all Eligible Renewable Energy Resources: i) The information on cost and availability of Eligible Renewable Energy Resources which is contained in this RPS Procurement Plan and which was obtained through the aforementioned RFI; ii) the expected cost of building, owning and operating an Eligible Renewable Energy Resource, as described in Section 5; and iii) the potential that some planned resource additions may be delayed or cancelled.
3. *Establishment of Initial Cost Limitation* – The City Council hereby establishes a limitation on the Incremental RPS Procurement Costs for Compliance Period 1 of \$400,000 plus the cost of Renewable Energy Credits purchased to meet a portion of the City’s Compliance Period 1 obligation (“Initial Cost Limitation”). For Compliance Period 1, the City is not obligated to expend any funds on RPS procurement in excess of the Initial Cost Limitation.
4. *Establishment of Cost Limitation for Compliance Period 2 and Compliance Period 3 and thereafter* – The City Council hereby establishes a cost limitation on the Incremental RPS Procurement Cost as follows:
  - i. 2.5% of total annual revenues from electricity sales to retail customers. not including public goods charges and taxes;
  - ii. In no event shall the purchase of renewable energy volumes required to ensure the City’s compliance with applicable RPS procurement guidelines result in customer rate impacts that would lead to the City’ electric rates exceeding those of Southern California Edison.
5. *Modifications to Cost Limitation* – The City will review the cost limitations annually as part of its budget process to determine whether (i) the cost limitations continue to assure that there are no disproportionate rate impacts between the City’s customers and those of Southern California Edison in the City of Moreno Valley; (ii) that the cost limitations are not unreasonably restricting the City in pursuing longer term, lower risk investment in Eligible Renewable Energy Resources, and (iii) that the City is able to continue to demonstrate good faith in pursuing the objectives of SB 2-1X and

meeting the State's overall RPS goals. In approving contracts for the purchase of Eligible Renewable Energy Resources, the City reserves the right to exceed cost limitations if the contract provides offsetting benefits to the electric customers of the City.

B. Modification of the Portfolio Content Category Requirements

Consistent with PUC § 399.16(e), and as described in Section 6 of the RPS Enforcement Program, the City Council may modify the minimum and maximum requirements in PUC § 399.16(c) for the various portfolio content categories ("PCC Requirements") if the City demonstrates that it cannot comply with the PCC Requirements because of: (a) conditions beyond the control of the City due to any of the conditions set forth in PUC § 399.15(b)(5), PUC § 399.15(c), or other conditions adopted by the City Council based on facts reasonably found by the City Council to be consistent with the intent of PUC § 399.15(b)(5), PUC § 399.15(c), or PUC § 399.18 and the unique circumstances facing the City as a small POU.