

Renewable Portfolio Standard
Procurement Plan 2016 Update

Port of Stockton
August 11, 2016



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I Executive Summary

In order for the Port of Stockton (Port) to meet the California Renewable Portfolio Standard (RPS) procurement goals of 33% of retail sales met by renewable energy¹ by December 31, 2020 and 50% renewable energy² by December 31, 2030, the Port has determined that currently the most efficient and cost effective approach is to continue the purchase of sufficient state approved renewable energy products from the active California market.

The Port's retail electric load consists solely of commercial and industrial customers that must compete in a global market with their respective products. In order to help its retail customers succeed, the Port strives to provide cost effective and reliable electric service while complying with the state's aggressive renewable energy standards. In the past, the Port has attempted to develop two local renewable resources only to have both projects fail because of transmission study issues beyond the Port's control.³

There are three compliance periods, the first of which is Compliance Period 2011-2013. For this period the Port had determined that it diligently expended significant development funds on a large-scale local renewable project and that after extensive study delays was met with regional development problems beyond the Port's control. Further, a second project, after lengthy study delays beyond the Port's control became too costly when compared to other market alternatives. By the time the project study was completed, the purchase of Renewable Energy Certificates (REC) through an active California market became the most cost effective method to meet the RPS requirements.

For the two Compliance Periods 2014-2020, the Port has purchased sufficient state approved RECs for its existing retail load to meet the state's yearly RPS of 20% in 2014 increasing to 33% by 2020.

For the Compliance Period 2021-2030, the Port will continue to monitor and participate in development of the regulations until the state regulators have completed their efforts to codify the new laws.

II Background

Beginning as early as 2002 California has lead the country in its efforts to reduced greenhouse gasses by the implementation of a series of ground breaking legislative actions. In 2002 CPUC regulated electric utilities were required to meet 20% of their retail electric load with renewable energy by 2017. 2006 legislation accelerated the state's Renewable Portfolio Standard (RPS) to 20% by 2010 for investor owned utilities. Publically owned utilities (POUs) were allowed to set their own RPS goals recognizing the intent of the legislation to attain a statewide goal of 20%. In April 2011

¹ Required by California Senate Bill SX1-2 signed by Governor Brown, April 12, 2011.

² Required by California Senate Bill SB350 signed by Governor Brown, October 7, 2015.

³ Section 3206(2)(A)(1&2) of CEC-300-2013-002-CFM, August 2013

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the state implemented an aggressive law (SBX1-2) requiring all electric utilities to achieve a power supply mix of 33% renewable energy from state approved renewable resources by 2020. The law specified a timetable with set compliance periods leading up to the 33 % RPS by 2020. The California Energy Commission (CEC) has been charged with RPS enforcement for POUs like the Port of Stockton. In 2015 Governor Brown signed Senate Bill SB350 to aggressively increase the RPS requirement to 50% by 2030. State regulators are currently working to codify the SB350 requirements into additional regulations for the state's electric utilities.

The Port of Stockton began incorporating renewable resources into its power supply plan in 2010. The Port entered into a development agreement on June 29, 2010 that provided for the purchase of renewable energy from a part of a large-scale solar photovoltaic project. The local project would produce in-state renewable energy from a large 20 MW rooftop photovoltaic power plant located on the Port's south facing warehouse facilities. The developer intended to sell the renewable solar energy to both the Port and PG&E, wherein the Port would purchase sufficient renewable energy from the project to meet its future RPS goals. The large-scale solar project required a System Impact Study (SIS) to be performed by PG&E in coordination with the California Independent System Operator (CAISO). In November 2010, the Port initiated the SIS with PG&E. By May of 2011, after multiple cluster study issues with PG&E and the CAISO and overall project cost issues the developer could not market the bulk of the project output to PG&E and abandoned the large-scale solar project at the Port. Since the proposed solar project's output was over seven times the size of the Port's total retail load, the Port could not step up to purchase the whole project. The Port had to regroup and determine a new course of action to address the state mandated RPS goals.

By mid 2012, the CEC completed draft RPS regulations for POUs. The CEC regulations helped clarify many implementation/definition issues thus helping the California electricity markets develop quantifiable Portfolio Content Categories (PCC) 0 through 4 renewable products that could meet the new regulations. By mid 2012 the Port had completed a design/engineering review of a 1-2MW ground based solar project to be located on Port property. With the design/engineering study completed, the Port developed a new RPS plan for the construction of a 1-2MW solar project on Port facilities supplemented by the purchase of additional vintage 2013 PCC3 RECs from the California market. The Port's RPS plan was reviewed in a public meeting and approved by the Port on December 20, 2012. During the pursuit of the local renewable energy projects, the Port expended about \$76,000.

Pursuant to the terms of the Port's interconnection agreement with PG&E, the proposed 1-2MW local solar project required a new SIS be performed by PG&E. The Port requested and paid PG&E to perform the SIS on January 3, 2013. With the construction plans underway, the Port did not commit to purchasing solar panels and support equipment until it had the final SIS results from PG&E. While waiting on the SIS results, the Port computed the additional 2013 RECs it would need in addition to the renewable energy output from the solar project. The Port contracted for the PCC3 REC purchase and joined the Western Renewable Energy Geographic Information System (WREGIS)³

³ The Port joined WREGIS on March 7, 2013.

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in order to account for its California certified renewable energy products. The second PG&E SIS took till January 14, 2014 to complete. Upon completion of the PG&E SIS in 2014, the Port's consultant performed a due diligence evaluation on the cost effectiveness of the 1-2MW local solar PV project compared to renewable products available from the developing California renewable energy market. The study showed that market purchased RECs would save an annual 20% compared to the construction/maintenance of a local 1-2MW solar project. After years of trying to construct a local renewable project, during its 2014 budget process the Port determined that it would purchase sufficient state approved RECs for its existing retail load in order to meet the state's yearly RPS target of 20% in 2014.

III Proposed 2016 Procurement Plan Update

For Compliance Period 2011-2013, the Port had determined that it diligently worked to develop a large-scale local renewable project that after extensive study delays by PG&E and the CAISO was met with regional development problems that were beyond the Port's control. Further, after lengthy study delays by PG&E that could not be mitigated, the development of a second local project ultimately became too costly when compared to other market renewable product alternatives

For Compliance Period 2014-2016, the Port has contracted for the purchase of sufficient RECs needed for existing retail load to meet the state's yearly RPS target of 20% in 2014, 20% in 2015 and 25% in 2016.

For Compliance Period 2017-2020, the Port has contracted for the purchase of sufficient RECs needed for existing retail load plus historical growth to meet the state's yearly RPS target of 27% in 2017, 29% in 2018, 31% in 2019 and 33% in 2020.

For the Compliance Period 2021-2030, the Port will wait till the state regulators have completed their efforts to codify the new law after which time the Port will review the most cost effective options at that time.

Therefore, for 2014-2020 period the Port has determined that currently the most efficient and cost effective RPS compliance approach is to continue to purchase sufficient state approved renewable energy products from the active California market. For any additional renewable energy needs for retail load, the Port will continue to review alternative renewable energy projects, on a case-by-case basis, along with market alternatives