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<td>Hetch Hetchy Power Adopted RPS Procurement Plan - IRP Filing Attachment C</td>
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<td><strong>Description:</strong></td>
<td>Copy of SFPUC's adopted RPS Procurement Plan required to be submitted as part of SFPUC's Hetch Hetchy Power's IRP Filing</td>
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<td><strong>Filer:</strong></td>
<td>James E. Hendry</td>
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Attachment C: HETCH HETCHY POWER ADOPTED RPS PROCUREMENT PLAN
PROCUREMENT PLAN

To ensure compliance with the
California Renewable Portfolio Standard (RPS)
(Adopted by Resolution 12-02/17)

1. PURPOSE AND SCOPE

The California Renewable Energy Resources Act (the Act), effective December 10, 2011, amended California’s Renewable Portfolio Standard (RPS),¹ which establishes requirements for electric utilities’ use of renewable energy resources (RPS-eligible supplies)² to serve their retail customers. The RPS, with certain exceptions, requires the San Francisco Public Utilities Commission (SFPUC) to meet 100% of its retail sales on an annual basis with generation from either the Hetch Hetchy system or with RPS-eligible supplies.³

On December 13, 2011 in Resolution 11-0202 (Attachment A), the SFPUC adopted an Enforcement Program to ensure the SFPUC will meet its RPS requirements. The Enforcement Program directs SFPUC staff to prepare a Procurement Plan for the Commission’s adoption which identifies the SFPUC’s requirements under the RPS and establishes a forecasting and procurement process to meet those needs.

The scope of this Procurement Plan is strictly limited to ensuring that the SFPUC is able to meet its RPS requirements in a cost-effective manner while maintaining reliable service and minimizing financial risk. The RPS and the Procurement Plan neither determine nor otherwise limit City or SFPUC policies and programs for renewable energy.

The Act amended the RPS to make its requirements mandatory for publicly owned utilities. The Procurement Plan covers the SFPUC’s requirements under the RPS as of January 1, 2011.

¹The Act is also referred to by its bill number as either SB2 or SBX1-2. The Act made a number of changes to state law, including the California Public Utilities Code Section 399.11 et seq.
²RPS-eligible supplies are generated by facilities certified as renewable by the California Energy Commission for purposes of complying with the RPS legislation. These resources include generation from wind, solar, geothermal, small hydro, wave, tidal, biomass, and/or the Renewable Energy Credits (RECs) associated with them.
³Public Utilities Code Section 399.30(k).
The Procurement Plan consists of:

- The SFPUC's RPS requirements under the RPS (Sections 2 and 3) including exceptions (Section 4).

- The Procurement Process, Guidelines and Authority (Section 5). The Procurement Plan directs the General Manager to develop forecasts to ensure the SFPUC timely meets the requirements of the RPS. If the forecasts identify a need to procure additional RPS-eligible supplies, the Procurement Plan authorizes the General Manager to procure these supplies up to certain limits.

- The reporting and public notice requirements required by the RPS and the SFPUC's Enforcement Program (Section 6).

Attachment B to the Procurement Plan includes forecasts of the SFPUC's RPS requirements for the SFPUC's adopted budget (covering Fiscal Year (FY) 2012-13 and FY 2013-14), and the ten-year financial forecast and Capital Improvement Plan through 2022. For consistency, forecasts of the SFPUC's RPS requirements utilize the same forecasts that are used to prepare the budget and long-term plans. Attachment B also reports on the SFPUC's requirements for calendar years 2011 and 2012.

The Procurement Plan Forecasts will be updated as needed. The next update is expected to occur in conjunction with the development of the SFPUC's next two-year budget (covering FY2014-15 and FY2015-16) to ensure that the costs of any expected RPS requirements, including known forecasting uncertainties, are incorporated into the Commission's adopted budgets and longer-term financial forecasts. Updates outside of the regular budget process will be done as necessary to reflect any material changes in the SFPUC's expected requirements under the RPS.

2. THE SFPUC'S RPS REQUIREMENTS

Statutory Requirement

Under the RPS, the SFPUC is required to meet 100% of its retail sales with either Hetch Hetchy generation or with RPS-eligible supplies, pursuant to Section 399.30(k) of the Public Utilities Code, which states that:

A local publicly owned electric utility in a city and county that only receives greater than 67 percent of its electricity sources from hydroelectric generation located within the state that it owns and operates, and that does not meet the definition of a renewable electrical generation facility pursuant to Section 25741 of the Public Resources Code, shall be required to procure eligible renewable energy resources, including renewable energy credits, to meet only the electricity demands unsatisfied by its hydroelectric generation in any given year, in order to satisfy its renewable energy procurement requirements.

Generation from the Hetch Hetchy system has never fallen below 67% of the SFPUC's retail sales in the last 90 years of recorded data.
Pursuant to Section 399.30(k), the SFPUC's RPS-eligible supplies used to meet its RPS requirements may include either the RPS-eligible renewable energy together with its associated RECs, or the purchase of RPS-eligible RECs.4

Calendar Year Requirement

The Procurement Plan establishes a calendar year obligation for determining the SFPUC's requirements under the RPS.5

The RPS applies only to the SFPUC's Retail Sales

The SFPUC's RPS requirements are limited to the electricity supplies used to meet the SFPUC's retail sales. The SFPUC's retail sales currently include sales to municipal customers, tenants on City property such as at the Airport and Port, and other retail customers. Retail sales also include service to Hunters Point, Treasure Island, Trans Bay Joint Powers Authority, as well as service to redevelopment or other areas for which the SFPUC provides electric service.6

The Procurement Plan does not apply to the SFPUC's electricity supplies or retail sales for its Community Choice Aggregation (CCA) program, CleanPowerSF.7

The SFPUC's wholesale sales of electricity, such as the SFPUC's sales to the Modesto and Turlock Irrigation Districts (MID and TID or the Districts), to the Norris-Riverbank Redevelopment Agency, and other sales to third parties through wholesale market transactions, are not covered by the RPS.

Hetch Hetchy Resources Available to Serve Retail Load

Available Hetch Hetchy generation includes generation, calculated on annual basis, from any of the Hetch Hetchy facilities operated by the SFPUC. This includes net withdrawals (withdrawals less deposits during the calendar year) of Hetch Hetchy generation associated with the operation of the Deferred Delivery Account (DDA). This calculation excludes any sale of Hetch Hetchy generation made on a specified basis8 such as current sales of Hetch Hetchy generation under long term contracts to the Districts and deposits to the MID Deferral Account (MDA).

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4 The RPS establishes three different types of RECs associated with the generation of renewable energy categorized as Portfolio Content Category 1, 2, or 3 depending upon their source and characteristics (informally referred to as Buckets 1, 2, and 3). The SFPUC, under the RPS, is allowed to procure any combination of renewable energy or RECs from any of these three categories to meet its RPS requirements pursuant to Section 399.30(k).

5 This includes a “true-up” period where any shortfalls could be made up after the end of the SFPUC’s calendar year obligation but before the SFPUC files its compliance reports to the CEC.

6 The General Manager may update this list as necessary to reflect the addition of new customer classes or any reclassification of load between wholesale and retail as appropriate.

7 Regulations for RPS requirements for CCAs are determined by the California Public Utilities Commission (CPUC) although CCAs, such as CleanPowerSF, may adopt RPS goals that exceed what is required by the CPUC.

8 A “specified sale” occurs when the electric generation being sold can be tracked back to a specific generating source through such means as contracts or other written sales agreements or that the REC associated with the generation is also specifically transferred with its underlying generation.
RPS-Eligible Supplies Available to Serve Retail Load

RPS-eligible supplies are those renewable resources that meet the requirements of Section 399.12(e) of the Public Utilities Code. The SFPUC’s RPS-eligible resources currently include in-City solar facilities such as the Sunset Reservoir Photovoltaic (PV) Project, the biomethane-fueled cogeneration facility at the Southeast Wastewater Treatment Facility, and the Moccasin low-head hydroelectric facility. Under the RPS, generation from RPS-eligible supplies will be tracked through the issuance of renewable energy credits (RECs) that verify renewable energy was generated. These RPS-eligible supplies will be available to serve SFPUC retail load unless the associated REC has been unbundled and transferred to another party.

3. DETERMINATION OF NEED FOR ADDITIONAL RPS-ELIGIBLE SUPPLIES (IF ANY)

Any shortfall between the SFPUC’s retail sales and its available Hetch Hetchy and RPS eligible generation results in a requirement (need) for additional RPS-eligible supplies, as follows:

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9 Some Hetch Hetchy generation is also RPS-eligible. Hetch Hetchy generation that is RPS-eligible will be counted only once (as either RPS-eligible generation or as Hetch Hetchy generation) for determining the SFPUC’s yearly RPS requirements.

10 The SFPUC has submitted applications to the CEC to certify all of its RPS-eligible resources including the Kirkwood units which are eligible under the Act as water conveyance facilities. Due to backlogs in the CEC certification process, the certifications may take several months to complete. For purposes of the Procurement Plan Forecasts, generation from the Kirkwood Units is not counted as RPS-eligible. If needed, the forecasts will be updated when the CEC certifications of the Kirkwood units are completed.

11 This list will be updated as necessary to reflect the addition/deletion of new RPS-eligible sources. For example, the Oceanside cogeneration plant is currently not counted as a RPS-eligible supply since its generation is used to serve on-site load and is not used by Power Enterprise to serve its retail sales as a POU. Similarly, the load served by the plant is not included in the SFPUC’s retail sales.

12 RECs will be tracked through the Western Regional Energy Generating Information System (WREGIS), a multi-state organization developed by the CEC that tracks and records renewable electric generation throughout the Western United States. The CEC is requiring all POUs to use WREGIS to track their renewable energy generation. The Commission authorized the establishment of a WREGIS account for the SFPUC for this purpose in Resolution 11-0151. WREGIS ensures that RECs are tied to actual renewable generation which is counted and credited only once by the entity that holds the REC.
In addition, any SFPUC purchases of resource-specific supplies from third parties that are not RPS-eligible but are used to meet the SFPUC's retail sales must be matched with an equivalent volume of RPS-eligible supplies.13

**Carry Forward and Excess Procurement Provisions**

In the event that the SFPUC's Hetch Hetchy generation and RPS-eligible supplies are more than the amount required to meet the RPS requirements for a given calendar year, the associated RECs may be carried forward for use in future years or sold. RECs initially may be used to meet the SFPUC's requirements for up to 36 months after the underlying renewable energy is generated14 and (subject to certain restrictions) excess procurement of RPS-eligible supplies above what the SFPUC needs to meet its RPS requirements may be carried forward beyond the 36 month limit and applied to meet future RPS requirements.15 Should there be more RECs than are foreseeably needed to ensure the SFPUC meets the requirements of the RPS,16 surplus RECs may be sold.

### 4. EXCEPTIONS

**Cap on Annual RPS Compliance Comparable to Other Utilities**

The CEC's draft regulations implementing the RPS do not require the SFPUC to procure more renewable energy as a percentage of its retail sales than California's other electric utilities. The Procurement Plan sets an upper limit on the amount of RPS-eligible energy the SFPUC is required to procure in any given calendar year of 20% for calendar years 2011 through 2016, 25% for calendar years 2017 through 2020 and 33% for calendar years 2021 and beyond based on the CEC's draft regulations. These requirements also

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14 Public Utilities Code Section 399.21(a)(6)
15 Public Utilities Code 399.30(d)(1) and 399.13(a)(4)(B).
16 These estimates will also be developed as part of the RPS forecasts prepared according to this plan.
apply for any calendar year the SFPUC does not meet 67% of its retail sales from its Hetch Hetchy generation.

Cost Limitation Provision

The Risk Management budget will include reserves to fund additional RPS-eligible resources (based on Procurement Plan forecasts) that may be needed to address potential shortfalls under known uncertainties such as dry-year forecasts.

Under this cost limitation, the SFPUC is not required to purchase additional RPS-eligible supplies that are needed to meet the requirements of the RPS if the cost of those supplies would exceed the funding available in the SFPUC’s adopted budget for Risk Management expenditures by Power Enterprise, subject to maintaining prudent reserves for other non-RPS procurement cost contingencies through the remainder of the budget cycle in which the procurement occurs.

Additionally, the SFPUC is not required to purchase additional RPS-eligible supplies that are needed to meet the requirements of the RPS if the cost of those supplies would exceed $100/MWh above the market cost of a comparable volume of energy that is not RPS-eligible.17

Deferral Authority

The SFPUC may defer timely compliance with the requirements of the RPS if the Commission determines that the SFPUC meets the requirements of Sections 399.30(d)(2) and 399.15(b) of the Public Utilities Code. These provisions allow POUs to defer compliance due to events beyond their control such as inadequate transmission capacity, permitting/interconnection issues, insufficient supply of renewable energy resources, or unanticipated curtailments.

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17 This limitation does not apply to the costs of the SFPUC’s existing RPS-eligible supplies.
5. PROCESS FOR MEETING THE RPS REQUIREMENTS

The Procurement Plan establishes the following process, guidelines and authority for obtaining necessary RPS-eligible supplies that may be required.

Preparation of Forecasts for Determining the Need for Additional RPS-Eligible Supplies

The SFPUC shall prepare and update forecasts in a timely manner as needed for a calendar year, budget cycle, and longer time frame to determine the SFPUC's forecasted obligations under the RPS. Each forecast shall include, at a minimum, the following elements:

a. Forecasts of retail sales, Hetch Hetchy generation, existing SFPUC RPS-eligible supplies, and wholesale sales;

b. A calculation of the amount of any additional RPS eligible supplies the SFPUC may need to acquire in order to ensure compliance with the RPS;

c. Identification of known uncertainties in the forecasts, primarily fluctuations in Hetch Hetchy generation due to hydrologic conditions, water needs and/or extended generator outages;

d. An evaluation of market conditions including strategies for mitigating cost and risk exposure given known forecasting uncertainties; and

e. Any other information that is useful in assisting the Commission to evaluate its needs under the RPS.

The forecasts will be coordinated and consistent with the forecasts developed as part of the SFPUC's budget cycle and long-term financial and Capital Investment Plan.

Procurement of Additional RPS-Eligible Supplies

When forecasts show a long-term, recurring need for additional RPS supplies, the General Manager shall recommend procurement actions to the Commission for its approval. To meet forecasted short term (under two years), non-recurring needs and to meet shortfalls resulting from forecasting uncertainties, the General Manager is authorized to procure the RPS-eligible supplies\(^{18}\) that are needed, subject to the following requirements:

a. The supplies are acquired through short-term market transactions;

b. The procurement process follows the SFPUC's procurement and risk management practices to minimize costs and risk exposure;

c. Reliable service is maintained;

d. Within the two-year budget cycle, the total volume procured is limited to the greater of:

(i) A cost limit of $500,000; or

(ii) 5% of retail sales.

\(^{18}\) Purchases may include either the purchase of RPS-eligible renewable energy with its associated REC, or the purchase of RPS-eligible RECs.
e. The total cost of procurement is within the cost limitation provisions of this Procurement Plan.

In procuring these additional RPS-eligible supplies, the General Manager shall seek to minimize the SFPUC's cost of meeting the RPS requirements, but may pay a reasonable premium to purchase RPS-eligible supplies that are located within California.

Should the SFPUC own more RECs than are foreseeably needed to ensure the SFPUC meets its RPS requirements, the General Manager may sell surplus RECs.

Procurement of RPS-eligible supplies that does not meet these requirements or is otherwise beyond these limits is subject to Commission approval.

6. REPORTING AND PUBLIC NOTICE

The General Manager shall provide reports to the Commission and the public on any material variance from the adopted Procurement Plan on a quarterly basis. The report shall explain any material variances, and to the extent the variances show a trend toward non-compliance with the adopted Procurement Plan, the report shall recommend corrective actions to ensure compliance.

The General Manager will report to the public and the California Energy Commission using the format and reporting protocols specified by the California Energy Commission.

The Commission will provide notice to the public as required by the Brown Act,19 and to the California Energy Commission as required under Public Utilities Code Section 399.30(f)(2) and (f)(3)20 whenever it is deliberating in public on this Procurement Plan. The Commission may modify this Procurement Plan as needed.

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19 Government Code Section 54950 et seq. The Brown Act governs the public meetings of government agencies and provides among other provisions; notice requirements, distribution of meeting agenda, public meetings, and opportunity to comment. The SFPUC already follows the Brown Act in its public meetings.

20 These provisions require respectively that "contemporaneously with the posting of the notice of a public meeting to consider the...procurement plan", the POU shall notify the CEC of the date, time, and location of the meeting in order to enable the CEC to post the information on its website and that any information provided publicly to the Commission shall also be provided to the CEC for posting on its website. Both requirements can be met "by provid[ing] the URL that links to the documents or information regarding other manners of access to the documents."