



SCHEDULED ITEM

TO: HONORABLE CHAIRPERSON AND MEMBERS OF THE AZUSA UTILITY BOARD

FROM: GEORGE F. MORROW, DIRECTOR OF UTILITIES

DATE: NOVEMBER 26, 2012

SUBJECT: APPROVAL OF AZUSA'S RPS PROCUREMENT PLAN

RECOMMENDATION

It is recommended that the Utility Board adopt the attached resolution approving Azusa's RPS Procurement Plan and Azusa RPS Procurement Logic chart.

BACKGROUND

On April 12, 2011, the Governor signed into law Senate Bill X1 2 (SBX 1 2), commonly known as renewable portfolio standard ("RPS"). The law became effective on December 10, 2011. It should be noted that as of this date, the regulations to implement SBX 1 2 for publicly-owned utilities have not been finalized yet by the California Energy Commission.

The Utility Board's public deliberation, and approval, if appropriate, of the attached Azusa RPS procurement Plan is required by the SBX1 2 [Public Utilities Code Section 399.30(f)].

SBX 1 2 mandates that all electric utilities and entities serving electric load in California produce and/or procure specific volumes of renewable energy products, as measured by percentage of retail electricity sales. Procurement(s) of renewable energy products must be made during three specific compliance periods beginning on January 1, 2011. The law further stipulates the minimum volume of renewable energy has to be derived from resources interconnected within, or scheduled directly, into California. The remaining portion of the SBX 1 2 required procurements may be satisfied by imported renewable energy and/or by "unbundled" renewable energy credits ("RECs").

It is key to note and recognize that SBX1 2 requires publicly owned utilities (POUs) to procure specific "base" volumes of the renewable energy products only to the extent that "*unmet long-term generation resource needs*" exist [PUC Section 399.30 (a)].

Further, it is important to note that SBX 1 2 specifically provides POUs have discretion over procurement of renewable energy products and thus may limit procurements as such.

RPS Procurement Plan

November 26, 2012

Page 2

Procurement limits may be based, among other things, on a POU's energy and/or capacity needs as well as on expenditures related to procurement of renewable energy. PUC Section 399.30(m) states that POUs "*shall retain discretion over*": 1) what the particular mix of renewable and other resources should be from the standpoint of resource adequacy and reliability, and 2) "*The reasonable costs incurred by the utility for eligible renewable energy resources...*".

POUs may also limit or delay procurement of renewable energy products in cases when projects from which renewable energy is contracted do not perform as expected or if there are delivery/transmission issues.

Key statutory provisions of the RPS law (as interpreted by Staff in absence of requisite regulations):

1. RPS Law became effective on 1/1/2011.
2. The California Public Utilities Commission (CPUC) and local Boards/Councils are the administrators and enforcing authorities for the investor owned utilities (IOUs) and the POUs, respectively.
3. The CEC is an arbiter/monitor of the POUs' self enforcement and as such may agree or disagree with a POU's administration and/or self enforcement of the RPS law.
4. Should the CEC determine that a POU is not properly or adequately enforcing itself, the CEC may refer that POU to the California Air Resources Board (CARB) for sanctioning.
5. Upon the referral by the CEC, CARB may levy sanctions/fines on the POU in accordance with applicable provisions of the California Health and Safety Code.
6. RPS product categories:
 - A) **Portfolio Content Category 1** (PCC1) also known as "Bucket 1" – energy from renewable resources connected to California distribution or California Balancing Authority transmission systems, or renewable energy scheduled directly (without substitution) into a California Balancing entity. This is generally the most expensive compliance product (up to \$100/MWh or more)
 - B) **Portfolio Content Category 2** (PCC2) also known as "Bucket 2" - shaped renewable energy imported/scheduled into a California Balancing Authority Area. This is generally the second most expensive compliance product (\$50 to \$70 per MWh).
 - C) **Portfolio Content Category 3** (PCC3) also known as "Bucket 3" - "unbundled" Renewable Energy Credits (RECs) without underlying renewable energy. This is generally the least expensive compliance product (\$1 to \$3 per REC).

RPS Procurement Plan

November 26, 2012

Page 3

7. The RPS law requires procurement of the following “base” volumes of renewable energy products during the specific compliance periods, subject to a POU’s assessment of unmet long-term generation needs, permissible safe harbors, and other POU established limitations:

A) Compliance Period 1 (1/1/2011- 12/31/2013)

“Base” RPS Procurement Requirement: 20% average for the period, as measured by % of retail sales. Minimum volume of PCC1- 50%; Maximum volume of PCC3 - 25%; PCC2 - balance

B) Compliance Period 2 (1/1/2014 – 12/31/2016)

“Base” RPS Procurement Requirement: 25% by December 31, 2016, as measured by percentage of retail sales. Minimum volume of PCC1- 65%; Maximum volume of PCC3 - 15%; PCC2 – balance

C) Compliance Period 3 (1/1/2017- 12/31/2020)

“Base” RPS Procurement Requirement: 33% by December 31, 2020, as measured by percentage of retail sales. Minimum volume of PCC1- 75%; Maximum volume of PCC3 - 10%; PCC2 – balance

D) Subsequent years (after 12/31/2020)

“Base” RPS Procurement Requirement: 33% annually, as measured by percentage of retail sales. Minimum volume of PCC1- 75%; Maximum volume of PCC3 - 10%; PCC2 – balance

8. POU’s are required to adopt individual RPS Enforcement Programs before 1/1/2012 with requisite public notification of such [PUC Section 399.30 (e)]. Azusa adopted such program in November 2011.

9. POU’s are required to establish and annually review their individual RPS procurement plans with requisite public notification of such and notification to the CEC [PUC Section 399.30 (f)]. The attached RPS procurement plan is intended to satisfy this requirement.

10. POU’s are required to annually submit to the CEC information on any new RPS contracts executed during the prior year [PUC Section 399.30(g)].

11. POU’s may bank excess products procured in one compliance period and use such banked products in subsequent compliance periods.

Discussion of Azusa RPS

Currently Azusa has contracts with five (5) renewable energy resources:

1. Garnett Wind - 6.5 MW capacity
2. Solano County Wind - 6.0 MW capacity
3. Small hydro with Metropolitan Water District - 3.72 MW capacity
4. Small hydro with San Gabriel Valley MWD – 1.05 MW capacity
5. Hoover hydro repowering – 4 MW capacity

In addition to the above preexisting renewable contracts, Azusa is close to executing (through SCPPA) a 7 MW (about 16,500 MWHR/year) contract for solar energy with Martifer/Silverado which will commence in 2015. Moreover, Azusa is in talks to contract for renewable energy from a small hydro facility planned by the San Gabriel Valley Municipal Water District (0.85 MW with potential annual delivery of 4000 MWHR).

Preexisting contracts 1 – 4 above are with resources certified by the CEC as renewable energy resources and thus fully qualify for the RPS compliance purposes. However, Hoover hydro repowering, although derived from incremental efficiency gains realized by installing newer more efficient turbines, may not qualify because of the effective date of the contract (1984). Although thus far the indications from the CEC have been that Hoover repowering may not be deemed qualified renewable resource, Staff understands that the CEC is currently in discussions with Hoover operator - the Western Area Power Administration (WALC) regarding creation of renewable energy credits for Hoover. Clearly not allowing Hoover may increase costs of compliance to Azusa.

Another important matter that may affect costs of RPS compliance to Azusa has to do with *how* grandfathering of pre-existing RPS resources/contracts will be done. All of the above listed Azusa pre-existing contracts were executed before June 1, 2010. SBX 1 2 states that all pre June 1, 2010 contracts for renewable energy with qualified resources will be grandfathered and will “**count in full**” for the purpose of calculating compliance [PUC Section 399.16 (d)]. Based on the indications from the CEC, their interpretation of the “**count in full**” provisions may likely be that grandfathered contracts will satisfy the volumetrically equivalent portion of the base compliance requirement (CEC calls it “**Bucket 0**”) but will not count toward satisfying the particular renewable product category/bucket requirement (PCC/Bucket 1, PCC/Bucket 2 or PCC/Bucket 3). Azusa and other POU's are on record as strong supporters and advocates for grandfathering pre-existing contracts in specific product categories (Buckets). Should grandfathering in buckets be allowed, Azusa would have to purchase the cheapest - Bucket 3 RECs product only (estimated to be under \$50,000 in total). On the other hand, potential disallowance of counting the grandfathered products into specific categories/buckets may cost Azusa up to \$1.2 million in Compliance Period 1 alone (example shown on next page).

RPS Procurement Plan

November 26, 2012

Page 5

"Count in Full" Non-Bucketized vs Bucketized Example	
Retail Load	200,000 MWh
20% Compliance	40,000 MWh
Total CEC certified RPS resources	30,000 MWh
1)"Count in Full" (Non-Bucketized)	
20 % Compliance	40,000 MWh
Total CEC certified RPS resources	30,000 MWh
Remaining needs	10,000 MWh
*Non-Bucketized would require utilities to proportionately allocate the remaining needs into the three Portfolio Content Category	
2)"Count in Full" (Bucketized)	
20 % Compliance	40,000 MWh
Total CEC certified in-state RPS resources	30,000 MWh
Remaining needs	10,000 MWh
*Bucketization would allow utilities to categorize the CEC certified RPS resources first towards PCC1 and the remaining in the less expensive PCC.	

All Azusa pre-existing (grandfathered) contracts are the PCC 1 (Bucket 1) type as all are California interconnected and Hoover energy is scheduled directly without substitution into the CAISO Balancing Authority Area). Clearly, a positive resolution of this matter is very important to Azusa.

The following two tables show delivered and projected volumes of renewable energy purchases (in MWh) from Azusa RPS contracts and Hoover during the First Compliance Period. Projections shown in Table 1 are inclusive of Hoover repowering contract and projections shown in Table 2 exclude Hoover repowering. When comparing to “base” Compliance Period 1 RPS requirement of 20%, the tables show 1.1% “shortage” (with Hoover) and 2.76% “shortage” (without Hoover), respectively.

RPS Procurement Plan

November 26, 2012

Page 6

Table 1			
RPS in Compliance Period 1 (including Hoover)			
Year	2011	2012	2013
		Estimated	Projected
RPS contract expenditures	\$ 3,182,625	\$ 2,969,167	\$ 3,042,518
Load (GWh)	238.74	244.24	249.87
RPS Contracts (GWh)	44.83	39.4	42.11
Hoover	4.06	4.06	4.06
Total	48.89	43.46	46.17
Ratio	20.48%	17.79%	18.48%
% Over/Under	0.48%	-2.21%	-1.52%
GWh Under/Over	1.14	-5.39	-3.80
Estimated Cumulative Compliance Period 1 Percentage		18.90%	
Estimated Total RPS Contracts Expenditures		\$9,194,310	

Table 2			
RPS in Compliance Period 1 (not including Hoover)			
Year	2011	2012	2013
		Estimated	Projected
RPS contract expenditures	\$ 3,068,509	\$ 2,880,514	\$ 2,942,130
Load (GWh)	238.74	244.24	249.87
RPS Contracts (GWh)	44.83	39.4	42.11
Ratio	18.78%	16.13%	16.85%
% Over/Under	-1.22%	-3.87%	-3.15%
GWh Under/Over	-2.92	-9.45	-7.86
Estimated Cumulative Compliance Period 1 Percentage		17.24%	
Estimated Total RPS Contracts Expenditures		\$8,891,153	

As provided for in Section 399.30 (a) of the Public Utilities Code, Staff performed a detailed assessment of Azusa generation needs through the end of Compliance Period 1 (2011 – 2013) and concluded that, consistent with our previous assessments, Azusa has substantial excess of energy as based on projected Azusa load and long term and mid term contracts and/or resource ownerships. It should be stated that virtually all such Azusa planned energy (or associated fuel) contracts are of the “must take” type, which do not allow for “backing off” the underlying generation. Please also note that unlike the Investor Owned Utilities (IOUs) which began divesting their resources in 1996 to comply with AB 1890, most POUs (including Azusa) remained fully resourced. Accordingly, from the purely volumetric energy planning perspective

RPS Procurement Plan

November 26, 2012

Page 7

the earliest possible opportunity to “fit” additional energy will be in 2015 after Azusa’s long term summer peaking contract expires in late 2014. Additional opportunities may materialize in subsequent years depending on the outcome of negotiations by Azusa to divest some or all of its share of San Juan. It should be also stated that Azusa is a “built-out” load area. Consequently, Azusa’s load growth, although currently beginning to recoup recessionary losses, is expected to stabilize at ¼% per year.

It is important to note that should there be any “room” under the Azusa load curve to take additional energy then, depending on the CEC’s reading of the statute, the following scenarios might come into play:

- 1) Should the Azusa grandfathered RPS contracts be permitted to satisfy the Product Category requirements (i.e. be placed in “Buckets”) all our existing contracts would qualify for “Bucket 1”. Should this scenario come into play, Staff estimates the cost of additional compliance (in addition to the cost our existing contracts) would be under \$50,000 as only Product Category 3 instruments (RECs) would be required.
- 2) Should the Azusa grandfathered RPS contracts NOT be permitted to be placed in “Bucket 1”, Staff estimates that the additional gross compliance cost (in addition to the cost our existing contracts) would be about \$1,200,000 (\$600,000 - \$800,000 on a net basis, after reselling unneeded energy).

In light of the above (i.e. no need for additional energy), to meet the RPS requirement during Compliance Period 1, Staff recommends purchasing Renewable Energy Credits (RECs) for the balance of the 20% RPS procurement requirement. RECs are the least expensive RPS compliance product since there is no associated energy. The Director of Utilities has authority to make such purchases under the utility’s Risk Management Policy. The timing of these purchases has not yet been finalized by staff. The total estimated cost for purchasing RECs for Compliance Period 1 should not exceed \$50,000.

Attached for the Board’s approval is **Azusa RPS Procurement Plan** covering the first RPS Compliance Period (1/1/2011 – 12/31/2013) and associated **Azusa RPS Procurement Decision logic** flow chart.

Staff would like to note again that the still evolving CEC regulations and/or future review by the CEC of the attached RPS Procurement plan and logic may require updating and/or amendment.

RECOMMENDATION

Staff recommends that the Board approve the attached RPS Procurement Plan and associated RPS Procurement Logic Chart.

RPS Procurement Plan

November 26, 2012

Page 8

FISCAL IMPACT

The total fiscal impact of the procurement recommendation should not exceed \$50,000.

Prepared by:

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Attachments:

1. Resolution Approving the RPS Procurement Plan
2. Azusa 2012 RPS Procurement Plan
3. Azusa RPS Procurement Logic flow chart