VALLEY CLEAN ENERGY ALLIANCE

Staff Report – Item 16
Confidential & Proprietary

TO: Valley Clean Energy Alliance Board

FROM: Mitch Sears, Interim General Manager
Gary Lawson, Sacramento Municipal Utility District (SMUD)

SUBJECT: Q2 2019 Procurement Update (Informational)

DATE: July 11, 2019

CONTEXT

In accordance with VCE's Wholesale Energy Risk Management Policy, staff is providing this Q2 2019 Procurement Update.

SUMMARY

With the exception of a shortfall in Local Resource Adequacy capacity (RA) forward power procurements for 2019 are completed. 2020 Procurements are underway.

We expect 2019 power costs to come in below budget by $1.129 million. Current power cost projections for 2020 also look favorable compared to prior estimates, at $0.664 million below the prior estimates, despite the impact of increasing RA market prices on the cost of RA. The 2020 view includes the impact of enrolling PG&E net metered customers into VCE service during 2020.

Our current estimate of 2021 power costs is looking $5.090 million worse than prior estiamtes for two primary reasons: 1. We've changed assumptions on when in 2021 the pending new long-term renewable contracts begin delivering, and have factored in the increased expected cost of those renewables; and, 2. The increase in RA prices seen recently in the market are negatively impacting RA procurement costs for 2021. Bear in mind in looking at 2021 power cost esimates that the renewable supply has not been locked in, and VCE will have a better idea of 2021 costs once we execute the long-term renewable PPA that we are negotiating with a supplier for. Also, with regard to increasing power cost on VCE's overall financial picture, is that a key off-setting factor to rising power costs is the downward pressure on the Power Charge Indifference Adjustment (PCIA) that higher RA market prices will have. This is expected to provide some cost relief going forward. In addition, future years will have the cost benefit of long-term renewable contracts in place for the full year whereas 2021 will only have that for half-year as those projects come on-line.

CURRENT POWER PORTFOLIO NET POSITION

Table 1 shows VCE's current power portfolio net position.

Table 1. VCE Net Position

[redacted]

2019

[redacted]

2020

[redacted]

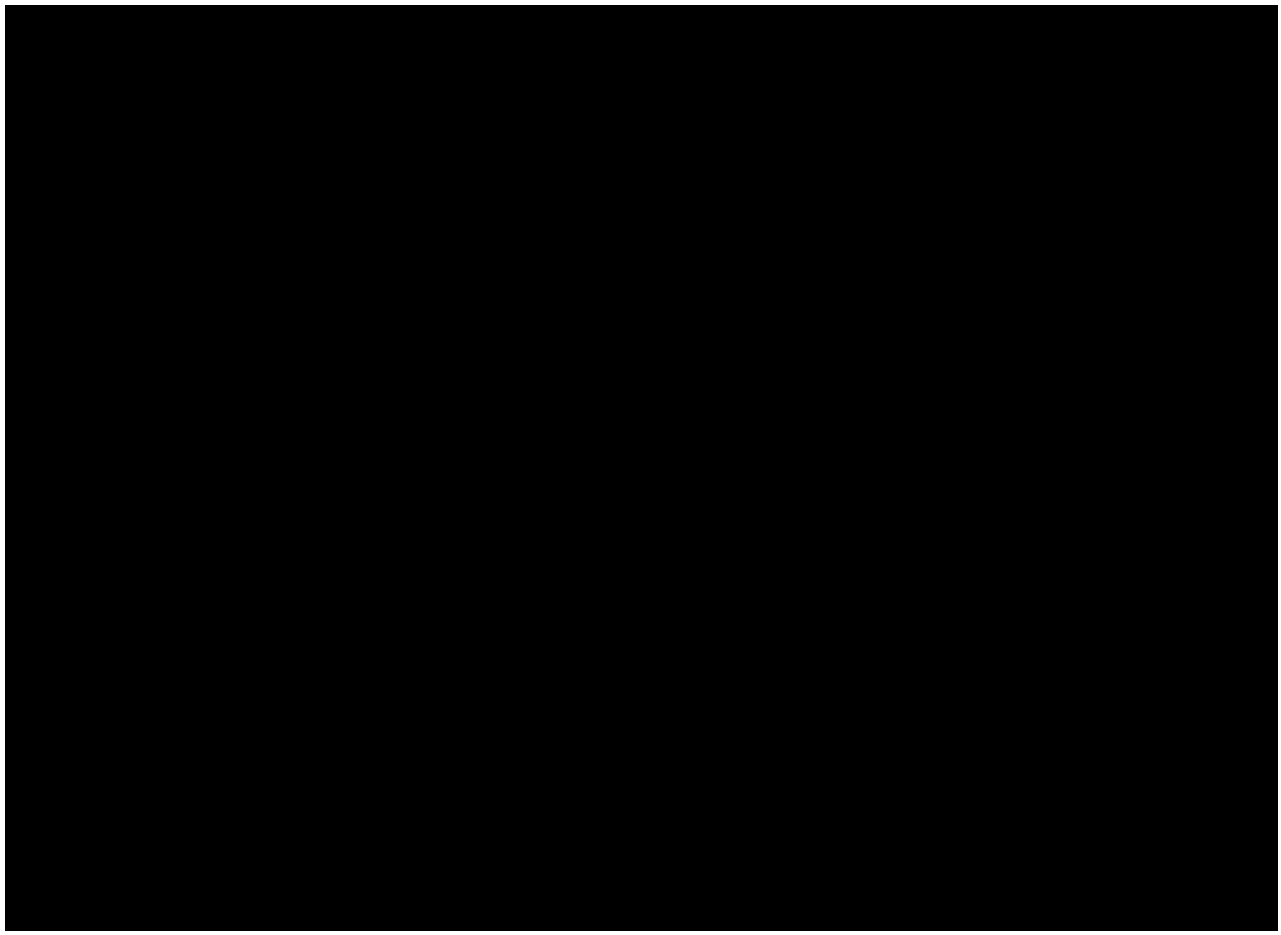
2021 & 2022

[redacted]

MARKET POWER PRICES

Prices for market power for 2019 and 2020 have recently been dropping from the high levels we saw late last year and early this year. Figures 1 and 2 below show the trend of On Peak and Off Peak NP-15 forward prices all the way back to late 2017.

Figure 1. On Peak NP-15 Forward Power Prices



The most recent price curves are the darkest, and the price curves lighten, the farther back in time their vintage represents. The relaxing of market power prices will allow us to hedge VCE's market energy at lower prices than previously forecast.

Figure 2. Off Peak NP-15 Forward Power Prices

CURRENT POWER SUPPLY COST PROJECTIONS

Tables 2, 3, and 4 below show the current power supply costs compared with forecasts from last November.

2019

For 2019, power cost projections are better by $1.129 million in large part due to the drop in forward market energy prices, offset by increased RA costs, driven by the runup in RA prices.

Table 2. 2019 Power Budget Comparison

2019 Power Supply Cost	Target Budget	Current Budget	Net Savings (Costs)
Market Energy	$ 29,079,467	$ 27,642,841	$ 1,436,626
CAISO Variable Fees	$ 126,983	$ 123,723	$ 3,260
REC Costs	$ 3,470,566	$ 3,377,424	$ 93,141
Resource Adequacy Cost	$ 7,432,636	$ 7,844,033	$ (411,397)
CAISO GMC Cost	$ 319,856	$ 311,952	$ 7,903
Market Services Charge	$ 67,777	$ 66,037	$ 1,740
System Operations Charge	$ 240,078	$ 233,915	$ 6,163
SCID Fee	$ 12,000	$ 12,000	$ -
Carbon Free Premium	$ 1,060,085	$ 1,060,085	$ -
2019 Total Power Cost	**$ 41,489,593**	**$ 40,360,059**	**$ 1,129,534**

2020

For 2020, power cost projections are better by $0.664 million in large part due to the drop in forward market energy prices, offset significantly by increased RA costs, driven by the runup in RA prices and the increased RA demand from the enrollment of PG&E net metered customers during 2020. The price of VCE's Large Hydro supply (Carbon Free Premium) was higher than forecast, increasing the Large Hydro supply costs by almost $198,658 more than forecast.

Table 3. 2020 Power Budget Comparison

2020 Power Supply Cost	Baseline Forecast	Current Forecast	Net Savings (Costs)
Market Energy	$ 32,952,900	$ 31,167,768	$ 1,785,132
CAISO Variable Fees	$ 133,891	$ 133,350	$ 541
REC Costs	$ 3,699,395	$ 3,627,478	$ 71,917
Resource Adequacy Cost	$ 7,505,146	$ 8,501,052	$ (995,906)
CAISO GMC Cost	$ 336,603	$ 335,291	$ 1,312
Market Services Charge	$ 71,465	$ 71,176	$ 289
System Operations Charge	$ 253,138	$ 252,115	$ 1,023
SCID Fee	$ 12,000	$ 12,000	$ -
Carbon Free Premium	$ 1,277,433	$ 1,476,091	$ (198,658)
2020 Total Power Cost	**$ 45,905,368**	**$ 45,241,031**	**$ 664,338**

2021

Our current estimate of 2021 power costs is looking $5.090 million worse than prior estiamtes for two primary reasons: 1. We've changed assumptions on when in 2021 the pending new long-term renewable contracts begin delivering, and have factored in the increased expected cost of those renewables; and, 2. The increase in RA prices seen recently in the market are negatively impacting RA procurement costs for 2021. The renewable supply for 2021 has not been locked in yet, and VCE will have a better idea of 2021 costs once we execute the long-term renewable PPA that we are negotiating with a supplier for. Also, with regard to increasing power cost on VCE's overall financial picture, is that a key off-setting factor to rising power costs is the downward pressure on the Power Charge Indifference Adjustment (PCIA) that higher RA market prices will have. This is expected to provide some cost relief going forward. In addition, future years will have the cost benefit of long-term renewable contracts in place for the full year whereas 2021 will only have that for half-year as those projects come on-line.

Table 4. 2021 Power Budget Comparison

2021 Power Supply Cost	Baseline Forecast	Current Forecast	Net Savings (Costs)
Market Energy	$ 35,560,603	$ 35,412,322	$ 148,280
CAISO Variable Fees	$ 146,870	$ 141,690	$ 5,180
REC Costs	$ (1,571,224)	$ 1,442,666	$ (3,013,889)
Resource Adequacy Cost	$ 8,097,302	$ 10,247,249	$ (2,149,947)
CAISO GMC Cost	$ 368,069	$ 355,511	$ 12,558
Market Services Charge	$ 78,392	$ 75,627	$ 2,765
System Operations Charge	$ 277,677	$ 267,884	$ 9,793
SCID Fee	$ 12,000	$ 12,000	$ -
Carbon Free Premium	$ 1,401,262	$ 1,493,722	$ (92,460)
2021 Total Power Cost	**$ 44,002,882**	**$ 49,093,160**	**$ (5,090,278)**

RESOURCE ADEQUACY

[redacted]

Table 5. VCE Month Ahead RA Compliance

[redacted]

[redacted]

CREDIT/EXPOSURE

Figure 3 shows the current credit/exposure to various VCE counter parties. [redacted]

Figure 3. Current Credit/Exposures

[redacted]

FORECAST VS ACTUAL LOADS

Figure 4 shows VCE's forecast retail loads for 2019, compared with actual loads to date. At the time of publication, we only have loads reported through March. Retail loads are coming in 4.6% below the forecast. Wholesale loads are similar, running 5.1% below forecast. The lower-than-forecast loads for January through March have been factored into VCE's net position (Table 1). Staff has just started monitoring actual versus forecast loads and will be evaluating the differences to determine what factors might be driving the differences and whether these differences are forming a trend.

Figure 4. 2019 Retail Loads – Forecast vs. Actual