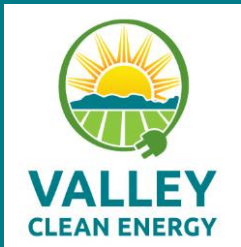




yvonnehunterphotography.com

Valley Clean Energy CAC Meeting – Thursday, December 21, 2023



Item 5 – Introduction/Overview of AgFIT program

To Provide Public Comment on any agenda item please:

- E-mail 300 words or less to: meetings@valleycleanenergy.org

OR

If in person, complete a COMMENT CARD

OR

Join the Public Comment Queue by

- “Raising Hand” on Zoom Meeting

OR

- Press *9 if joining by phone

Emailed comments received **before** the item has concluded will be read into the record.

Emailed comments received **after** the item has concluded but before the end of the meeting will not be read
will be included in the meeting record.

An aerial photograph showing a large agricultural field. A central portion of the field is covered with rows of solar panels, which appear as a grid of dark, rectangular shapes. The surrounding areas are lush green crops, likely corn. A road or path runs through the field, intersecting the solar panel area. The overall scene is a blend of traditional agriculture and modern renewable energy technology.

All About AgFIT

Sierra Huffman

Sierra.Huffman@valleycleanenergy.org

Presentation Topics

1. Who's Participating
2. Hourly Prices
3. Subscription/Bill Protection
4. Customer Experience
5. Findings and Customer Response



AgFIT Participation

- Began Summer '22, runs through Summer '24
- 5 customers and 49 participating pumps
- 3 MW of enrolled load
- Agricultural irrigation pumping customers
- Incentives for load automation technology
- Fully voluntary program enrollment



Pricing Details

Prices are broken into two main components:

1. VCE's Portion: Generation
2. PG&E's Portion: Distribution and Transmission

VCE's Price Inputs

- Revenue requirements
- Maximum Net Load (MW)
- Hourly Net Load (load – renewable output)
- LMP – Locational Marginal Price



Scarcity Pricing

Designed to collect more revenue during times of grid stress, when electricity demand is high

Price Drivers

- **Peak** = revenue collected during peak times or high load
- **Ramp** = revenue collected during ramp hours or as load increases over 3-hour increments

[Prices are available up to 7 days in advance!](#)



Subscriptions/Bill Protection

2 Versions of Subscriptions or Bill Protection

1. AgFIT 1.0 – Based on historical usage
2. AgFIT 2.0 – adjusted using an average OAT

AgFIT 1.0

- Historical hourly usage – used to create an average 24 hr load shape for each billing month
- Historical bill total – used to set the cost of kWh
- Outcome – a set quantity of kW in each hour of a billing month for a set cost



Enrollment Process

1. Customer elects to participate in pilot, agrees to terms and conditions
2. Customer service points are evaluated for best fit – Little to no previous shifting
3. Automation is installed in the field and/or software is connected to devices
4. Customer receives training/mentoring on the Polaris scheduling portal



Automation

- Provided an incentive of \$200/enrolled kW
- Incentive covers hardware and software
- Participation in program is not hardware specific and can even be done manually
- Polaris provides software that communicates set schedules to devices in the field
- Prices are not sent to devices directly



AgFIT Weekly Scheduling



David Meyers

Scheduled Pump HP (15kW)
20

Schedule Operation Notes
Pump Panel Switch in AUTO

Select TOU or AgFIT rates
TOU AgFIT

Week of
Sunday Aug 28

→ PRE-FILL RECOMMEND NEXT

Bill Period: Aug 1 - Aug 31

Transactive Energy \$0.18 (AVG) existing: 12,058kWh new: 1,050kWh \$2,224.03

Charges with Subscription

Bill Period: Sep 1 - Sep 30

Transactive Energy \$0.24 (AVG) existing: 1,246kWh new: 750kWh \$293.48 + \$15.03

Charges with Subscription

CALCULATE Calculate final Schedule cost

Estimated Schedule Charges (120hr) \$15.03

Existing Bill Charges \$2,517.51

Total \$2,532.54

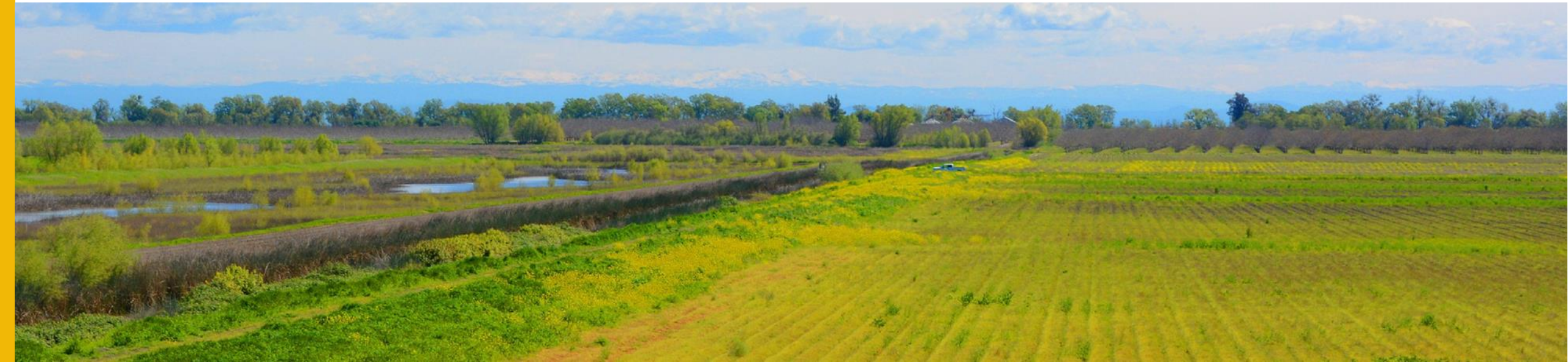
	8/28 Sunday	8/29 Monday	8/30 Tuesday	8/31 Wednesday	9/1 Thursday	9/2 Friday	9/3 Saturday
12:00am	0.22	0.21	0.23	0.24	0.32	0.29	0.27
01:00am	0.20	0.20	0.21	0.23	0.27	0.26	0.24
02:00am	0.21	0.21	0.22	0.25	0.28	0.28	0.26
03:00am	0.20	0.21	0.21	0.24	0.28	0.26	0.25
04:00am	0.21	0.21	0.23	0.24	0.27	0.25	0.24
05:00am	0.21	0.21	0.23	0.24	0.28	0.27	0.25
06:00am	0.20	0.25	0.27	0.30	0.34	0.31	0.25
07:00am	0.19	0.21	0.23	0.25	0.27	0.27	0.22
08:00am	0.17	0.21	0.21	0.23	0.24	0.24	0.21
09:00am	0.16	0.19	0.20	0.22	0.24	0.24	0.21
10:00am	0.16	0.20	0.20	0.22	0.26	0.25	0.21
11:00am	0.16	0.21	0.21	0.24	0.31	0.29	0.24
12:00pm	0.18	0.20	0.22	0.25	0.31	0.29	0.26
01:00pm	0.19	0.22	0.25	0.29	0.36	0.34	0.30
02:00pm	0.21	0.25	0.29	0.34	0.43	0.38	0.36
03:00pm	0.23	0.27	0.31	0.38	0.50	0.42	0.41
04:00pm	0.26	0.31	0.35	0.41	0.55	0.46	0.45
05:00pm	0.34	0.36	0.43	0.51	0.67	0.53	0.55
06:00pm	0.56	0.55	0.70	0.87	1.26	0.95	0.93
07:00pm	0.72	0.66	0.77	0.91	1.35	0.97	0.98
08:00pm	0.53	0.46	0.53	0.59	0.77	0.59	0.54
09:00pm	0.27	0.26	0.30	0.34	0.39	0.36	0.36
10:00pm	0.23	0.23	0.26	0.28	0.35	0.33	0.33
11:00pm	0.22	0.24	0.25	0.27	0.33	0.32	0.31

estimated bills: 08/01 - 08/31 VCE LSE -
09/01 - 09/30 VCE LSE

***Scheduled manually each week by program participant**

Key Takeaways

- **Automation is driving customer action!**
- Program participants seeing additional savings from efficient water usage and reduced labor
- Almost all action is scheduled a week in advance, few changes in scheduling happening at DA
- For customers that successfully manage TOU and avoid demand charges, AgFIT may not be the best choice





yvonnehunterphotography.com

Valley Clean Energy CAC Meeting – Thursday, December 21, 2023



Item 7 – Power Procurement / Renewable Portfolio Standard (RPS) Update

PUBLIC COMMENTS

To Provide Public Comment on any agenda item please:

- E-mail 300 words or less to: meetings@valleycleanenergy.org

OR

If in person, complete a COMMENT CARD

OR

Join the Public Comment Queue by

- “Raising Hand” on Zoom Meeting

OR

- Press *9 if joining by phone

Emailed comments received **before** the item has concluded will be read into the record.

Emailed comments received **after** the item has concluded but before the end of the meeting will not be read
ill be included in the meeting record.

Item 7 – Power Procurement/RPS Update: Background

- California requires LSEs to procure a minimum percentage of their load from eligible renewable resources such as wind, solar, geothermal, small hydro, etc.¹
- LSEs must achieve interim targets referred to as Compliance Periods (CP1, CP2, CP3, etc). CP4 is measured over years 2021-2024 and the average for this period is 40%.
- In May 2020 (CAC) and June 2020 (Board) the concept of ramping into VCE's long-term contracts versus relying on short-term renewable energy credits (RECs) was adopted and since then Staff has been executing on that strategy.
- The plan helps keep customers rates lower while VCE ramps into long-term renewable contracts at competitive prices.
- 2020 & 2021 were intentionally low renewable content. 2023 & 2024 will be significantly higher thus resulting in a CP4 average at or above the mandate (40%).
- If necessary, small shortfalls will be met with short-term RECs.



Note: 1) From a State perspective, LSEs need to procure 60% of the load from renewable energy by 2030 as outlined in SB 100. VCE has adopted a more aggressive target of achieving 100% renewable by 2030 (adopted July '23).

Item 7 – Power Procurement/RPS Update: Contracted Renewable Projects

POWER RESOURCE CONTRACTS



<https://valleycleanenergy.org/power-sources/>

Item 7 – Power Procurement/RPS Update: 2023 Target vs Actuals

	Original Plan		Actual	
Standard Green Load	705,065		639,973	
UltraGreen Load	7,051		6,399	
RPS Supply	285,218	40%	333,849	52%
Aquamarine Solar	133,341		111,803	
Indian Valley	6,445		5,246	
Putah Creek	7,920		5,797	
Resurgence Solar	137,512		111,003	
Short Term RECs	-		100,000	
Large Hydro Supply	87,511	12%	92,274	14%
PG&E Allocation	87,511		92,274	

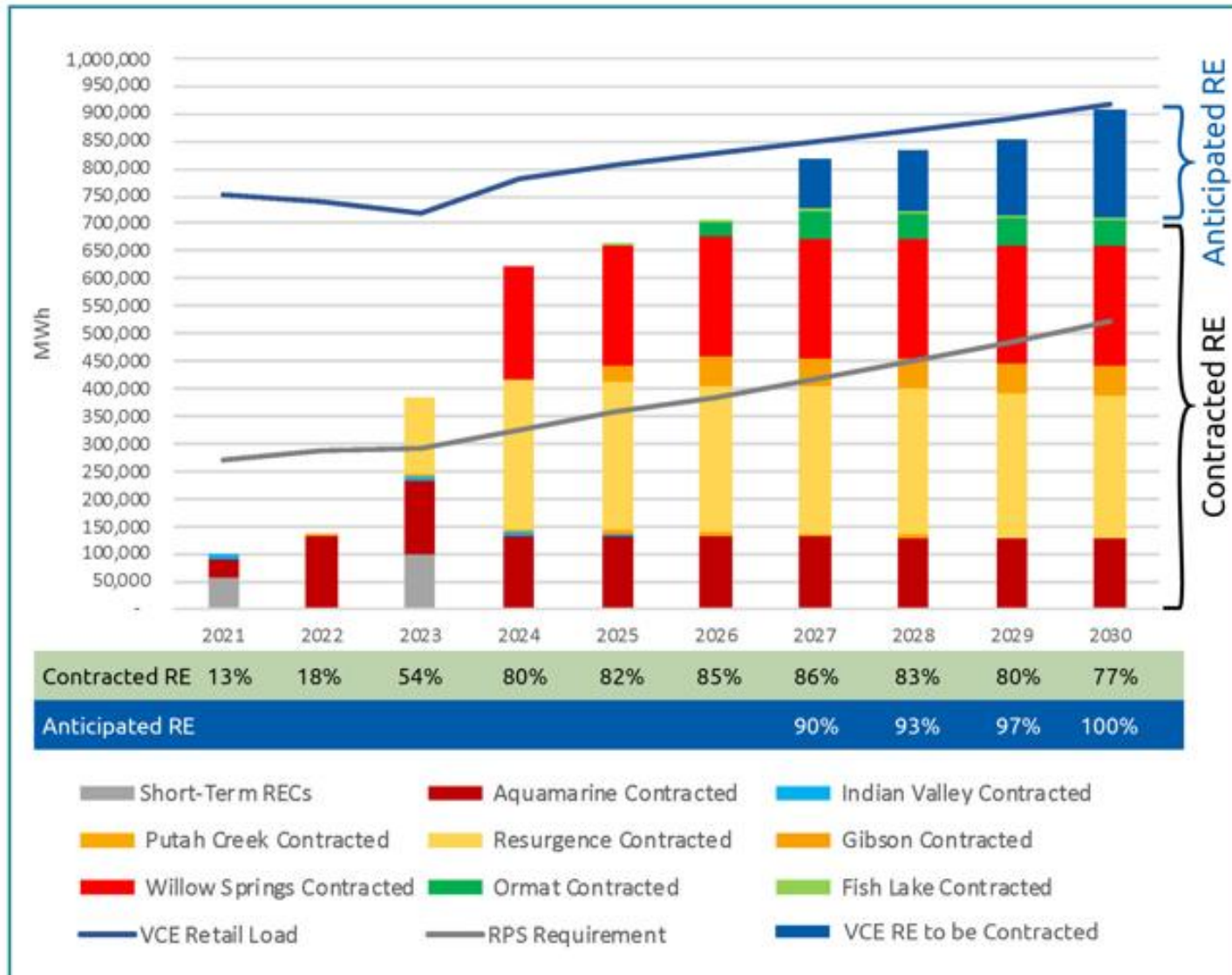
Note: 1) Load actuals are utilized through October. Generation actuals are utilized through November. Forecasted values are utilized for the remaining months.

2) Large hydro actuals through June. July-Dec is a forecast.

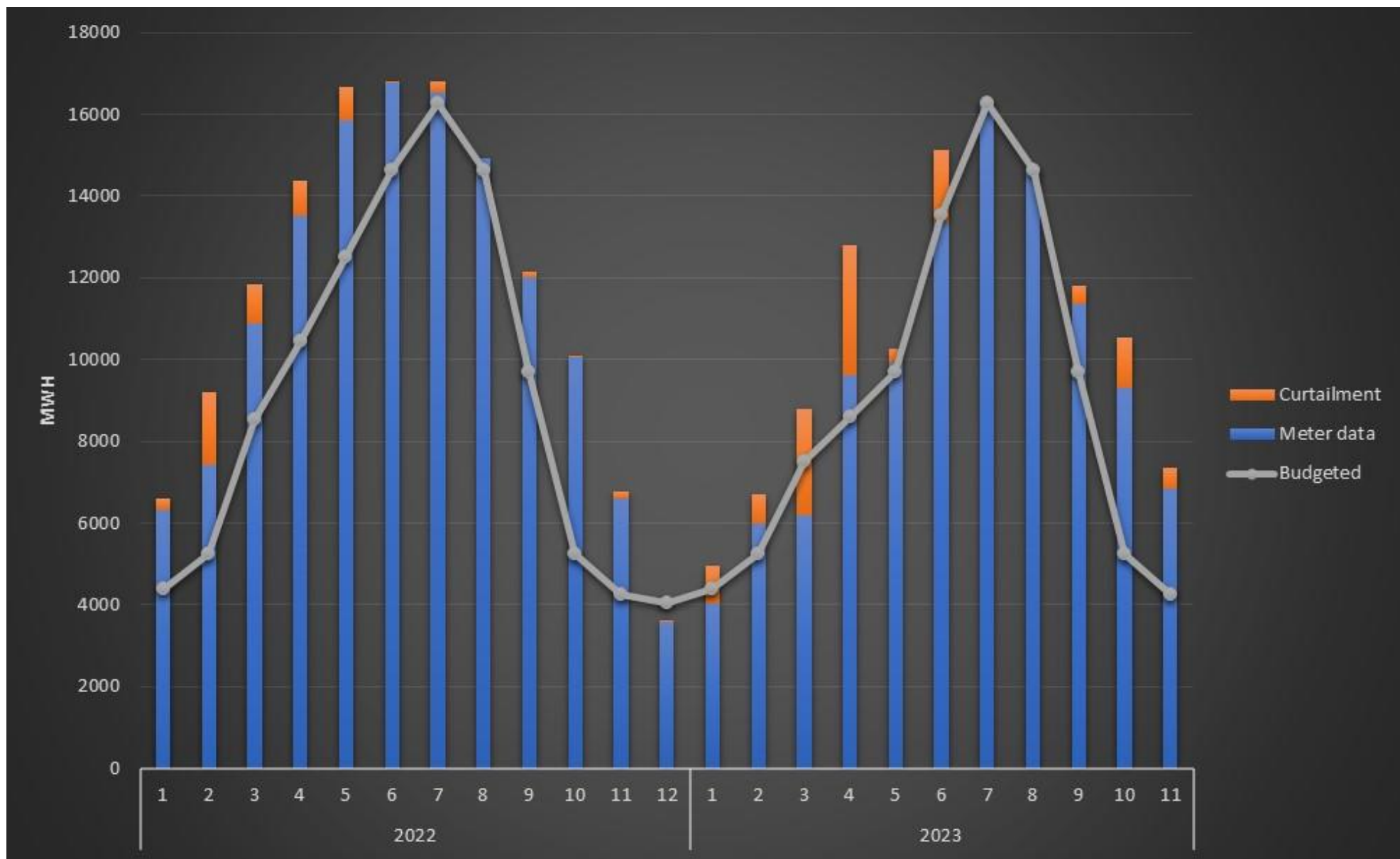
3) RPS supply should end the year btw 50-55% (depends on load and performance of renewable projects in Dec.)

Item 7 – Power Procurement/RPS Update: Outlook

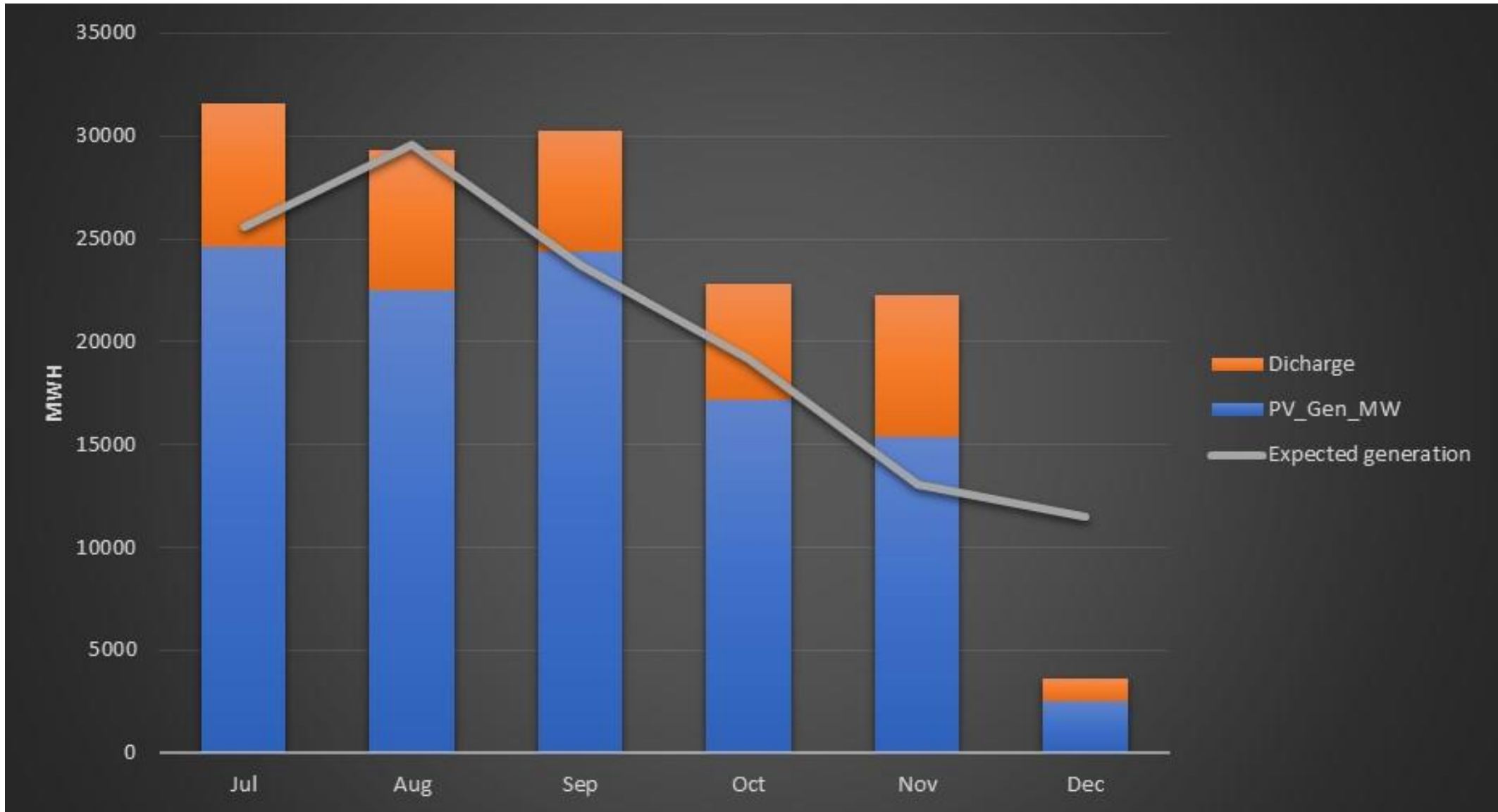
ANNUAL RPS POSITION



Item 7 – Power Procurement/RPS Update: Aquamarine Production



Item 7 – Power Procurement/RPS Update: Resurgence Production



Item 7 – Power Procurement/RPS Update: Resurgence Daily Activity

