333 W El Camino Real, Ste. 330 | Sunnyvale, CA 94087 | SVCleanEnergy.org | 1-844-474-SVCE

George Tyson, Chair
Town of Los Altos Hills

Tina Walia, Vice Chair
City of Saratoga

Elliot Scozzola
City of Campbell

Sheila Mohan
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Zach Hilton
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Margaret Abe-Koga
City of Mountain View

Larry Klein
City of Sunnyvale

Otto Lee
County of Santa Clara

AGENDA PACKET MATERIALS AMENDMENTS SUMMARY

12/11/23

1. Item 1f: Amendment made to Staff Report, Fiscal Impact section (page 84 of packet)

George Tyson, Chair
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Silicon Valley Clean Energy Authority
Board of Directors Meeting
Wednesday, December 13, 2023
7:00 pm

Cupertino Community Hall
10350 Torre Avenue
Cupertino, CA

Teleconference Meeting
Webinar:
https://cityofcupertino.zoom.us/j/96339940385

Telephone (Audio Only):
US: +1 669-900-6833
Webinar ID: 963 3994 0385

Members of the public may also attend this meeting in person, or observe this meeting electronically by accessing the meeting via instructions above. Public Comments can be sent in advance of the meeting via email up to three hours before the meeting begins to Board Clerk Andrea Pizano at Andrea.Pizano@svcleanenergy.org and will be distributed to the Board of Directors. The public will also have an opportunity to provide comments during the meeting. Members of the public participating remotely and using Zoom may comment during public comment or the applicable agenda item by using the Raise Hand feature and you will be recognized by the Chair. Those using the telephone (audio only) feature should press star 9 on your phones to initiate the "Raise Hand" function in Zoom. You will then be announced, unmuted, and your time to speak will begin.

The public may provide comments on any matter listed on the Agenda. Speakers are customarily limited to 3 minutes each, however, the Board Chair may increase or decrease the time allotted to each speaker based on the number of speakers, the length of the agenda and the complexity of the subject matter. Speaking time will not be decreased to less than one minute.

If you are an individual with a disability and need a reasonable modification or accommodation pursuant to the Americans with Disabilities Act ("ADA") please contact Board Clerk Andrea Pizano at Andrea.Pizano@svcleanenergy.org prior to the meeting for assistance.

AGENDA

Call to Order

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333 W El Camino Real
Suite 330
Sunnyvale, CA 94087

Pursuant to the Americans with Disabilities Act, if you need special assistance in this meeting, please contact the Clerk for the Authority at (408) 721-5301 x1005. Notification 48 hours prior to the meeting will enable the Authority to make reasonable arrangements to ensure accessibility to this meeting. (28 CFR 35.105 ADA Title II).

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County of Santa Clara

Roll Call

Public Comment on Matters Not Listed on the Agenda

The public may provide comments on any matter not listed on the Agenda provided that it is within the subject matter jurisdiction of SVCE. Speakers are customarily limited to 3 minutes each, however, the Board Chair may increase or decrease the time allotted to each speaker based on the number of speakers, the length of the agenda and the complexity of the subject matter. Speaking time will not be decreased to less than one minute.

Consent Calendar (Action)

1a) Approve Minutes of the November 8, 2023, Board of Directors Meeting

1b) Receive October 2023 Treasurer Report

1c) Approve Cancellation of July 10, 2024 Board of Directors Meeting and Receive 2024 Board of Directors Regular Meeting Schedule

1d) Authorize the Chief Executive Officer to Execute a Five-Year Agreement with the Sacramento Municipal Utility District for Program Administration Support for Decarbonization Programs

1e) Authorize the Chief Executive Officer to Execute a Five-Year Agreement with AIQUEOUS/Energy Orbit for Programs Portfolio Management Tool Software and Support

1f) Authorize the Chief Executive Officer to Execute Service Agreements with 1) Arup; 2) Evergreen Economics; and 3) Opinion Dynamics for Data Analytics Support Services

1g) Authorize the Chief Executive Officer to Execute an Agreement with Energy and Environmental Economics (E3) for Long-term Clean Energy Pathways Portfolio Analysis

1h) Approve Amendments to SVCE Financial Policy 7 – Purchasing Card Policy

1i) Approve Plan to Delay Implementation of Net Billing Tariff (Solar Billing Plan, NEM3) in Alignment with PG&E Implementation Delays

1j) Executive Committee Report

1k) Finance and Administration Committee Report

1l) California Community Power Report

1m) Audit Committee Report

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SILICON VALLEY CLEAN ENERGY

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Otto Lee
County of Santa Clara

Regular Calendar

2) CEO Report (Discussion)
3) Budget Update, 2024 Customer Rate Setting, and Additional Budget Funding Items (Action)
4) Approve Formation of Transition Ad Hoc Committee (Action)
5) Authorize the Chief Executive Officer to Execute a Five-Year Agreement with the Association for Energy Affordability Inc. for Multifamily Electrification Program Design and Implementation Support Services (Action)
6) 2024 SVCE Board Elections Information (Discussion)

Board Member Announcements and Direction on Future Agenda Items

Adjourn

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Silicon Valley Clean Energy Authority
Board of Directors Meeting
Wednesday, November 8, 2023
7:00 pm

Cupertino Community Hall
10350 Torre Avenue
Cupertino, CA

Administrative Conference Room, Gilroy City Hall
7351 Rosanna St.
Gilroy, CA 95020

DRAFT MEETING MINUTES

Call to Order:
Chair Tyson called the meeting to order at 7:00 p.m.

Prior to Roll Call, Director Meadows made a statement that she was appearing remotely pursuant to AB 2449 under the Just Cause provision because she was unable to attend in person due to a contagious illness. Director Meadows noted there were no other individuals present in the room with her.

Roll Call
Present:
George Tyson (Chair), Los Altos Hills
Tina Walia (Vice Chair), Saratoga
Elliot Scozzola, Campbell (Arrived during Closed Session)
Sheila Mohan, Cupertino
Zach Hilton, Gilroy (Participated via teleconference)
Sally Meadows, Los Altos (Participated via teleconference)
Rob Rennie, Los Gatos
Evelyn Chua, Milpitas
Bryan Mekechuk, Monte Sereno
Yvonne Martinez Beltran, Morgan Hill
Pat Showalter, Mountain View
Murali Srinivasan, Sunnyvale
Otto Lee, Santa Clara County

Absent:
None

Public Comment on Matters Not Listed on the Agenda
No speakers.

Public Comment on Closed Session
No speakers.

The Board of Directors convened to Closed Session at 7:03 p.m.

Convene to Closed Session
Public Employee Appointment
Title: Chief Executive Officer

CONFERENCE WITH LABOR NEGOTIATORS
Agency Designated Representatives: George Tyson, Tina Walia and Rob Rennie
Unrepresented Employee: Chief Executive Officer

The Board of Directors reconvened at 7:42 p.m.

Report from Closed Session
Chair Tyson reported the Board met in Closed Session to consider appointment of a new CEO and by a vote of 13 Directors in favor, no opposing, and no abstentions, the Board voted to appoint Monica Padilla as SVCE's new CEO.

Consent Calendar

MOTION: Chair Tyson moved and Vice Chair Walia seconded the motion to pull Item 1c) *Approve Employment Agreement with Chief Executive Officer* from the Consent Calendar.

The motion carried unanimously by verbal roll call vote.

1c) Approve Employment Agreement with Chief Executive Officer

Chair Tyson thanked staff and members of the Board of Directors for their input in the search for a new CEO, and voiced support of the selection of Monica Padilla as the new CEO.

Board members provided comments supporting Monica Padilla as the next CEO.

Chair Tyson opened public comment.
No speakers.
Chair Tyson closed public comment.

Chair Tyson recommended the approval of the Employment Agreement with Monica Padilla as the new CEO for SVCE, noting the agreement provides the following:

1) An annual salary of $403,000
2) 40 hours of management leave, in addition to the SVCE standard Paid Time Off, and
3) A $400 per month transportation allowance for an electric car.

MOTION: Vice Chair Walia moved and Director Rennie seconded the motion to approve the employment agreement with the Chief Executive Officer as read by Chair Tyson and included in the agenda packet.

The motion carried unanimously by verbal roll call vote.

CEO Girish Balachandran provided positive comments on the new CEO selection; COO and Director of Power Resources Padilla thanked CEO Balachandran and the Board of Directors and shared a few words about her future role.

The Board of Directors addressed the remaining items on the Consent Calendar.

Chair Tyson opened public comment.
No speakers.
Chair Tyson closed public comment.

MOTION: Director Chua moved and Director Lee seconded the motion to approve the remaining items on the Consent Calendar.

The motion carried unanimously by verbal roll call vote.

1a) Approve Minutes of the October 11, 2023, Board of Directors Meeting
1b) Receive September 2023 Treasurer Report
1d) Adopt Resolution Approving Amended Conflict of Interest Code
1e) Approve Plan to Implement Net Billing Tariff (Solar Billing Plan, NEM3) for New Solar Customers without Modification Beginning December 15, 2023
1f) Approve Scholarship Funds for 2024 EmPower Silicon Valley Student Short-Film Competition
1g) Closing Report of the Ad Hoc Committee of the Board to Address Legislative Responses to Industry Transition
1h) Legislative Response to Industry Transition 2023 Ad Hoc Committee Report
1i) Executive Committee Report
1j) California Community Power Report
1k) Additional Committee Reports

Regular Calendar

2) CEO Report (Discussion)

CEO Balachandran provided the CEO Report, which included the following:

1) Invitation to SVCE's December 13, 2023 event, *Reflect & Recharge;*
2) Announcement that PG&E rates would likely be higher than expected and PCIA would be lower than expected;
3) Announcement that updates regarding the anticipated RA citation would be provided by legal counsel;
4) Introductions to the following new employees:
    a. Britta Bradshaw, Power Resources Manager
    b. Adam Pearse, Regulatory Analyst
    c. Brett Sirianni, Information Technology Analyst
    d. Willy Wang, Power Resources Planner

All provided brief welcome comments.

3) Approve 2024 Legislative Policy Platform and Identify Focus Areas for the 2024 Legislative Ad Hoc Committee (Action)

Bena Chang, Director of Government and Legislative Affairs, presented the following:

- A recap of the 2023 legislative year and a forecast for 2024;
- A proposed 2024 Legislative Policy Platform for approval, which included the following main guiding principles:
    - Affordability and Rates
    - Climate Change Mitigation/Fuel Switching
    - Clean, Reliable Grid
    - Competitive Equity/Do No Harm
    - Health Impact/Safety

    - Equity
- A request to the Board of Directors to authorize the creation of a 2024 Legislative Ad Hoc Committee, with appointments to be made in February 2024.

Director of Government and Legislative Affairs responded to a committee member question regarding Climate Bonds.

Chair Tyson opened Public Comment.
No speakers.
Chair Tyson closed Public Comment.

MOTION: Vice Chair Walia moved and Director Martinez Beltran seconded the motion to approve SVCE's 2024 Legislative Policy Platform and create the 2024 Legislative Ad Hoc Committee.

The motion carried unanimously by verbal roll call vote.

4) Authorize the Chief Executive Officer to Make Changes to the GreenStart and GreenPrime Retail Rate Offerings (Action)

Director Hilton left the meeting at 9:00 p.m. during Item 4.

Chair Tyson introduced the item. Maren Wenzel, Senior Manager of Energy Policy and Regulatory Analysis, and Don Bray, Director of Strategic Development, provided a presentation evaluating SVCE's GreenStart and GreenPrime offerings and reviewed short-term options to achieve 100% clean or alternatives.

The presentation addressed long-term pathways to achieving SVCE's mission and offering customer valued clean energy products, provided an overview of SVCE standard product offerings, addressed challenges with carbon-free energy procurement in 2024, and reviewed short-term options for GreenStart and GreenPrime.

Staff presented the following recommendations:

<u>GreenStart 2024</u>
1. Continue to seek carbon-free resources within budget parameters for calendar year 2024;
2. Approve the procurement of nuclear carbon-free resources, provided:
    1. Allocations from PG&E are not available
    2. Sufficient volume is available to achieve 100% Clean below budget
3. If carbon-free resources are not available within budget, adjust 100% Clean goal for 2024 to current position of ~78% Clean

<u>GreenPrime 2024</u>
1. Discontinue Green-e Certification for 2024 for GreenPrime
2. Re-price GreenPrime premium for 2024 from .8 cents per kWh to 1.2 cents per $0.012/kWh, reflecting underlying cost increases but maintaining 100% RE/CF GreenPrime as a viable alternative to GreenStart for our GreenPrime customers.
3. Communicate GreenPrime rate and process changes to customers in December 2023

Staff also provided a recommended path for beyond 2024:
- Return with recommended overall Clean target for CY 2025-2030 as part of 2024 Integrated Resource Plan and 2045 Pathway to Carbon Neutral discussion
- Re-assess GreenStart and GreenPrime offerings holistically with consideration for findings from above analysis including product value proposition, cost allocation, hedging and price premium

Vice Chair Walia provided comments regarding the discussion at the Executive Committee level and the support of staff's recommendation.

Board members asked questions and provided comments on the presentation from staff.

Chair Tyson opened Public Comment.
Bruce Karney shared PowerPoint slides and addressed SVCE emission factors, shared a graph of Unincorporated County emissions vs. all of SVCE territory, commented that decarbonizing electricity bent the carbon curve downwards and rising emission factors bent the carbon curve upwards, and urged the SVCE Board of Directors to make sure that SVCE does not leave its carbon-free roots and become an agency that is 78-85% carbon-free.

Chair Tyson closed Public Comment.

The Board of Directors agreed to address and vote on the recommendations for GreenStart and GreenPrime separately.

MOTION: Director Lee moved and Director Martinez Beltran seconded the motion to support Staff's recommended path for GreenStart 2024 which included:
1. Continue to seek carbon-free resources within budget parameters for calendar year 2024
2. Approve the procurement of nuclear carbon-free resources, provided:
    1. Allocations from PG&E are not available
    2. Sufficient volume is available to achieve 100% Clean below budget
3. If carbon-free resources are not available within budget, adjust 100% Clean goal for 2024 to current position of ~78% Clean

The motion carried by verbal roll call vote with Director Hilton absent.

The Board of Directors proceeded to discuss the options for 2024 GreenPrime.

MOTION: Director Mekechuk moved and Director Lee seconded the motion to:
1. Discontinue Green-e Certification for 2024 for GreenPrime
2. Re-price GreenPrime premium for 2024 from .8 cents per kWh to 1.5 cents per $0.015/kWh, reflecting underlying cost increases but maintaining 100% RE/CF GreenPrime as a viable alternative to GreenStart for our GreenPrime customers
3. Communicate GreenPrime rate and process changes to customers in December 2023

The motion carried by verbal roll call vote with Director Hilton absent.

5) Authorize the Chief Executive Officer to Execute a 15-Year Power Purchase Agreement with SunZia Wind PowerCo LLC and Potential Replacement PPAs in Substantial Form and Any Necessary Ancillary Agreements and Documents (Action)

Director Chua left the meeting at 9:29 p.m.

Monica Padilla, COO and Director of Power Resources, introduced Kris Van Vactor, Wholesale Energy Markets Manager, and provided a presentation to the Board of Directors requesting authorization for the Chief Executive Officer to execute an agreement with SunZia Wind PowerCo LLC. COO and Director of Power Resources Padilla reviewed the progress made toward meeting long-term clean energy goals, fall 2022 procurement efforts, information on SunZia Wind PowerCo, LLC, how the SunZia Wind project would help meet agency and state goals and help with long-term RPS procurement mandates, and the contribution toward building a clean portfolio.

Staff responded to Board Member questions regarding the project.

Chair Tyson opened Public Comment.
Bruce Karney commented on PG&E filing a request to extend the life of Diablo Canyon an additional 20 years, and questioned what the impact would be knowing that Diablo Canyon would be operating until the

mid-2040s on the overall procurement strategies.

Chair Tyson closed Public Comment.

MOTION: Director Martinez Beltran moved and Alternate Director Showalter seconded the motion to authorize the Chief Executive Officer to Execute the SunZia Wind agreement and potential replacement PPAs for the procurement of renewable wind energy in substantial form and any necessary ancillary agreements and documents as follows:

1. **SunZia Wind PowerCo LLC, Power Purchase Agreement (PPA) ("SunZia Wind")**
    a. **100 MW or approximately 316,000 MWh per year of Renewable Portfolio Standard (RPS) Portfolio Category Content One ("PCC1") eligible resources**
    b. **15-Year term PPA with expected commercial operation date (COD) and term from September 30th, 2026, through September 29th, 2041.**
    c. **Total amount not-to-exceed $361,000,000.**

The motion carried by verbal roll call vote with Directors Chua and Hilton absent.

6) Update on Permit Modernization and Policy Experimentation Program Rollout (Discussion)

Zoe Elizabeth, Deputy Director of Decarbonization Programs and Policy, provided a presentation on the Permit Modernization and Policy Experimentation program which included background information and an overview of the program and proposed schedule.

Deputy Director of Decarbonization Programs and Policy responded to Board Member feedback and questions about the program.

Chair Tyson opened Public Comment.
No speakers.
Chair Tyson closed Public Comment.

Board Member Announcements and Future Agenda Items
Director Martinez Beltran thanked SVCE for their sponsorship of the Dia De Los Muertos celebrations in South County.

Director Mekechuk announced SVCE's Ford Lightning F-150 would be helping the City of Monte Sereno in the City of Los Gatos Holiday Parade on December 2, 2023.

Adjourn
Chair Tyson adjourned the meeting at 9:54 p.m.

ATTEST:

_____
Andrea Pizano, Board Secretary

TREASURER REPORT

Fiscal Year to Date
As of October 31, 2023

(Preliminary & Unaudited)

Issue Date: December 13, 2023

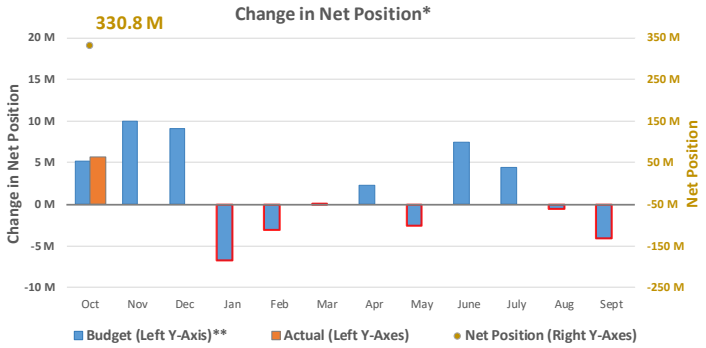
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SILICON VALLEY CLEAN ENERGY AUTHORITY
Financial Statement Highlights* ($ in millions)
October 31, 2023

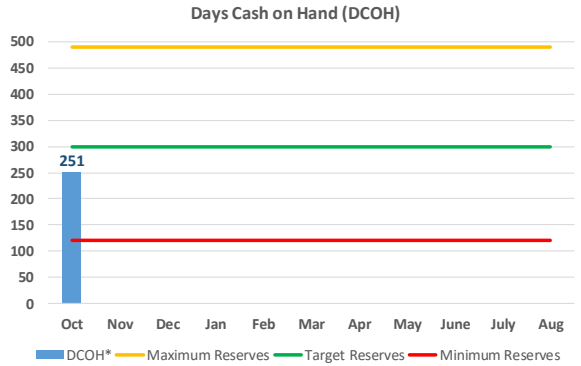
Balance Sheet Highlights:

> SVCE operations resulted in a positive change in net position of $5.7 million for the month of October and the new fiscal-year-to-date (FYTD).*
> Total Net Position increased further to $330.8 million.
> SVCE is investing ~97% of available funds generating FYTD interest/dividend income of $1.3 million.



*Does not yet recognize unspent program dollars

**For reconciliation purposes, budget numbers include actual program expenses and depreciation, exclude GASP 87 expenses.



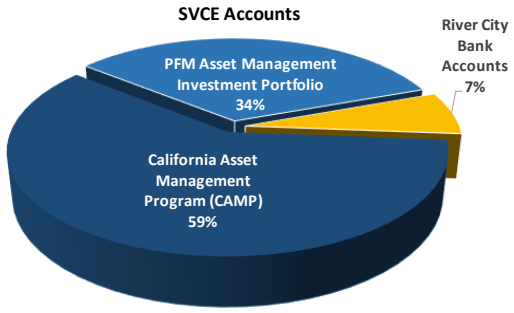
*Adjusted to reflect Mid-year budget adjustments and additional program funding

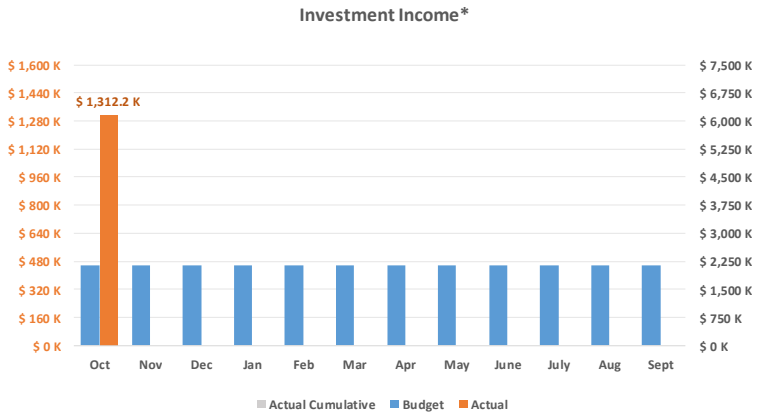
SVCE Yield-bearing Accounts:

Combined Ending Balance	310.9 M
Total Interest/Div. Earned FYTD	1.3 M
Average Return On Investments	5.4%

* Includes River Bank accounts - Money Market, Collateral and ICS; CAMP; PFM Portfolio

** Average annualized Yield for the current month





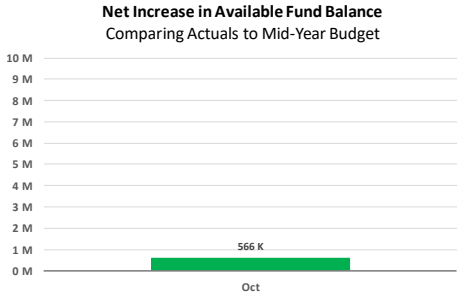
*Includes investment income from SVCE Yield-bearing accounts plus interest on cash collateral

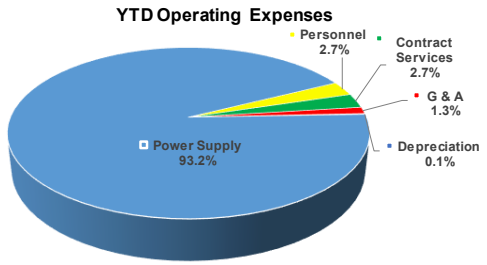
SILICON VALLEY CLEAN ENERGY AUTHORITY
Financial Statement Highlights** ($ in millions)
October 31, 2023

Summary of Actual Results vs. Budget (includes allocated but unspent program dollars):

> **FYTD operating margin of $6.7 million or 17.6% is slightly below budget expectations of 18.4% operating margin for the fiscal year to date.**
> **October Power Supply costs are -10% below budget.**
> **Retail GWh sales for the month landed -6% below budget.**

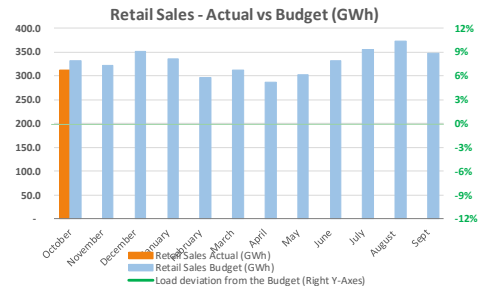
Variance Explanation:
January *- the variance mainly reflects lower than estimated revenues due to smaller customer load, offset by lower operating expenses and higher investment income.*

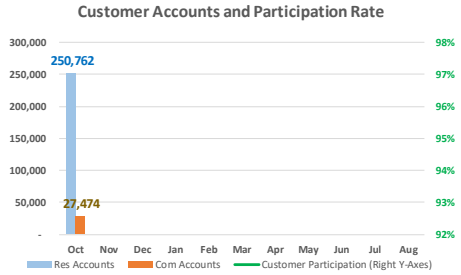




$ in thousands	October Actual	October Budget	October % Dif	Fiscal YTD Actual	Fiscal YTD Budget	Fiscal YTD % Dif	Main Drivers:
Revenue	37.8 M	42.5 M	-10.9%	37.8 M	42.5 M	-10.9%	• -6% lower than budgeted customer load for the month of October.
Power Supply Cost	31.2 M	34.7 M	-10.1%	31.2 M	34.7 M	-10.1%	
Operating Margin	6.7 M	7.8 M	-14.7%	6.7 M	7.8 M	-14.7%	
Operating Expenses (ex Power)	1.8 M	2.7 M	-32.1%	1.8 M	2.7 M	-32.1%	• *Staffing vacancies, underrunning professional services, and lower marketing expenses*
Other Non-Op. Expen. (Income)	12.9 M	13.7 M	-6.2%	12.9 M	13.7 M	-6.2%	• *Reflects higher Interest Income*
Net Increase in Available Fund Balance	-8.1 M	-8.6 M	-6.6%	-8.1 M	-8.6 M	-6.6%	

Customer Load Statistics:





Total Accounts	**278,236**
Opt-Out Accounts (Month)	**56**
Opt-Out Accounts (FYTD)	**56**
Opt-Up Accounts (Month)	**(18)**
Opt-Up Accounts (FYTD)	**(18)**

Program Funds:

	Beginning Balance	End Balance	YTD Contributions	YTD Expenditures
General Program Fund				
CRCR Fund*				
Electrification Discount Fund				

Program fund information will be updated next month

** Customer Relief and Community Resilience Fund*

*** The financial results in this report are preliminary and subject to change pending closing of the books for the fiscal year. Any potential changes are not expected to be significant.*

SILICON VALLEY CLEAN ENERGY AUTHORITY

STATEMENT OF NET POSITION
As of October 31, 2023

ASSETS	
Current Assets	
Cash & Cash Equivalents	$ 225,590,673
Accounts Receivable, net of allowance	40,885,498
Investments	35,602,254
Accrued Revenue	23,025,078
Other Receivables	2,026,770
Prepaid Expenses	2,775,240
Deposits	25,844,314
Restricted cash	164,174
Total Current Assets	**355,914,001**
Noncurrent assets	
Capital assets, net of depreciation	412,403
Investments	67,667,419
Lease asset, net of amortization	802,500
Deposits	45,130
Total Noncurrent Assets	**68,927,452**
Total Assets	**424,841,453**
LIABILITIES	
Current Liabilities	
Accounts Payable	2,272,772
Accrued Cost of Electricity	62,513,256
Other accrued liabilities	1,998,184
User Taxes and Energy Surcharges due to other gov'ts	1,460,979
Supplier securit deposits	8,051,250
Lease liability	510,663
Total Current Liabilities	**76,807,104**
Noncurrent Liabilities	
Supplier security deposits	16,850,000
Lease liability	358,910
Total noncurrent liabilities	**17,208,910**
Total Liabilities	**94,016,014**
NET POSITION	
Net investment in capital assets	345,330
Restricted for security collateral	164,174
Unrestricted (deficit)	330,315,935
Total Net Position	**$ 330,825,439**

SILICON VALLEY CLEAN ENERGY AUTHORITY

STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION
October 1, 2023 through October 31, 2023

OPERATING REVENUES	
Electricity Sales, Net	$ 37,692,603
GreenPrime electricity premium	136,391
Other income	2,500
TOTAL OPERATING REVENUES	**37,831,494**
OPERATING EXPENSES	
Cost of Electricity	31,160,273
Contract services	893,535
Staff compensation and benefits	910,013
Other operating expenses	420,848
Depreciation	49,996
TOTAL OPERATING EXPENSES	**33,434,665**
OPERATING INCOME(LOSS)	**4,396,829**
NONOPERATING REVENUES (EXPENSES)	
Interest Income	1,312,249
Financing costs	(6,183)
TOTAL NONOPERATING REVENUES (EXPENSES)	**1,306,066**
CHANGE IN NET POSITION	5,702,895
Net Position at beginning of period	325,122,544
Net Position at end of period	**$ 330,825,439**

SILICON VALLEY CLEAN ENERGY AUTHORITY

STATEMENT OF CASH FLOWS
October 1, 2023 through October 31, 2023

CASH FLOWS FROM OPERATING ACTIVITIES	
Receipts from customers	$ 54,973,575
Other operating receipts	2,500
Payments to suppliers for electricity	(45,164,853)
Payments for other goods and services	(2,658,815)
Payments for staff compensation and benefits	(798,631)
Tax and surcharge payments to other governments	(999,464)
Net cash provided (used) by operating activities	**5,354,312**
CASH FLOWS FROM NON-CAPITAL FINANCING ACTIVITIES	
Grant revenue received	
Finance costs paid	(6,183)
Net cash provided (used) by financing activities	**(6,183)**
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES	
Payments of lease liability	(43,235)
Acquisition of capital assets	(10,507)
Net cash provided (used) by capital and related financing activities	**(53,742)**
CASH FLOWS FROM INVESTING ACTIVITIES	
Purchase of investments	(11,385,259)
Investment income received	1,151,214
Net cash provided (used) by investing activities	**(10,234,045)**
Net change in cash and cash equivalents	(4,939,658)
Cash and cash equivalents at beginning of year	230,694,505
Cash and cash equivalents at end of period	**$ 225,754,847**
Reconciliation to the Statement of Net Position	
Cash and cash equivalents (unrestricted)	$ 225,590,673
Restricted cash	164,174
Cash and cash equivalents	**$ 225,754,847**

SILICON VALLEY CLEAN ENERGY AUTHORITY

STATEMENT OF CASH FLOWS (Continued)
October 1, 2023 through October 31, 2023

RECONCILIATION OF OPERATING INCOME (LOSS) TO NET CASH PROVIDED (USED) BY OPERATING ACTIVITIES

Operating Income (loss)	$	4,396,829
Adjustments to reconcile operating income to net cash provided (used) by operating activities		
Depreciation expense		49,996
(Increase) decrease in accounts receivable		9,003,894
(Increase) decrease in other receivables		2,452,010
(Increase) decrease in accrued revenue		7,407,044
(Increase) decrease in prepaid expenses		(835,334)
(Increase) decrease in current deposits		(241,835)
Increase (decrease) in accounts payable		(579,998)
Increase (decrease) in accrued cost of electricity		(18,144,274)
Increase (decrease) in accrued liabilities		58,803
Increase (decrease) in energy settlements payable		2,052,998
Increase (decrease) in taxes and surcharges due to other governments		(265,821)
Net cash provided (used) by operating activities	**$**	**5,354,312**

SILICON VALLEY CLEAN ENERGY AUTHORITY
BUDGETARY COMPARISON SCHEDULE
October 1, 2023 through October 31, 2023

	FYTD	FYTD	Variance		FY 2022-23	FY 2022-23
OPERATING REVENUES	**Actual**	**Budget**	**$**	**%**	**Budget**	**Remaining Budget**
Energy Sales	$37,692,603	$42,377,785	-$4,685,182	-11%	$438,342,000	$400,649,397
Green Prime Premium	136,391	99,795	$36,596	37%	2,012,000	1,875,609
Other Income	2,500	4,167	(1,667)	-40%	50,000	47,500
TOTAL OPERATING REVENUES	**37,831,494**	**42,481,747**	**(4,650,253)**	**-11%**	**440,404,000**	**402,572,506**
ENERGY EXPENSES						
Power Supply	31,160,273	34,662,275	(3,502,002)	-10%	391,624,000	360,463,727
Operating Margin	**6,671,221**	**7,819,472**	**(1,148,251)**	**-15%**	**48,780,000**	**42,108,779**
	17.6%	18.4%				
OPERATING EXPENSES						
Data Management	253,895	284,375	(30,480)	-11%	3,413,000	3,159,105
PG&E Fees	98,425	122,500	(24,075)	-20%	1,470,000	1,371,575
Salaries & Benefits	910,013	1,283,804	(373,791)	-29%	15,406,000	14,495,987
Professional Services	232,505	673,706	(441,201)	-65%	8,084,000	7,851,495
Marketing & Promotions	109,691	112,438	(2,747)	-2%	1,349,000	1,239,309
Notifications	8,867	1,750	7,117	407%	21,000	12,133
Lease	43,234	45,938	(2,704)	-6%	551,000	507,766
General & Administrative	174,141	172,218	1,923	1%	2,067,000	1,892,859
TOTAL OPERATING EXPENSES	**1,830,771**	**2,696,729**	**(865,958)**	**-32%**	**32,361,000**	**30,530,229**
OPERATING INCOME/(LOSS)	**4,840,450**	**5,122,743**	**(282,293)**	**-6%**	**16,419,000**	**11,578,550**
NON-OPERATING REVENUES						
Investment Income	1,312,249	458,455	853,794	186%	5,501,000	4,188,751
TOTAL NON-OPERATING REVENUES	**1,312,249**	**458,455**	**853,794**	**186%**	**5,501,000**	**4,188,751**
NON-OPERATING EXPENSES						
Financing	4,596	250	4,346	1738%	3,000	(1,596)
CAPITAL EXPENDITURES, TRANSFERS, & OTHER						
Capital Outlay	5,533	4,167	1,366	33%	50,000	44,467
Transfer to Programs Fund	8,874,000	8,874,000	-	0%	8,874,000	-
Nuclear Allocation	2,188,000	2,188,000	-	0%	2,188,000	-
Transfer to CRCR Fund	3,136,000	3,136,000	-	0%	3,136,000	-
Transfer from Electrification Discount Fund	-	-	-	n/a		
Transfer from CRCR Fund - customer bill relief	-	-	-	n/a	-	-
TOTAL OTHER USES	**14,203,533**	**14,202,167**	**1,366**	**0%**	**14,248,000**	**44,467**
NET INCREASE(DECREASE) IN AVAILABLE FUND BALANCE	**-$8,055,430**	**-$8,621,219**	**$565,789**	**-7%**	**$7,669,000**	

SILICON VALLEY CLEAN ENERGY AUTHORITY

OPERATING FUND
BUDGET RECONCILIATION TO STATEMENT OF
REVENUES, EXPENSES AND CHANGES IN NET POSITION
October 1, 2023 through October 31, 2023

Net Increase (decrease) in available fund balance per budgetary comparison schedule	$	(8,055,430)
Adjustments needed to reconcile to the changes in net position in the Statement of Revenues, Expenses and Changes in Net Position		
Subtract depreciation expense		(49,996)
Subract program expense not in operating budget		(436,860)
Add back GASB 87 expenses not in operating budget		41,648
Add back transfer to Program fund		14,198,000
Add back capital asset acquisition		5,533
Change in Net Position		**5,702,895**

SILICON VALLEY CLEAN ENERGY AUTHORITY
STATEMENT OF REVENUES, EXPENSES
AND CHANGES IN NET POSITION
October 1, 2023 through October 31, 2023

	October	November	December	January	February	March	April	May	June	July	August	September	YTD
OPERATING REVENUES													
Electricity sales, net	$ 37,692,603												$ 37,692,603
Green electricity premium	136,391												136,391
Liquidated damages	-												-
Other Income	2,500												2,500
Total operating revenues	37,831,494	-	-	-	-	-	-	-	-	-	-	-	37,831,494
OPERATING EXPENSES													
Cost of electricity	31,160,273												31,160,273
Staff compensation and benefits	910,013												910,013
Data manager	253,895												253,895
Service fees - PG&E	98,425												98,425
Consultants and other professional fees	541,215												541,215
Other operating expenses	420,848												420,848
Depreciation	49,996												49,996
Total operating expenses	33,434,665	-	-	-	-	-	-	-	-	-	-	-	33,434,665
Operating income (loss)	4,396,829	-	-	-	-	-	-	-	-	-	-	-	4,396,829
NONOPERATING REVENUES (EXPENSES)													
Grant income	-												-
Interest income	1,312,249												1,312,249
Financing costs	(6,183)												(6,183)
Total nonoperating revenues (expenses)	1,306,066	-	-	-	-	-	-	-	-	-	-	-	1,306,066
CHANGE IN NET POSITION	**$ 5,702,895**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 5,702,895**

SILICON VALLEY CLEAN ENERGY AUTHORITY
INVESTMENTS SUMMARY
October 1, 2023 through October 31, 2023

Ending Balance of SVCE Accounts:	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
River City Bank Accounts	$ 22,348,341	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
California Asset Management Program (CAMP)	$ 196,558,074	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
PFM Asset Management Investment Portfolio	$ 111,010,094	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Ending Balance	**$ 329,916,509**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

Return On Investments:

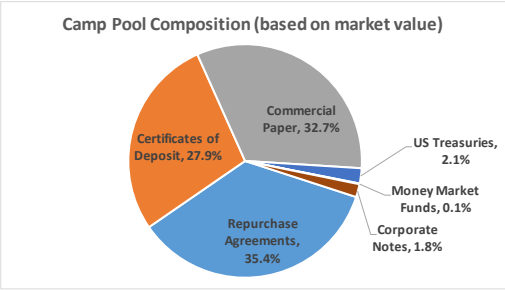
Annual % Yield	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
River City Bank Accounts	3.47%											
California Asset Management Program (CAMP)	5.56%											
PFM Asset Management Investment Portfolio	5.41%											
Average Return On Investments:	**5.37%**											

Interest Earned	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
River City Bank Accounts	$ 9,534	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
California Asset Management Program (CAMP)	$ 830,321	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
PFM Asset Management Investment Portfolio	$ 457,149	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Interest/Div. Earned	**$ 1,297,003**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

CAMP Portfolio Statistics

As of October 31, 2023

Beginning of the Month Market Value	$ 191,727,753
Ending of The Month Market Value	$ 196,558,074
Yield at Market	5.56%
Weighted Average Maturity (days)	47

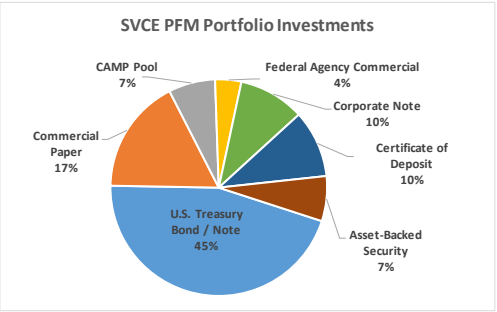


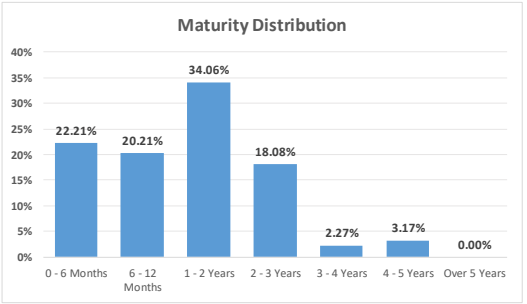
PFM Portfolio Statistics

As of October 31, 2023

Portfolio Par Value	$ 111,720,330
Portfolio Market Value (incl. Accrued Interest)	$ 110,669,278
Yield at Cost	5.41%
Yield at Market	5.47%
Benchmark Yield*	5.17%
Weighted Average Maturity (days)	540

*ICE BofA 0-3 Year U.S. Treasury Index





SVCE Investment Policy:
https://svcleanenergy.org/wp-content/uploads/2018/10/FP-08_Investments-Policy-F.pdf

SILICON VALLEY CLEAN ENERGY AUTHORITY
RETAIL SALES, CUSTOMER ACCOUNTS AND AGING REPORT

	October	November	December	January	February	March	April	May	June	July	August	Sept	YTD
Retail Sales Actual (GWh)	312.6												313
Retail Sales Budget (GWh)	331.7	322.1	350.5	335.5	297.1	311.4	286.9	302.4	331.4	355.3	373.4	347.6	332
Load deviation from the Budget	*-6%*												*-6%*
Customer Participation Rate Res	96.3%												
Customer Participation Rate Com	96.8%												
Total Accounts	278,236	-	-	-	-	-	-	-	-	-	-	-	
Opt-Out Accounts	56												56
Opt-Up Accounts	-18												-18

Age Summary (as of 11/1/2023)

<30 days	$37,935,127
<60 days	$1,552,556
<90 days	$914,461
<120 days	$622,189
Older	$3,112,467

Accounts Receivable Days

37 Days

$44,136,799

TOTAL DUE

Bad Debt % (*Budget*)

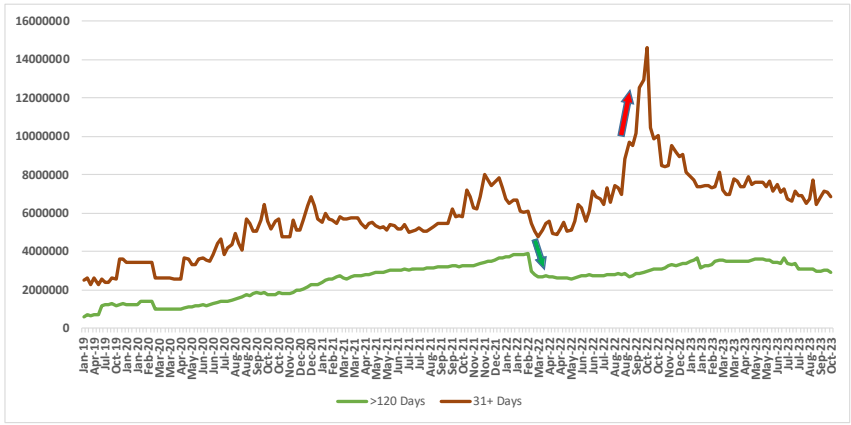
0.90%

Bad Debt % (Actual)

September 2023 FYTD

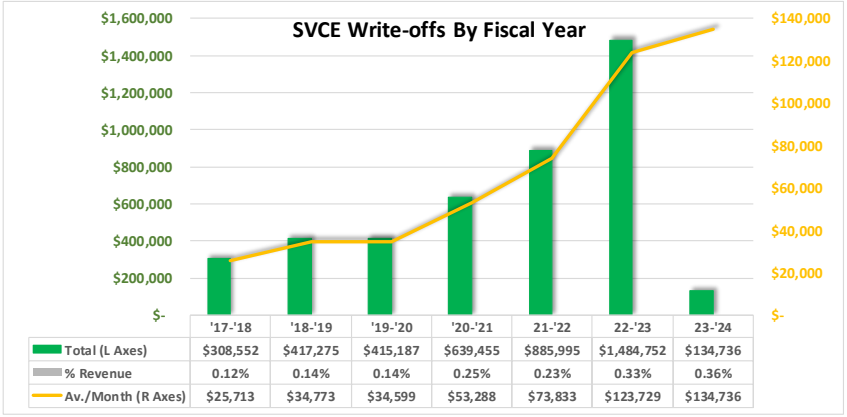
0.36%

SVCE Arrearager Total for customers 31+ days late and 120+ days late



	Date	Amount
High	11/29/2021	$7.99M
Low	4/17/2020	$2.54M
Current	7/31/2023	$6.2 M

- Green arrow indicates receipt of $1.3M in Federal CAPP funds.
- An additional $717K in CAPP funding provided in Winter 2023.
- Growth at red arrow indicates short-term PG&E billing-hold issue in Fall 2022 that was quickly resolved.



	'17-'18	'18-'19	'19-'20	'20-'21	21-'22	22-'23	23-'24
Total (L Axes)	$308,552	$417,275	$415,187	$639,455	$885,995	$1,484,752	$134,736
% Revenue	0.12%	0.14%	0.14%	0.25%	0.23%	0.33%	0.36%
Av./Month (R Axes)	$25,713	$34,773	$34,599	$53,288	$73,833	$123,729	$134,736

Silicon Valley Clean Energy October 31, 2023

Certificate of Compliance

During the reporting period for the period ended October 31, 2023, the account(s) managed by PFM Asset Management ("PFMAM") were in compliance with the applicable investment policy and guidelines as furnished to PFMAM.

Acknowledged : *PFM Asset Management LLC*

Note: Pre- and post-trade compliance for the account(s) managed by PFM Asset Management is provided via Bloomberg Asset and Investment Management ("AIM").

Managed Account Security Transactions & Interest

For the Month Ending **October 31, 2023**

Silicon Valley Clean Energy - SVCE Investment Portfolio - 4025-002 - (12517950)

Transaction Type / Trade	Settle	Security Description	CUSIP	Par	Principal Proceeds	Accrued Interest	Total	Realized G/L Cost	Realized G/L Amort Cost	Sale Method
BUY										
10/02/23	10/04/23	AMERICAN HONDA FINANCE CORPORATE NOTES DTD 10/04/2023 5.800% 10/03/2025	02665WEQ0	450,000.00	(449,581.50)	0.00	(449,581.50)			
10/02/23	10/04/23	BANK OF NOVA SCOTIA HOUS CERT DEPOS DTD 10/04/2023 5.960% 10/02/2024	06417M4M4	2,000,000.00	(2,000,000.00)	0.00	(2,000,000.00)			
10/03/23	10/11/23	GMCAR 2023-4 A3 DTD 10/11/2023 5.780% 08/16/2028	379930AD2	470,000.00	(469,903.46)	0.00	(469,903.46)			
10/04/23	10/11/23	COPAR 2023-2 A2A DTD 10/11/2023 5.910% 10/15/2026	14044EAB4	1,100,000.00	(1,099,902.87)	0.00	(1,099,902.87)			
10/05/23	10/11/23	FHMS K736 A2 DTD 09/01/2019 2.282% 07/01/2026	3137FNWX4	750,000.00	(695,888.67)	(475.42)	(696,364.09)			
10/06/23	10/10/23	HSBC BANK USA NA CERT DEPOS DTD 10/10/2023 6.000% 10/04/2024	40435RSC6	1,750,000.00	(1,750,000.00)	0.00	(1,750,000.00)			
10/16/23	10/23/23	JPMORGAN CHASE & CO CORP NOTE (CALLABLE) DTD 10/23/2023 6.070% 10/22/2027	46647PDW3	300,000.00	(300,000.00)	0.00	(300,000.00)			
10/17/23	10/20/23	FHMS K733 A2 DTD 11/09/2018 3.750% 08/01/2025	3137FJXQ7	571,834.48	(553,026.49)	(1,131.76)	(554,158.25)			
10/18/23	10/23/23	FNA 2015-M11 A2 DTD 07/30/2015 2.848% 04/01/2025	3136APSZ6	656,289.08	(630,627.15)	(1,142.23)	(631,769.38)			
10/18/23	10/25/23	NAROT 2023-B A2A DTD 10/25/2023 6.210% 05/15/2026	65480MAB9	925,000.00	(924,986.40)	0.00	(924,986.40)			
10/19/23	10/25/23	MBART 2023-2 A2 DTD 10/25/2023 5.920% 11/16/2026	58769FAB1	315,000.00	(314,985.89)	0.00	(314,985.89)			
10/23/23	10/26/23	FHMS K039 A2 DTD 09/01/2014 3.303% 07/01/2024	3137BDCW4	1,173,108.05	(1,154,182.52)	(2,690.82)	(1,156,873.34)			
10/24/23	10/26/23	ALLYA 2023-1 A3 DTD 07/19/2023 5.460% 05/15/2028	02007WAC2	500,000.00	(496,406.25)	(834.17)	(497,240.42)			
10/24/23	10/26/23	HART 2022-C A3 DTD 11/09/2022 5.390% 06/15/2027	44933DAD3	550,000.00	(545,767.58)	(905.82)	(546,673.40)			

Managed Account Security Transactions & Interest

For the Month Ending **October 31, 2023**

Silicon Valley Clean Energy - SVCE Investment Portfolio - 4025-002 - (12517950)

Transaction Type Trade	Settle	Security Description	CUSIP	Par	Principal Proceeds	Accrued Interest	Total	Realized G/L Cost	Realized G/L Amort Cost	Sale Method
BUY										
10/30/23	**11/02/23**	**NATIONAL RURAL COOP CORPORATE NOTES (CAL DTD 11/02/2023 5.600% 11/13/2026**	**63743HFK3**	**305,000.00**	**(304,893.25)**	**0.00**	**(304,893.25)**			
10/31/23	**11/08/23**	**WOART 2023-D A2A DTD 11/08/2023 6.240% 02/16/2027**	**98164DAB3**	**350,000.00**	**(349,970.53)**	**0.00**	**(349,970.53)**			
Transaction Type Sub-Total				**12,166,231.61**	**(12,040,122.56)**	**(7,180.22)**	**(12,047,302.78)**			
INTEREST										
10/01/23	10/25/23	FHMS K058 A1 DTD 11/09/2016 2.340% 07/01/2026	3137BSP64	552,313.47	0.00	1,077.01	1,077.01			
10/01/23	10/25/23	FHMS K065 A1 DTD 07/24/2017 2.864% 10/01/2026	3137F1G36	851,285.21	0.00	2,031.73	2,031.73			
10/15/23	10/15/23	CHAIT 2023-A1 A DTD 09/15/2023 5.160% 09/15/2028	161571HT4	805,000.00	0.00	3,461.50	3,461.50			
10/15/23	10/15/23	CARMX 2022-2 A3 DTD 04/28/2022 3.490% 02/16/2027	14317HAC5	725,000.00	0.00	2,108.54	2,108.54			
10/15/23	10/15/23	AMXCA 2023-3 A DTD 09/19/2023 5.230% 09/15/2028	02582JKD1	825,000.00	0.00	3,116.21	3,116.21			
10/15/23	10/15/23	COMCAST CORP CORP NOTES (CALLABLE) DTD 10/05/2018 3.950% 10/15/2025	20030NCS8	400,000.00	0.00	7,900.00	7,900.00			
10/15/23	10/15/23	HDMOT 2023-B A3 DTD 09/27/2023 5.690% 08/15/2028	41285YAC9	935,000.00	0.00	2,660.08	2,660.08			
10/22/23	10/22/23	WELLS FARGO & CO CORP NOTES DTD 04/22/2016 3.000% 04/22/2026	949746RW3	400,000.00	0.00	6,000.00	6,000.00			
10/24/23	10/24/23	BANK OF NY MELLON (CALLABLE) CORP NOTES DTD 04/24/2020 1.600% 04/24/2025	06406RAN7	850,000.00	0.00	6,800.00	6,800.00			
10/31/23	10/31/23	US TREASURY NOTES DTD 10/31/2022 4.375% 10/31/2024	91282CFQ9	5,000,000.00	0.00	109,375.00	109,375.00			
Transaction Type Sub-Total				**11,343,598.68**	**0.00**	**144,530.07**	**144,530.07**			

Managed Account Security Transactions & Interest

For the Month Ending **October 31, 2023**

Silicon Valley Clean Energy - SVCE Investment Portfolio - 4025-002 - (12517950)

Transaction Type										
Trade	Settle	Security Description	CUSIP	Par	Principal Proceeds	Accrued Interest	Total	Realized G/L Cost	Realized G/L Amort Cost	Sale Method
PAYDOWNS										
10/01/23	10/25/23	FHMS K065 A1 DTD 07/24/2017 2.864% 10/01/2026	3137F1G36	22,335.08	22,335.08	0.00	22,335.08	964.07	0.00	
10/01/23	10/25/23	FHMS K058 A1 DTD 11/09/2016 2.340% 07/01/2026	3137BSP64	13,762.80	13,762.80	0.00	13,762.80	705.34	0.00	
Transaction Type Sub-Total				**36,097.88**	**36,097.88**	**0.00**	**36,097.88**	**1,669.41**	**0.00**	
Managed Account Sub-Total					**(12,004,024.68)**	**137,349.85**	**(11,866,674.83)**	**1,669.41**	**0.00**	
Total Security Transactions					**($12,004,024.68)**	**$137,349.85**	**($11,866,674.83)**	**$1,669.41**	**$0.00**	

Bolded items are forward settling trades.

SILICON VALLEY CLEAN ENERGY

Staff Report – Item 1c

Item 1c:	**Approve Cancellation of July 10, 2024 Board of Directors Meeting and Receive 2024 Board of Directors Regular Meeting Schedule**
From:	Girish Balachandran, CEO
Prepared by:	Andrea Pizano, Sr. Executive Assistant and Board Clerk
Date:	12/13/2023

RECOMMENDATION

Staff recommends that the Board approve the cancellation of the regularly scheduled July 10, 2024 Board of Directors Meeting and receive the 2024 Board of Directors regular meeting schedule.

BACKGROUND

Since 2018, the Board of Directors approved a one-month summer hiatus from meetings; in 2018 it was August, and, based on feedback from the Board that a July recess would be preferable, it has been July since 2019.

ANALYSIS & DISCUSSION

Given the positive feedback received for a summer recess, staff would like to propose this be continued. Staff suggests July be selected for the summer hiatus, as this has worked well in the past.

With this approval, the month of July will not have a regularly scheduled SVCE board meeting, however if the need for Board action arises in July, a special meeting of the Board will be called.

STRATEGIC PLAN

Not applicable.

ALTERNATIVES

The Board may select an alternative month for a summer hiatus; the Board could also choose not to cancel the regularly scheduled July meeting.

FISCAL IMPACT

None.

ATTACHMENT

1. Proposed 2024 SVCE Board of Directors Regular Meeting Schedule

2024 Board Meeting Schedule

All Board of Directors meetings occur at 7:00 p.m. and will be held at Cupertino Community Hall, located at 10350 Torre Avenue in Cupertino, CA, with an option to participate virtually unless noted otherwise on the SVCE website

January 10, 2024

February 14, 2024

March 13, 2024

April 10, 2024

May 8, 2024

June 12, 2024

~~July 10, 2024~~ No meeting in July

August 14, 2024

September 11, 2024

October 9, 2024

November 13, 2024

December 11, 2024

Updated: 12/2/23

SILICON VALLEY CLEAN ENERGY

Staff Report – Item 1d

Item 1d:	**Authorize the Chief Executive Officer to Execute a Five-Year Agreement with the Sacramento Municipal Utility District for Program Administration Support for Decarbonization Programs**
From:	Girish Balachandran, CEO
Prepared by:	Justin Zagunis, Director of Decarbonization Programs and Policy Doug Bernard, Management Analyst
Date:	12/13/2023

RECOMMENDATION

Staff recommends the Board approve and authorize the CEO to execute an agreement with Sacramento Municipal Utility District ("SMUD") for Program Administration Support for Decarbonization Programs for a period of five years for an amount not to exceed $4,000,000.

Under the proposed agreement, SVCE will issue individual task orders to SMUD as needed to allow staff to more easily perform tasks in support of various programs and organizational needs. This is consistent with previous Master Consultant Agreements signed by SVCE. Reporting will be consistent with the previous Master Consultant Agreement with SMUD; all signed task orders will be added to a CEO report spreadsheet.

BACKGROUND

Since 2018, SVCE's decarbonization program offerings have been growing in number and expanding their reach. Over the last five years, the Board has allocated over $85 million to programs that provide community education, technical assistance, financial incentives, support for innovative technologies, and local policy development. We are currently running over 18 initiatives and customer-facing programs and have many more in the pipeline focused on direct installation services, accessible financing, and enhanced customer support for electrification. As we work to scale our program offerings, staff needs enhanced and reliable technical and implementation support to bring these programs to fruition.

To date, many of SVCE's decarbonization program efforts have been supported by third-party program administrators or consultants, all led by SVCE staff. In 2019, the Board approved executing a master services agreement with the Sacramento Municipal Utilities District ("SMUD") to provide program design, administration, and implementation support. SMUD has provided instrumental support in launching initial pilot programs (e.g., Heat Pump Water Heater 1.0) and in transitioning several programs from pilot to large-scale (e.g., FutureFit Homes, GridShift). In addition, SMUD has also served as a thought partner for designing new programs for both transportation and building electrification, such as incentive programs for multifamily properties and businesses.

As the current program administration agreement comes to an end, staff is seeking Board approval to execute a new agreement for program design, administration, and implementation support. This will ensure continued third-party program implementation support as we expand and deepen decarbonization program offerings to support all customers in the transition to an all-electric future.

Agenda Item: 1d **Agenda Date: 12/13/2023**

ANALYSIS & DISCUSSION

SVCE staff solicited consultants for program administration support for decarbonization programs through a competitive bid process, as shown below. The RFP had a strong response, with six proposals submitted from qualified proposers. After a thorough evaluation, SVCE conducted virtual video interviews with select finalists. The SVCE review team consisted of four internal staff who selected SMUD as the final consultant for program administration support.



SMUD's Community Energy Services (CES) business unit was created to leverage SMUD's knowledgeable and experienced staff to serve CCA clients. Related to programs in specific, SMUD has been designing, developing and administering innovative, customer-facing products and programs for decades, and currently offers nearly 100 programs to their customers and community. Key staff and experience from their programs teams are brought to bear under this consulting agreement. In addition to decades of relevant programs experience, SMUD as an organization is also aligned in its mission to address climate change, reinvest in the community, and harness local control. Aside from SVCE, SMUD's CCA clients include Ava Community Energy (formerly East Bay Community Energy) and Valley Clean Energy, who retained SMUD for services spanning billing, data management, procurement strategy, call center services, rate and policy design, and operational support.

Specific areas in which SMUD may provide services to SVCE under the proposed contract agreement include, but are not limited to, the following:

- Program Design and Implementation
- Program Application Administration
- Program Management

STRATEGIC PLAN

As referenced in SVCE's Strategic Plan Goal 14, Measure 7, this contract will increase organizational capacity to design, deploy, and manage programs at a larger scale including budget, enrollments, and number of units deployed.

ALTERNATIVE

Do not authorize the CEO to execute the agreement with SMUD and, instead, use existing staff resources to deliver programs in-house. Staff does not recommend this alternative due to the limited staff resources relative to SVCE's current programs scale and appetite for new programs and expansion.

Agenda Item: 1d **Agenda Date: 12/13/2023**

FISCAL IMPACT

Approval of this 5-year contract with SMUD for $4 million not-to-exceed will have no incremental fiscal impact. Funds for work performed under this contract will come out of budgets allocated by the Board to specific programs and, therefore, is already reflected in the total program allocation of $85 million (or will be allocated in a future Board appropriation).

ATTACHMENTS

1. Agreement between SVCE and SMUD for Program Administration Support for Decarbonization Programs

AGREEMENT BETWEEN THE SILICON VALLEY CLEAN ENERGY AUTHORITY AND SACRAMENTO MUNICIPAL UTILITY DISTRICT FOR Program Administration Support for Decarbonization Programs

THIS AGREEMENT ("Agreement"), is entered into this 15th day of December, 2023, by and between the SILICON VALLEY CLEAN ENERGY AUTHORITY, an independent public agency, ("Authority"), and SACRAMENTO MUNICIPAL UTILITY DISTRICT, a political subdivision of the State of California established under the Municipal Utility District Act whose address is 6201 S Street, Sacramento CA, 95817 (hereinafter referred to as "Consultant" or "SMUD") (collectively referred to as the "Parties" and individually as a "Party").

RECITALS:

A. Authority is an independent public agency duly organized under the provisions of the Joint Exercise of Powers Act of the State of California (Government Code Section 6500 *et seq*.) ("Act") with the power to conduct its business and enter into agreements.

B. Consultant possesses the skill, experience, ability, background, certification and knowledge to provide the services described in this Agreement pursuant to the terms and conditions described herein.

C. Authority and Consultant desire to enter into an agreement for program administration support services for Decarbonization Programs upon the terms and conditions herein.

NOW, THEREFORE, the Parties mutually agree as follows:

1. **TERM**

The term of this Agreement shall commence on December 15, 2023 and shall terminate on December 15, 2028 unless terminated earlier as set forth herein.

2. **SERVICES TO BE PERFORMED**

Consultant shall perform each and every service set forth in Exhibit "A" pursuant to the schedule of performance set forth in Exhibit "B," both of which are attached hereto and incorporated herein by this reference.

3. **COMPENSATION TO CONSULTANT**

Consultant shall be compensated for services performed pursuant to this Agreement in a total amount not to exceed four million dollars ($4,000,000.00) based on the rates and terms set forth in Exhibit "C," which is attached hereto and incorporated herein by this reference.

4. **TIME IS OF THE ESSENCE**

Consultant and Authority agree that time is of the essence regarding the performance of this Agreement.

5. **STANDARD OF CARE**

Consultant agrees to perform all services required by this Agreement in a manner commensurate with the prevailing standards of specially trained professionals in the San Francisco Bay Area under similar circumstances and in a manner reasonably satisfactory to Authority and agrees that all services shall be performed by qualified and experienced personnel. Consultant shall be responsible to Authority for any errors or omissions in the performance of work pursuant to this Agreement. Should any errors caused by Consultant be found in such services or products, Consultant shall correct the errors at no additional charge to Authority by redoing the professional work and/or revising the work product(s) called for in the Scope of Services to eliminate the errors. Should Consultant fail to make such correction in a reasonably timely manner, such correction may be made by Authority, and the cost thereof shall be charged to Consultant. In addition to all other available remedies, Authority may deduct the cost of such correction from any retention amount held by Authority or may withhold payment otherwise owed Consultant under this Agreement up to the amount of the cost of correction.

6. **INDEPENDENT PARTIES**

Authority and Consultant intend that the relationship between them created by this Agreement is that of an independent contractor. The manner and means of conducting the work are under the control of Consultant, except to the extent they are limited by statute, rule or regulation and the express terms of this Agreement. No civil service status or other right of employment will be acquired by virtue of Consultant's services. None of the benefits provided by Authority to its employees, including but not limited to, unemployment insurance, workers' compensation plans, vacation and sick leave are available from Authority to Consultant, its employees or agents. Deductions shall not be made for any state or federal taxes, FICA payments, PERS payments, or other purposes normally associated with an employer-employee relationship from any fees due Consultant. Payments of the above items, if required, are the responsibility of Consultant. Consultant shall indemnify and hold harmless Authority and its elected officials, officers, employees, servants, designated volunteers, and agents serving as independent contractors in the role of Authority officials, from any and all liability, damages, claims, costs and expenses of any nature to the extent arising from Consultant's personnel practices. Authority shall have the right to offset against the amount of any fees due to Consultant under this Agreement any amount due to Authority from Consultant as a result of Consultant's failure to promptly pay to Authority any reimbursement or indemnification arising under this section.

7. **NO RECOURSE AGAINST CONSTITUENT MEMBERS OF AUTHORITY**

Authority is organized as a Joint Powers Authority in accordance with the Joint Powers Act of the State of California (Government Code Section 6500 et seq.) pursuant to a Joint Powers Agreement dated March 31, 2016, and is a public entity separate from its constituent members. Authority shall solely be responsible for all debts, obligations and liabilities accruing and arising out of this Agreement. Consultant shall have no rights and shall not make any claims, take any actions or assert any remedies against any of Authority's constituent members in connection with this Agreement.

8. **NON-DISCRIMINATION**

In the performance of this Agreement, Consultant, and any subconsultant under the

Consultant, shall not discriminate against any employee, subcontractor or applicant for employment because of race, color, religious creed, sex, gender, gender identity, gender expression, marital status, national origin, ancestry, age, physical disability, mental disability, medical condition, genetic information, sexual orientation, military or veteran status, or other basis prohibited by law, except as provided in Government Code section 12940. Consultant shall have responsibility for compliance with this Section.

9. **HOLD HARMLESS AND INDEMNIFICATION**

A. General Indemnification. To the fullest extent permitted by law, Consultant shall, at its sole cost and expense, defend against third party claims, hold harmless and indemnify Authority and its elected officials, officers, attorneys, agents, employees, designated volunteers, successors, assigns and those Authority agents serving as independent contractors in the role of Authority officials (collectively "Indemnitees"), from and against any and all direct damages, costs, expenses, liabilities, claims, demands, causes of action, proceedings, expenses, judgments, penalties, liens, and losses of any nature whatsoever, including reasonable fees of accountants, attorneys, or other professionals and all costs associated therewith (collectively "Liabilities"), in law or equity, whether actual, alleged or threatened, to the extent which arise out of, are claimed to arise out of, pertain to, or relate to the acts or omissions of Consultant, its officers, agents, servants, employees, subcontractors, materialmen, consultants or their officers, agents, servants or employees (or any entity or individual that Consultant shall bear the legal liability thereof) in the performance of this Agreement, including the Indemnitees' active or passive negligence, except for Liabilities arising from the sole negligence or willful misconduct of the Indemnitees as determined by court decision or by the agreement of the Parties. Consultant shall defend the Indemnitees in any action or actions filed in connection with any Liabilities with counsel of the Indemnitees' approval (which approval shall not be unreasonably withheld), and shall pay all costs and expenses, including all reasonable attorneys' fees and experts' costs actually incurred in connection with such defense. Consultant shall reimburse the Indemnitees for any and all reasonable legal expenses and costs incurred by Indemnitees in connection therewith.

B. Intellectual Property Indemnification. Except for material in the public domain or provided by Authority, Consultant hereby certifies that it owns, controls, or licenses and retains all right, title, and interest in and to any intellectual property it uses in relation to this Agreement, including the design, look, feel, features, source code, content, and other technology relating to any part of the services and including all related patents, inventions, trademarks, and copyrights, all applications therefor, and all trade names, service marks, know how, and trade secrets (collectively referred to as "IP Rights"), except as otherwise expressly provided by this Agreement. Consultant warrants that the services to be provided pursuant to this Agreement do not infringe, violate, trespass, or constitute the unauthorized use or misappropriation of any IP Rights of any third party. Consultant shall indemnify, defend, and hold Indemnitees, harmless from and against any Liabilities by a third party that the services to be provided pursuant to this Agreement infringe or violate any third-party's IP Rights, provided any such right is enforceable in the United States. Such costs and expenses shall include reasonable attorneys' fees of counsel reasonably acceptable to Authority, expert fees and all other costs and fees of litigation.

C. The acceptance of the services by Authority shall not operate as a waiver of these rights of indemnification. The hold harmless and indemnification provisions of this Section shall apply regardless of whether or not any insurance policies are determined to be applicable to the

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Liability.

D. Consultant's indemnifications and obligations under this section shall survive the expiration or termination of this Agreement.

10. **INSURANCE**

A. General Requirements. On or before the commencement of the term of this Agreement, Consultant shall furnish Authority with certificates showing the type, amount, class of operations covered, effective dates and dates of expiration of insurance coverage in compliance with the requirements listed in Exhibit "D," which is attached hereto and incorporated herein by this reference. Such insurance and certificates, which do not limit Consultant's indemnification obligations under this Agreement, shall also contain substantially the following statement: "Should any of the above insurance covered by this certificate be canceled or coverage reduced before the expiration date thereof, the insurer affording coverage shall provide thirty (30) days' advance written notice to the Authority by certified mail, Attention: Chief Executive Officer." Consultant shall maintain in force at all times during the performance of this Agreement all appropriate coverage of insurance required by this Agreement with an insurance company that is acceptable to Authority and licensed to do insurance business in the State of California or satisfy the requirements through self-insurance. Endorsements naming the Authority as additional insured shall be submitted with the insurance certificates.

B. Subrogation Waiver. Consultant agrees that in the event of loss due to any of the perils for which he/she has agreed to provide comprehensive general and automotive liability insurance, Consultant shall look solely to his/her/its insurance for recovery. Consultant hereby grants to Authority, on behalf of any insurer providing comprehensive general and automotive liability insurance to either Consultant or Authority with respect to the services of Consultant herein, a waiver of any right to subrogation which any such insurer of Consultant may acquire against Authority by virtue of the payment of any loss under such insurance.

C. Failure to Secure or Maintain Insurance. If Consultant at any time during the term hereof should fail to secure or maintain the foregoing insurance, Authority shall be permitted to obtain such insurance in the Consultant's name or as an agent of the Consultant and shall be compensated by the Consultant for the costs of the insurance premiums at the maximum rate permitted by law and computed from the date written notice is received that the premiums have not been paid.

D. Additional Insured. Authority, its members, officers, employees and volunteers shall be named as additional insureds under all insurance coverages, except any professional liability insurance, required by this Agreement. The naming of an additional insured shall not affect any recovery to which such additional insured would be entitled under this policy if not named as such additional insured. An additional insured named herein shall not be held liable for any premium, deductible portion of any loss, or expense of any nature on this policy or any extension thereof. Any other insurance held by an additional insured shall not be required to contribute anything toward any loss or expense covered by the insurance provided by this policy.

E. Sufficiency of Insurance. The insurance limits required by Authority are not represented as being sufficient to protect Consultant. Consultant is advised to confer with Consultant's insurance broker to determine adequate coverage for Consultant.

F. Maximum Coverage and Limits. It shall be a requirement under this Agreement that any available insurance proceeds broader than or in excess of the specified minimum Insurance coverage requirements and/or limits shall be available to the additional insureds. Furthermore, the

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requirements for coverage and limits shall be the minimum coverage and limits specified in this Agreement, or the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named insured, whichever is greater.

11. **CONFLICT OF INTEREST**

Consultant warrants that it, its officers, employees, associates and subcontractors, presently have no interest, and will not acquire any interest, direct or indirect, financial or otherwise, that would conflict in any way with the performance of this Agreement, and that it, its officers, employees, associates and subcontractors, will not employ any person having such an interest. Consultant and its officers, employees, associates and subcontractors, if any, shall comply with all conflict of interest statutes of the State of California applicable to Consultant's services under this Agreement, including the Political Reform Act (Gov. Code § 81000, et seq.) and Government Code Section 1090. During the term of this Agreement, Consultant may perform similar services for other clients, but Consultant and its officers, employees, associates and subcontractors shall not, without the Authority Representative's prior written approval, perform work for another person or entity for whom Consultant is not currently performing work that would require Consultant or one of its officers, employees, associates or subcontractors to abstain from a decision under this Agreement pursuant to a conflict of interest statute. Consultant shall incorporate a clause substantially similar to this section into any subcontract that Consultant executes in connection with the performance of this Agreement. Consultant understands that it may be required to fill out a conflict of interest form if the services provided under this Agreement require Consultant to make certain governmental decisions or serve in a staff Authority, as defined in Title 2, Division 6, Section 18700 of the California Code of Regulations

12. **PROHIBITION AGAINST TRANSFERS**

Consultant shall not assign, sublease, hypothecate, or transfer this Agreement, or any interest therein, directly or indirectly, by operation of law or otherwise, without prior written consent of Authority. Any attempt to do so without such consent shall be null and void, and any assignee, sublessee, pledgee, or transferee shall acquire no right or interest by reason of such attempted assignment, hypothecation or transfer. However, claims for money by Consultant from Authority under this Agreement may be assigned to a bank, trust company or other financial institution without prior written consent. Written notice of such assignment shall be promptly furnished to Authority by Consultant.

The sale, assignment, transfer or other disposition of any of the issued and outstanding capital stock of Consultant, or of the interest of any general partner or joint venturer or syndicate member or cotenant, if Consultant is a partnership or joint venture or syndicate or cotenancy, which shall result in changing the control of Consultant, shall be construed as an assignment of this Agreement. Control means fifty percent (50%) or more of the voting power of the corporation.

13. **SUBCONTRACTOR APPROVAL**

Unless prior written consent from Authority is obtained, only those persons and subcontractors whose names are attached to this Agreement shall be used in the performance of this Agreement.

In the event that Consultant employs subcontractors, such subcontractors shall be required to furnish proof of workers' compensation insurance and shall also be required to carry general, automobile and professional liability insurance in substantial conformity to the insurance carried

by Consultant. In addition, any work or services subcontracted hereunder shall be subject to each provision of this Agreement.

Consultant agrees to include within their subcontract(s) with any and all subcontractors the same requirements and provisions of this Agreement, including the indemnity and insurance requirements, to the extent they apply to the scope of the subcontractor's work. Subcontractors hired by Consultant shall agree to be bound to Consultant and Authority in the same manner and to the same extent as Consultant is bound to Authority under this Agreement. Subcontractors shall agree to include these same provisions within any sub-subcontract. Consultant shall provide a copy of the Indemnity and Insurance provisions of this Agreement to any subcontractor. Consultant shall require all subcontractors to provide valid certificates of insurance and the required endorsements prior to commencement of any work and will provide proof of compliance to Authority.

14. **REPORTS**

A. Each and every report, draft, work product, map, record and other document, hereinafter collectively referred to as "Report", reproduced, prepared or caused to be prepared by Consultant pursuant to or in connection with this Agreement, shall be the exclusive property of Authority. Consultant shall not copyright any Report required by this Agreement and shall execute appropriate documents to assign to Authority the copyright to Reports created pursuant to this Agreement. Any Report, information and data acquired or required by this Agreement shall become the property of Authority, and all publication rights are reserved to Authority. Consultant may retain a copy of any Report furnished to the Authority pursuant to this Agreement.

B. All Reports prepared by Consultant may be used by Authority in execution or implementation of: (1) The original project for which Consultant was hired; (2) Completion of the original project by others; (3) Subsequent additions to the original project; and/or (4) Other Authority projects as Authority deems appropriate in its sole discretion

C. Consultant shall, at such time and in such form as Authority may require, furnish reports concerning the status of services required under this Agreement.

D. All Reports shall also be provided in electronic format, both in the original file format (e.g., Microsoft Word) and in PDF format.

E. No Report, information or other data given to or prepared or assembled by Consultant pursuant to this Agreement that has not been publicly released shall be made available to any individual or organization by Consultant without prior approval by Authority.

F. Authority shall be the owner of and shall be entitled upon request to immediate possession of accurate reproducible copies of Reports or other pertinent data and information gathered or computed by Consultant prior to termination of this Agreement or upon completion of the work pursuant to this Agreement.

15. **RECORDS**

Consultant shall maintain complete and accurate records with respect to costs, expenses, receipts and other such information required by Authority that relate to the performance of services under this Agreement, in sufficient detail to permit an evaluation of the services and costs. All such records shall be clearly identified and readily accessible. Consultant shall provide free access to such books and records to the representatives of Authority or its designees at all proper times, and gives Authority the right to examine and audit same, and to make transcripts therefrom as necessary, and to allow inspection of all work, data, documents, proceedings and activities related

to this Agreement. Such records, together with supporting documents, shall be maintained for a minimum period of five (5) years after Consultant receives final payment from Authority for all services required under this agreement

16. **PARTY REPRESENTATIVES**

The Chief Executive Officer ("Authority Representative") shall represent the Authority in all matters pertaining to the services to be performed under this Agreement. Tracy Carlson, Director of Community Energy Services (Consultant Representative") shall represent Consultant in all matters pertaining to the services to be performed under this Agreement

17. **CONFIDENTIAL INFORMATION AND DOCUMENTS**

A. Consultant covenants that all data, reports, documents, discussion, or other information (collectively "Data") developed or received by Consultant or provided for performance of this Agreement are deemed confidential and shall not be disclosed or released by Consultant without prior written authorization by Authority. Authority shall grant such authorization if applicable law requires disclosure. Consultant, its officers, employees, agents, or subcontractors shall not without written authorization from the Authority Representative or unless requested in writing by the Authority Attorney, voluntarily provide declarations, letters of support, testimony at depositions, response to interrogatories or other information concerning the work performed under this Agreement or relating to any project or property located within the Authority. Response to a subpoena or court order shall not be considered "voluntary," provided Consultant gives Authority notice of such court order or subpoena

B. Consultant shall promptly notify Authority should Consultant, its officers, employees, agents or subcontractors be served with any summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, request for admissions or other discovery request, court order or subpoena from any party regarding this Agreement and the work performed thereunder or with respect to any project or property located within the Authority. Authority may, but has no obligation to, represent Consultant or be present at any deposition, hearing or similar proceeding. Consultant agrees to cooperate fully with Authority and to provide Authority with the opportunity to review any response to discovery requests provided by Consultant. However, Authority's right to review any such response does not imply or mean the right by Authority to control, direct or rewrite the response.

C. In the event Authority gives Consultant written notice of a "litigation hold", then as to all data identified in such notice, Consultant shall, at no additional cost to Authority, isolate and preserve all such data pending receipt of further direction from the Authority

D. Consultant agrees to comply with the confidentiality and data protection provisions set forth in Exhibit "E," attached hereto and incorporated herein by this reference.

E. It is understood that both Parties are subject to the California Public Records Act (Gov. Code § 7920.000 et seq.). If a request under the California Public Records Act is made to view a Party's Data, the other Party shall notify the Party that provided the Data of the request and the date that such records will be released to the requester unless that Party obtains a court order enjoining that disclosure. If the Party that provided the Data fails to obtain a court order enjoining that disclosure, the Party receiving the request will release the requested information on the date specified.

F. Consultant's covenants under this section shall survive the expiration or termination of this Agreement.

18. **NOTICES**

Any notice, consent, request, demand, bill, invoice, report or other communication required or permitted under this Agreement shall be in writing and conclusively deemed effective: (a) on personal delivery, (b) on confirmed delivery by courier service during Consultant's and Authority's regular business hours, or (c) three Business Days after deposit in the United States mail, by first class mail, postage prepaid, and addressed to the Party to be notified as set forth below:

TO AUTHORITY:
333 W. El Camino Real
Suite 330
Sunnyvale CA 94087
Attention: Chief Executive Officer

TO CONSULTANT:
Sacramento Municipal Utility District
6201 S Street
Sacramento, CA 95817
Attn: Ali Crawford, SMUD Legal

19. **TERMINATION**

In the event Consultant fails or refuses to perform any of the provisions hereof at the time and in the manner required hereunder, Consultant shall be deemed in default in the performance of this Agreement. If Consultant fails to cure the default within the time specified (which shall be determined by the Authority but shall be not less than 10 days) and according to the requirements set forth in Authority's written notice of default, and in addition to any other remedy available to the Authority by law, the Authority Representative may terminate the Agreement by giving Consultant written notice thereof, which shall be effective immediately. The Authority Representative shall also have the option, at its sole discretion and without cause, of terminating this Agreement by giving seven (7) calendar days' prior written notice to Consultant as provided herein. Upon receipt of any notice of termination, Consultant shall immediately discontinue performance.

In the event of Authority's termination of this Agreement due to no fault or failure of performance by Consultant, Authority shall pay Consultant for services satisfactorily performed up to the effective date of termination. Upon termination, Consultant shall immediately deliver to the Authority any and all copies of studies, sketches, drawings, computations, and other material or products, whether or not completed, prepared by Consultant or given to Consultant, in connection with this Agreement. Such materials shall become the property of Authority. Consultant shall have no other claim against Authority by reason of such termination, including any claim for compensation.

20. **COMPLIANCE WITH LAWS**

Consultant shall keep itself informed of all applicable federal, state and local laws, ordinances, codes, regulations and requirements which may, in any manner, affect those employed by it or in any way affect the performance of its services pursuant to this Agreement. Consultant

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shall, at all times, observe and comply with all such laws and regulations, including, but not limited to the Americans with Disabilities Act, the Stored Communications Act, 18 U.S.C. Section 2701, et seq., California Civil Code Sections 1798.80 through 1798.84, and the California Consumer Privacy Act, Civil Code Section 1798.100 et seq. Authority, and its officers and employees, shall not be liable at law or in equity by reason of the failure of the Consultant to comply with this paragraph.

Consultant represents and agrees that all personnel engaged by Consultant in performing services are and shall be fully qualified and are authorized or permitted under state and local law to perform such services. Consultant represents and warrants to Authority that it has all licenses, permits, certificates, qualifications, and approvals required by law to provide the services and work required to perform services under this Agreement, including a business license. Consultant further represents and warrants that it shall keep in effect all such licenses, permits, and other approvals during the term of this Agreement.

21. **CONFLICT OF LAW**

This Agreement shall be interpreted under, and enforced by the laws of the State of California. The Agreement and obligations of the Parties are subject to all valid laws, orders, rules, and regulations of the authorities having jurisdiction over this Agreement (or the successors of those authorities). Any suits brought pursuant to this Agreement shall be filed with the Superior Court of the County of Santa Clara, State of California.

22. **ADVERTISEMENT**

Consultant shall not post, exhibit, display or allow to be posted, exhibited, displayed any signs, advertising, show bills, lithographs, posters or cards of any kind pertaining to the services performed under this Agreement unless prior written approval has been secured from Authority to do otherwise.

23. **WAIVER**

A waiver by Authority of any breach of any term, covenant, or condition contained herein shall not be deemed to be a waiver of any subsequent breach of the same or any other term, covenant, or condition contained herein, whether of the same or a different character.

24. **INTEGRATED CONTRACT**

This Agreement represents the full and complete understanding of every kind or nature whatsoever between the Parties, and all preliminary negotiations and agreements of whatsoever kind or nature are merged herein. No verbal agreement or implied covenant shall be held to vary the provisions hereof. Any modification of this Agreement will be effective only by a written document signed by both Authority and Consultant.

25. **AUTHORITY**

The individual(s) executing this Agreement represent and warrant that they have the legal Authority and authority to do so on behalf of their respective legal entities.

26. **INSERTED PROVISIONS**

Each provision and clause required by law to be inserted into the Agreement shall be deemed to be enacted herein, and the Agreement shall be read and enforced as though each were included herein. If through mistake or otherwise, any such provision is not inserted or is not correctly inserted, the Agreement shall be amended to make such insertion on application by either Party.

27. **CAPTIONS AND TERMS**

The captions in this Agreement are for convenience only, are not a part of the Agreement and in no way affect, limit or amplify the terms or provisions of this Agreement.

28. **AUTHORITY'S RIGHTS TO EMPLOY OTHER CONSULTANTS**

Authority reserves the right to employ other consultants in connection with the subject matter of the Scope of Services.

29. **EXHIBITS**

The Exhibits referenced in this Agreement are attached hereto and incorporated herein by this reference as though set forth in full in the Agreement. If any inconsistency exists or arises between a provision of this Agreement and a provision of any exhibit, or between a provision of this Agreement and a provision of Consultant's proposal, the provisions of this Agreement shall control.

30. **FORCE MAJEURE**

Consultant shall not be liable for any failure to perform its obligations under this Agreement if Consultant presents acceptable evidence, in Authority's sole judgment, that such failure was due to acts of God, embargoes, inability to obtain labor or materials or reasonable substitutes for labor or materials, governmental restrictions, governmental regulations, governmental controls, judicial orders, enemy or hostile governmental action, civil commotion, fire or other casualty, or other causes beyond Consultant's reasonable control and not due to any act by Consultant.

31. **FINAL PAYMENT ACCEPTANCE CONSTITUTES RELEASE**

The acceptance by Consultant of the final payment made under this Agreement shall operate as and be a release of Authority from all claims and liabilities for compensation to Consultant for anything done, furnished or relating to Consultant's work or services. Acceptance of payment shall be any negotiation of Authority's check or the failure to make a written extra compensation claim within ten calendar days of the receipt of that check. However, approval or payment by Authority shall not constitute, nor be deemed, a release of the responsibility and liability of Consultant, its employees, subcontractors and agents for the accuracy and competency of the information provided and/or work performed; nor shall such approval or payment be deemed to be an assumption of such responsibility or liability by Authority for any defect or error in the work prepared by Consultant, its employees, subcontractors and agents.

32. **ATTORNEY FEES**

In any litigation or other proceeding by which a Party seeks to enforce its rights under this Agreement (whether in contract, tort or both) or seeks a declaration of any rights or obligations

under this Agreement, the prevailing Party shall be entitled to recover all attorneys' fees, experts' fees, and other costs actually incurred in connection with such litigation or other proceeding, in addition to all other relief to which that Party may be entitled.

33. **SEVERABILITY**

If any provision in this Agreement is held by a court of competent jurisdiction to be illegal, invalid, void, or unenforceable, the remaining provisions will nevertheless continue in full force without being impaired or invalidated in any way.

34. **SUCCESSORS AND ASSIGNS**

The terms and conditions of this Agreement shall be binding on the successors and assigns of the Parties to this Agreement.

35. **NO THIRD PARTY BENEFICIARIES INTENDED**

This Agreement is made solely for the benefit of the Parties to this Agreement and their respective successors and assigns, and no other person or entity may have or acquire a right by virtue of this Agreement.

36. **COUNTERPARTS; FACSIMILE/PDF/ELECTRONIC SIGNATURE**

This Agreement may be executed in multiple counterparts, all of which shall be deemed an original, and all of which will constitute one and the same instrument. The Parties agree that a facsimile, PDF or electronic signature may substitute for and have the same legal effect as the original signature.

37. **DRAFTING PARTY**

This Agreement shall be construed without regard to the Party that drafted it. Any ambiguity shall not be interpreted against either Party and shall, instead, be resolved in accordance with other applicable rules concerning the interpretation of contracts.

IN WITNESS WHEREOF, the Parties have caused the Agreement to be executed as of the date set forth above.

RECOMMENDED FOR APPROVAL

_____
Justin Zagunis, Director of Decarbonization Programs and Policy

RECOMMENDED FOR APPROVAL

_____

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Amrit Singh, Chief Financial Officer/Director of Administrative Services

CONSULTANT NAME
Sacramento Municipal Utility District

By: _____
Name: Brandy Bolden
Title: Chief Customer Officer
Date: _____

SILICON VALLEY CLEAN ENERGY AUTHORITY
A Joint Powers Authority

By: _____
Name: Girish Balachandran
Title: Chief Executive Officer
Date: _____

APPROVED AS TO FORM:

_____
Counsel for Authority

ATTEST:

_____
Authority Clerk

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Exhibit A
Scope of Services

SMUD has been one of SVCE's program administrators for the past four years and helped SVCE launch many programs including eHub, Homes Rebates, SMB Rebates, GridShift Rebates, Multifamily Charging Infrastructure Incentives, Priority Zone DCFC Incentives, Electric Showcase Awards, and more. SMUD continues to support SVCE's current programs and help design, develop and launch new customer solutions.

1. Programs and Decarbonization Landscape Consideration:

A. General support for SVCE in considering program concepts and understanding the decarbonization landscape.
B. Assist SVCE in calculating metrics or synthesizing information about a sector of the market, program concepts, or SVCE's portfolio to inform strategic planning.
C. Provide expertise and exploratory analysis to assist SVCE in understanding program related concepts, opportunities, risks, and best practices.

2. Program Design and Implementation

A. Work with SVCE to shape a final program design, based on existing draft development work that SVCE staff has completed. May include defining project goals, requirements and restrictions.
B. Estimate required effort on behalf of consultant and SVCE. Outline key roles and responsibilities and obtain SVCE sign-off on program-specific plans.
C. Review budget and objectives to provide an estimate on cost-effectiveness and anticipated achievements of the program.
D. Work with SVCE staff and SVCE's marketing consultant(s) to design an effective marketing campaign recognizing the importance of matching customers with competent providers.
E. Work with SVCE staff and SVCE's third-party evaluation, measurement & verification (EM&V) consultants to design an EM&V plan for the program.
F. Implement and operationalize the program design. Develop any required materials, applications or other forms. Address any remaining gaps in the program design and fill in missing details to the level of granularity required to administer the program. Work with SVCE staff to publish necessary materials on the web and launch marketing campaigns.
G. Iterate and revise the program design and implementation, as necessary, throughout the life of the program to address any key issues that are discovered, or at the request of SVCE staff.

3. Program Application Administration

A. Respond to applicant requests for clarification on requirements, help with application forms and application status through email and phone channels.
B. Manage application processes. Review and approve, or deny and provide feedback, all applications based on eligibility, completeness and accuracy.
C. Monitor any reservations in the system for compliance with program requirements. Process any additional paperwork upon completion of reservation terms and approve project. Remind applicants with reservations who have not completed their projects as they approach the end of their reservation window, and reject any that fail to meet the terms.
D. Through the processes identified with SVCE staff, route approved projects for required rebate payment and other processing.

4. Ongoing Program Revisions and Tracking:

A. Make improvements to the program process, recommend program design improvements to SVCE staff, and keep track of all projects in the pipeline.

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B. Iterate and revise the program design and implementation, as necessary, throughout the life of the program, including incorporating customer feedback.
C. Address any key issues that are discovered (e.g., gray area in program rules).
D. Proactively identify these issues through actively considering the customer journey/experience and tracking the program results.
E. Use Salesforce-based Portfolio Tool on a day-to-day basis to ensure effective program implementation for SMUD administered programs.
F. Report on program enrollments and budgets weekly in SVCE preferred tool, method, and format, including but not limited to the Salesforce-based Portfolio Tool

5. Program Management

A. Provide SVCE with updates as defined by SVCE on the budget, including spent money, reserved funds and remaining funds, and program applications, enrollments, claims paid, and other metrics. Updates should identify successes and failures, along with the impact that the program has had to date. Updates will likely be weekly or bi-weekly. SVCE will define program goals / targets and communicate to SMUD what performance targets are. Results on the budget and enrollment metrics will be presented in relation to the program goals / targets.
B. Identify key issues faced by the program and communicate with SVCE to resolve them effectively.
C. Provide all additional reporting documentation required for compliance with the program funding sources.
D. Provide SVCE with periodic updates on program achievements and progress towards state objectives and goals.
E. As needed, design feedback surveys with SVCE staff and administer them to program participants.
F. Coordinate with SVCE's EM&V consultant to facilitate their review and evaluation of the program.

6. Check Processing

A. Use a check processing services like checkissuing.com or smartpayables.com to deliver refund checks.

7. Miscellaneous Other Support

A. On a time and materials basis, SVCE may require additional miscellaneous work. This Scope of Services has described the standard program requirements, but all future programs will be unique and may require additional support. SVCE also believes that there may be additional, innovative work that the consultant could perform within this overarching scope.

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Exhibit B
Schedule of Performance

Work will be assigned by the Authority on a task order basis. Each task order shall assign work consistent with the Scope of Services, a not to exceed budget, and a schedule for performance of each such task and shall be signed by both Parties and attached to this Agreement.

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Exhibit C
Compensation

Authority shall compensate Consultant for professional services in accordance with the terms and conditions of this Agreement based on the rates and compensation schedule set forth below. Compensation shall be calculated based on the hourly rates set forth below up to the not to exceed budget amount set forth below.

The compensation to be paid to Consultant under this Agreement for all services described in Exhibit "A" and reimbursable expenses shall not exceed a total of four million dollars ($4,000,000), as set forth below. Any work performed or expenses incurred for which payment would result in a total exceeding the maximum amount of compensation set forth herein shall be at no cost to Authority unless previously approved in writing by Authority.

Rates

Below are the hourly labor rates for SMUD staff by role by year.

Title	2023	2024	2025	2026	2027	2028
Program Manager	$160	$170	$180	$190	$200	$210
Project Manager	$160	$170	$180	$190	$200	$210
Marketing Specialist	$160	$170	$180	$190	$200	$210
Research Specialist	$160	$170	$180	$190	$200	$210
Trainer	$160	$170	$180	$190	$200	$210
Energy Specialists	$120	$125	$130	$135	$140	$145
Energy Advisors	$110	$115	$120	$125	$130	$135

Check Processing
If SVCE chooses to work with SMUD on check processing, SMUD will charge for labor to execute a contract and set up the system, to process each check request, and will pass through the check processing and postage fees.

Invoices

Monthly Invoicing: In order to request payment, Consultant shall submit monthly invoices to the Authority describing the services performed and the applicable charges (including a summary of the work performed during that period, personnel who performed the services, hours worked, task(s) for which work was performed). Authority shall pay all undisputed invoice amounts within thirty (30) calendar days after receipt up to the maximum compensation set forth herein. Authority does not pay interest on past due amounts.

Reimbursable Expenses
Administrative, overhead, secretarial time or overtime, word processing, photocopying, in house printing, insurance and other ordinary business expenses are included within the scope of payment for services and are not reimbursable expenses. Travel expenses must be authorized in advance in writing by Authority

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Additional Services

Consultant shall provide additional services outside of the services identified in Exhibit A only by advance written authorization from Authority Representative prior to commencement of any additional services. Consultant shall submit, at the Authority Representative's request, a detailed written proposal including a description of the scope of additional services, schedule, and proposed maximum compensation. Any changes mutually agreed upon by the Parties, and any increase or decrease in compensation, shall be incorporated by written amendments to this Agreement.

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Exhibit D
Insurance Requirements and Proof of Insurance

Consultant shall maintain the following minimum insurance coverage:

A. **COVERAGE**:

(1) **Workers' Compensation**:
Statutory coverage as required by the State of California.

(2) **Liability**:
Commercial general liability coverage with minimum limits of $1,000,000 per occurrence and $2,000,000 aggregate for bodily injury and property damage. ISO occurrence Form CG 0001 or equivalent is required.

(3) **Automotive**:
Comprehensive automotive liability coverage with minimum limits of $1,000,000 per accident for bodily injury and property damage. ISO Form CA 0001 or equivalent is required.

(4) **Professional Liability**
Professional liability insurance which includes coverage for the professional acts, errors and omissions of Consultant in the amount of at least $1,000,000.

(5) **Privacy and Cybersecurity Liability**
Privacy and cybersecurity liability (including costs arising from data destruction, hacking or intentional breaches, crisis management activity related to data breaches, and legal claims for security breach, privacy violations, and notification costs of at least $5,000,000 US per occurrence.

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Exhibit E
Confidentiality and Data Security Requirements

Subject to the terms and conditions of the Agreement, current proprietary and confidential information of Authority regarding customers of Authority ("Authority Customers") and/or other confidential information (collectively "Confidential Information") may be disclosed to Consultant from time to time in connection herewith solely for the purposes set forth in the Agreement. Such disclosure is subject to the following legal continuing representations and warranties by Consultant:

1. The Confidential Information disclosed to Consultant in connection herewith may include, without limitation, the following information about Authority Customers: (a) names; (b) addresses; (c) telephone numbers and email addresses; (d) service agreement numbers and account numbers; (e) meter and other identification numbers; (f) Authority-designated account numbers; (g) electricity and gas usage (including monthly usage, monthly maximum demand, electrical or gas consumption, HP load, and other data detailing electricity or gas needs and patterns of usage); (h) billing information (including rate schedule, baseline zone, CARE participation, end use code (heat source) service voltage, medical baseline, meter cycle, bill cycle, balanced payment plan and other plans); (i) payment / deposit status; (j) number of units; and (k) other similar information specific to Authority Customers individually or in the aggregate. Confidential Information shall also include specifically any copies, drafts, revisions, analyses, summaries, extracts, memoranda, reports and other materials prepared by Consultant or its representatives that are derived from or based on Confidential Information disclosed by Authority, regardless of the form of media in which it is prepared, recorded or retained.

2. Except for electric and gas usage information provided to Consultant pursuant to this Agreement, Confidential Information does not include information that Consultant proves (a) was properly in the possession of Consultant at the time of disclosure; (b) is or becomes publicly known through no fault of Consultant, its employees or representatives; or (c) was independently developed by Consultant, its employees or representatives without access to any Confidential Information.

3. From the Effective Date, no portion of the Confidential Information may be disclosed, disseminated or appropriated by Consultant, or used for any purpose other than the purposes set forth in the Agreement.

4. Consultant shall, at all times and in perpetuity, keep the Confidential Information in the strictest confidence and shall take all reasonable measures to prevent unauthorized or improper disclosure or use of Confidential Information. Consultant shall implement and maintain reasonable security procedures and practices appropriate to the nature of the information, to protect the personal information from unauthorized access, destruction, use, modification, or disclosure and prohibits the use of the data for purposes not set forth in the Agreement. Specifically, Consultant shall restrict access to Confidential Information, and to materials prepared in connection therewith, to those employees or representatives of Consultant who have a "need to know" such Confidential Information in the course of

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their duties with respect to the Consultant program and who agree to be bound by the nondisclosure and confidentiality obligations of this Agreement. Prior to disclosing any Confidential Information to its employees or representatives, Consultant shall require such employees or representatives to whom Confidential Information is to be disclosed to review this Agreement and to agree to be bound by the terms of this Agreement. Consultant shall not disclose Confidential Information or otherwise make it available, in any form or manner, to any other person or entity that is not Consultant's employee or representative (a "Third Party"), except where that Third Party has separately entered into a nondisclosure agreement with Authority. Without limiting Consultant's obligation of confidentiality as further described herein, Consultant shall be responsible for establishing, maintaining, and providing a written description to Authority of, a data privacy and information security program, including physical, technical, administrative, and organizational safeguards, that comply with or are substantial similar to the security controls identified in the current version of NIST SP800-53, and that is designed to: (a) ensure the security and confidentiality of the Authority's Data; (b) protect against any anticipated threats or hazards to the security or integrity of the Data; (c) protect against unauthorized disclosure, access to, or use of the Data; (d) ensure the proper disposal of Data; and, (e) ensure that all employees, agents, and subcontractors of Consultant, if any, comply with all of the foregoing. In no case shall the safeguards of Consultant's data privacy and information security program used to protect Data be less stringent than the safeguards used by Consultant for its own data. If the services include handling credit card information, then the Consultant shall comply at all times with all applicable Payment Card Industry Data Security Standards (PCI-DSS). Consultant agrees and warrants that it is responsible for the security of "cardholder data" that Consultant possesses, stores, processes or transmits on behalf of the Authority, and for any impact on the security of Authority's cardholder data environment adversely affected by any failure of Company to maintain compliance with provisions of the PCI-DSS applicable to the services. No less than annually, Consultant shall conduct a comprehensive independent third-party audit of its data privacy and information security program and provide such audit findings to Authority. The required audit shall be a SAS-70 (or successor standard) compliant audit, and Consultant shall provide the audit findings in the form of an SAS-70 Type II report

5. Notwithstanding the above, Consultant may disclose Confidential Information to the extent required by an order or subpoena requiring the disclosure of such Confidential Information issued by a court or other governmental authority of competent jurisdiction, or lawful process requiring disclosure of such Confidential Information, provided that Consultant notifies Authority immediately upon receipt thereof to allow Authority to seek protective treatment for such Confidential Information.

6. In the event of any act, error or omission, negligence, misconduct, or breach that permits any unauthorized access to, or that compromises or is suspected to compromise the security, confidentiality, or integrity of the Authority's Data or the physical, technical, administrative, or organizational safeguards put in place by Consultant that relate to the protection of the security, confidentiality, or integrity of the Data, Consultant shall, as applicable: (a) notify Authority as soon as practicable but no later than twenty-four (24) hours of becoming aware of such occurrence; (b) cooperate with Authority in investigating the occurrence, including making available all relevant records, logs, files, data reporting,

and other materials required to comply with applicable law or as otherwise required by Authority; (c) in the case of Confidential Information, at Authority's sole election, (i) notify the affected individuals who comprise the Confidential Information as soon as practicable but no later than is required to comply with applicable law including, but not limited to, the provisions of California Civil Code Section 1798.82, or, in the absence of any legally required notification period, within five (5) calendar days of the occurrence; or, (ii) reimburse Authority for any costs in notifying the affected individuals; (d) in the case of Confidential Information, provide third-party credit and identity monitoring services to each of the affected individuals who comprise the Confidential Information for the period required to comply with applicable law, or, in the absence of any legally required monitoring services, for no less than twelve (12) months following the date of notification to such individuals; (e) perform or take any other actions required to comply with applicable law as a result of the occurrence; (f) without limiting Consultant's obligations of indemnification as further described in this Agreement, indemnify, defend, and hold harmless Authority for any and all Claims (as defined herein), including reasonable attorneys' fees, costs, and expenses incidental thereto, which may be suffered by, accrued against, charged to, or recoverable from Authority in connection with the occurrence; (g) be responsible for recreating lost Data in the manner and on the schedule set by Authority without charge to Authority; (h) provide to Authority a detailed plan within ten (10) calendar days of the occurrence describing the measures Consultant will undertake to prevent a future occurrence and (i) upon conclusion of the occurrence, or at Authority's request, provide to Authority a comprehensive summary of the occurrence, including reason for occurrence, details of occurrence, how occurrence was addressed and any other information required by Authority, which shall be executed by Consultant and may be relied upon by Authority as a true and accurate account of the occurrence. Notification to affected individuals, as described above, shall comply with applicable law, be written in plain language, and contain, at a minimum: name and contact information of Consultant's representative; a description of the nature of the loss; a list of the types of data involved; the known or approximate date of the loss; how such loss may affect the affected individual; what steps Consultant has taken to protect the affected individual; what steps the affected individual can take to protect himself or herself; contact information for major credit card reporting agencies; and, information regarding the credit and identity monitoring services to be provided by Consultant. This Section shall survive the termination of this Agreement.

7. It shall be considered a material breach of this Agreement if Consultant engages in a pattern or practice of accessing, storing, using, or disclosing the Confidential Information in violation of the contractual obligations described herein. Consultant understands that if Authority finds that Consultant is engaged in a pattern or practice of accessing, storing, using, or disclosing Confidential Information in violation of this Agreement Authority shall promptly cease all disclosures of Confidential Information to Consultant. Consultant further understands that if Authority receives a customer complaint about Consultant's misuse of data or other violation of the Disclosure Provisions, Authority shall promptly cease disclosing that customer's information to Consultant and shall notify the California Public Utilities Commission of the complaint.

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8. Consultant shall be liable for the actions of, or any disclosure or use by, its employees or representatives contrary to this Agreement; however, such liability shall not limit or prevent any actions by Authority directly against such employees or representatives for improper disclosure and/or use. In no event shall Consultant or its employees or representatives take any actions related to Confidential Information that are inconsistent with holding Confidential Information in strict confidence. Consultant shall immediately notify Authority in writing if it becomes aware of the possibility of any misuse or misappropriation of the Confidential Information by Consultant or any of its employees or representatives. However, nothing in this Agreement shall obligate the Authority to monitor or enforce the Consultant's compliance with the terms of this Agreement.

9. Consultant shall comply with the consumer protections concerning subsequent disclosure and use set forth in Attachment B to California Public Utilities Commission (CPUC) Decision No. 12-08-045.

10. In addition to any other requirements set forth in the Agreement, within ten (10) business days of receipt of Authority's written request, and at Authority's option, Consultant will either return to Authority all tangible Confidential Information, including but not limited to all electronic files, documentation, notes, plans, drawings, and copies thereof, or will provide Authority with written certification that all such tangible Confidential Information of Authority has been destroyed.

11. Consultant acknowledges that disclosure or misappropriation of any Confidential Information could cause irreparable harm to Authority and/or Authority Customers, the amount of which may be difficult to assess. Accordingly, Consultant hereby confirms that the Authority shall be entitled to apply to a court of competent jurisdiction or the California Public Utilities Commission for an injunction, specific performance or such other relief (without posting bond) as may be appropriate in the event of improper disclosure or misuse of its Confidential Information by Consultant or its employees or representatives. Such right shall, however, be construed to be in addition to any other remedies available to the Authority, in law or equity.

12. In addition to all other remedies, Consultant shall indemnify and hold harmless Authority, its officers, employees, or agents from and against and claims, actions, suits, liabilities, damages, losses, expenses and costs (including reasonable attorneys' fees, costs and disbursements) attributable to actions or non-actions of Consultant and/or its employees and/or its representatives in connection with the use or disclosure of Confidential Information.

13. When Consultant fully performs the purposes set forth in the Agreement, or if at any time Consultant ceases performance or Authority requires Consultant cease performance of the purposes set forth in the Agreement, Consultant shall promptly return or destroy (with written notice to Authority itemizing the materials destroyed) all Confidential Information then in its possession at the direction of Authority. Notwithstanding the foregoing, the nondisclosure obligations of this Agreement shall survive any termination of this Agreement.

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SILICON VALLEY CLEAN ENERGY

Staff Report – Item 1e

Item 1e:	**Authorize the Chief Executive Officer to Execute a Five-Year Agreement with AIQUEOUS/Energy Orbit for Programs Portfolio Management Tool Software and Support**
From:	Girish Balachandran, CEO
Prepared by:	Justin Zagunis, Director of Decarbonization Programs and Policy Doug Bernard, Management Analyst
Date:	12/13/2023

RECOMMENDATION

Staff recommends the Board approve and authorize the CEO to execute an agreement with AIQUEOUS / Energy Orbit for Portfolio Management Tool Software and Support for a period of five years with a not-to-exceed of $955,000.

BACKGROUND

Since 2018, SVCE's decarbonization program offerings have been growing in number and expanding their reach. Over the last five years, the Board has allocated over $85 million to programs that provide community education, technical assistance, financial incentives, support for innovative technologies, and local policy development. We are currently running over 18 initiatives and customer-facing programs and have many more in the pipeline focused on direct installation services, accessible financing, and enhanced customer support for electrification. As we work to scale our program offerings, staff needs enhanced and reliable technical and implementation support to bring these programs to fruition.

This agreement represents a maturation of SVCE's current practices for data collection and management for decarbonization programs at SVCE – from custom tracking for each program to a consolidated, central repository. Today, customer program engagement is tracked for each program by SVCE's third-party program implementers using off-the-shelf software tools and analytics on customer engagement and journeys are run manually on the backend by staff or consultants. Moving away from this individualized and manual approach will allow staff to be more effective as the number and scale of programs continue to increase. Staff is seeking Board approval to execute an agreement with a vendor to develop a Programs Portfolio Tool, a robust software system that will enable staff to manage, analyze, and report on program-related metrics. Through this tool, staff also aims to improve customer interactions with SVCE's programs with an easy, convenient, consistent user interface for program applications.

ANALYSIS & DISCUSSION

SVCE staff solicited consultants for portfolio management tool software and support through a competitive bid process, as shown below. The RFP had a strong response, with eight proposals submitted from qualified proposers. After a thorough evaluation SVCE conducted virtual video interviews with select finalists. The SVCE review team consisted of four staff who selected AIQUEOUS/Energy Orbit as the final consultant for developing the Programs Portfolio Tool.

Agenda Item: 1e **Agenda Date: 12/13/2023**



AIQUEOUS/Energy Orbit provides a customized Salesforce-based system to provide a program management and customer relationship management platform for program application reviews and approvals, customer communications, partner data access, and accurate and consistent reporting. AIQUEOUS and Energy Orbit are technology and consulting firms that recently merged, increasing their combined bandwidth to offer tailored services to their clients. Other CCAs, including MCE, Ava Community Energy (formerly East Bay Clean Energy), and Central Coast Community Energy (3CE), have previously worked with AIQUEOUS and still use a Salesforce-based platform. Similarly, Energy Orbit has an extensive client list, including City of Roseville Electric Utility, Arizona Public Service, and CLEAResult.

Under the proposed contract, specific areas in which AIQUEOUS/Energy Orbit may provide services to SVCE under the proposed contract agreement include, but are not limited to, the following:

- Customer Application Submission and Review
- Configure Workflows to Move Applications Through Stages
- Customer Interaction Notes and Database
- Program Enrollment/Budget Dashboards and Reports

STRATEGIC PLAN

As referenced in SVCE's Strategic Plan Goal 14, Measure 7, this contract will increase organizational capacity to deploy and manage programs at a larger scale including budget, enrollments, and number of units deployed.

ALTERNATIVE

Do not authorize the CEO to execute the agreement with AIQUEOUS/Energy Orbit. Staff can, instead, continue to use the current software tools to manage program data and customer interactions. This will increase the time required to track and report on programs, limiting the insights and scalability.

FISCAL IMPACT

The proposed agreement has a not-to-exceed amount of $955,000 for a 5-year contract term. The cost for year 1 of the agreement was included in the FY24 budget request approved by the Board. Appropriations of funds for subsequent years of the agreement will be requested in upcoming budgets.

ATTACHMENTS

1. Agreement between SVCE and AIQUEOUS/Energy Orbit

MASTER AGREEMENT

SOFTWARE AS A SERVICE

This Master Agreement (the "Agreement") is entered into and is effective as of _____, 2023 ("Effective Date"), by and between Silicon Valley Clean Energy, an independent public agency located at _____, California ____ ("SVCE") and Aiqueous, LLC, a Texas limited liability company located at 502 W. 30th Street #1, Austin, Texas 78705 ("Service Provider").

RECITALS

WHEREAS, SVCE requires third-party hosted "software as a service" services, as further described herein, with respect to certain of its information technology needs;

WHEREAS, SVCE requested a proposal from Service Provider for such Services;

WHEREAS, Service Provider has experience and expertise in the business of providing the Services;

WHEREAS, Service Provider submitted a proposal to SVCE to perform such Services on behalf of SVCE;

WHEREAS, based on Service Provider's superior knowledge and experience relating to such Services, SVCE has selected Service Provider to provide and manage the Services;

WHEREAS, Service Provider wishes to perform the Services and acknowledges that the successful performance of the Services and the security and availability of SVCE's data are critical to the operation of SVCE's business; and,

WHEREAS, Service Provider has agreed to provide the Services to SVCE, all on the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the mutual covenants and representations set forth in this Agreement, the parties hereby agree as follows:

1. Term. This Agreement is legally binding as of the Effective Date and shall continue until terminated as provided for herein. Unless this Agreement is terminated earlier in accordance with the terms set forth herein, the term (the "Initial Term") shall commence on the Effective Date and continue for five (5) years. Following the Initial Term and unless otherwise terminated as provided for in this Agreement, this Agreement may be renewed (each, a "Renewal Term") upon mutual written agreement of the parties.

2. Not to Exceed Amount. SVCE shall be responsible for and shall pay to Service Provider the fees as further described in the applicable Order, subject to the terms and conditions contained in this Agreement, including, but not limited to, Section 10 Fees; Billing, below. The total amount payable to Service Provider under this Agreement shall not exceed nine hundred fifty five thousand dollars ($955,000).

3. The Services. This Agreement (and the applicable Orders and Scopes of Work ("SOW")) sets forth the terms and conditions under which Service Provider agrees to license to SVCE certain hosted software and provide all other services necessary for productive use of such software including customization / integration, user identification and password change management, data import / export, monitoring, technical support, maintenance, training, backup and recovery, and change management (collectively, the "Services") as further set forth in Exhibit A attached hereto.

   3.1 Authorized Users. Unless otherwise limited herein and as further detailed in the applicable Order, Service Provider grants SVCE a renewable, limited, nonexclusive, royalty-free, and worldwide right and license for any SVCE employee, contractor, or agent, or any other individual or entity

authorized by SVCE, (each, an "Authorized User") to access and use the Services. For the avoidance of doubt, the number of Authorized Users will be detailed in the applicable Order. Other than any limitations otherwise described herein, Authorized Users will have no other limitations on their access to or use of the Services.

3.2 Acknowledgement of License Grant. For the purposes of 11 U.S.C. § 365(n), the parties acknowledge and agree that this Agreement constitutes a grant of license to use intellectual property in software form, to SVCE by Service Provider.

3.3 Changes in Number of Authorized Users. SVCE is entitled to increase or decrease the initial number of Authorized Users ("Minimum Commitment"), on an as-requested basis; provided, however, that SVCE shall maintain the Minimum Commitment unless the parties otherwise agree to adjust the Minimum Commitment. Should SVCE elect to change the number of Authorized Users, Service Provider shall reduce or increase Authorized Users specified in the applicable Order and adjust the prospective Services Fees accordingly no later than five (5) business days from SVCE's written request.

3.4 Control and Location of Services. The method and means of providing the Services shall be under the exclusive control, management, and supervision of Service Provider, giving due consideration to the requests of SVCE. Cloud based storage shall not be utilized without the SVCE's prior, written consent. Any and all permitted cloud storage shall be in compliance with ISO/IEC 27001 – 27017, as applicable, or successor standards thereto. Except as otherwise expressly set forth in Exhibit A, the Services (including all data storage), shall be provided solely from within the continental United States and on computing and data storage devices residing therein, and all such locations shall be disclosed to SVCE annually and within thirty (30) days of the effective date of this Agreement.

3.4.1 Subcontractors. Excepting Service Provider's arrangement with SFDC, Service Provider shall not enter into any subcontracts for the performance of the Services, or assign or transfer any of its rights or obligations under this Agreement, without SVCE's prior written consent and any attempt to do so shall be void and without further effect and shall be a material breach of this Agreement. Service Provider's use of subcontractors shall not relieve Service Provider of any of its duties or obligations under this Agreement.

3.5 Storage. The Services shall include the applicable allocation of base data storage as described in Exhibit A, if any. Service Provider shall immediately notify SVCE when SVCE has reached eighty percent (80%) of SVCE's then-current data storage maximum. Within five (5) calendar days of SVCE's request, Service Provider shall make additional data storage available to SVCE at the rates described in Exhibit A.

3.6 Development and Test Environments. In addition to production use of the Services, SVCE is entitled to one development and one test environment for use by Authorized Users at the rates described in the applicable Order. Such non-production environments shall have the same data storage and processing capacities as the production environment. Service Provider shall cooperate with SVCE's requests in managing the non-production environments such as refreshing SVCE Data upon request.

3.7 Documentation. The documentation for the Software and SaaS Solution ("Documentation") will accurately and completely describe the functions and features of the Services, including all subsequent revisions thereto. The Documentation shall be understandable by a typical end user and shall provide Authorized Users with sufficient instruction such that an Authorized User can become self-reliant with respect to access and use of the Services. SVCE shall have the right to make any number of additional copies of the Documentation at no additional charge.

3.8 Changes in Functionality. During the term of this Agreement, Service Provider shall not reduce or eliminate functionality in the Services without the prior written consent of SVCE. Where Service

Provider desires to modify the material functionality in the Services, the parties shall resort to the Change Control Procedure detailed in Section 7 below.

3.9 No Effect of Click-Through Terms and Conditions. Where an SVCE Authorized User is required to "click through" or otherwise accept or made subject to any online terms and conditions in accessing or using the Services, such terms and conditions are not binding and shall have no force or effect as to the Services or this Agreement.

3.10 Modification of the Services. SVCE's Director of Information Technology shall be authorized to waive, in writing, any of the Service Provider's obligations with respect to the Services, where deemed to be in SVCE's best interests, provided that no such modification shall result in any increase in the amount of the Services Fees.

3.11 Compliance with All Laws. Service Provider shall keep itself informed of all applicable federal, state and local laws, ordinances, codes, regulations and requirements which may, in any manner, affect those employed by it or in any way affect the performance of its services pursuant to this Agreement. Service Provider shall, at all times, observe and comply with all such laws and regulations, including, but not limited to the Americans with Disabilities Act, the Stored Communications Act, 18 U.S.C. Section 2701, et seq., California Civil Code Sections 1798.80 through 1798.84, and the California Consumer Privacy Act, Civil Code Section 1798.100, *et seq*. SVCE, and its officers and employees, shall not be liable at law or in equity by reason of the failure of the Service Provider to comply with this paragraph.

4. Service Levels.

4.1 Service Levels;. For the term of this Agreement, Service Provider shall provide the Services, force majeure events excepted, during the applicable Service Periods and in accordance with the applicable Service Level Standards, each as described in Exhibit A hereto.

4.2 Service Level Reporting. See Exhibit A and Exhibit B.

4.3 Failure to Meet Service Level Standards. See Service Credit subsection of Exhibit A.

4.3.1 Termination for Material and Repeated Failures. SVCE shall have, in addition to any other rights and remedies under this Agreement or at law, the right to terminate this Agreement, and be entitled to a return of any prepaid fees where Service Provider fails to meet any Service Level Standard: (a) to such an extent that the SVCE's ability to use the Services is materially disrupted and Service Provider fails to cure such disruption within 30 days of written notice from SVCE, force majeure events excepted; or, (b) for four (4) months out of any twelve (12) month period.

4.4 Audit of Service Levels. Once every 12 months and upon not less than ten (10) calendar days written notice, SVCE or SVCE's agent shall have the right to audit Service Provider's books, records, and measurement and auditing tools to verify Service Level Standard achievement.

5. Support; Maintenance; Additional Services.

5.1 Technical Support. Service Provider shall provide the Technical Support as described in Exhibit A and Exhibit B. The Services Fees shall be inclusive of the fees for the Technical Support.

5.2 Maintenance. Service Provider shall provide bug fixes, corrections, modifications, enhancements, upgrades, and new releases to the Services to ensure: (a) the functionality of the Software and SaaS Solution, as described in the Documentation, is available to Authorized Users; (b) the functionality of the Services in accordance with the representations and warranties set forth herein, including but not limited to, the Services conforming in all material respects to the specifications, functions,

descriptions, standards, and criteria set forth in Exhibit A and the Documentation; (c) the Service Level Standards can be achieved; and, (d) the Services work with the then-current version and the three prior versions of Internet Explorer, Mozilla Firefox, and Google Chrome Internet browsers. The Services Fees shall be inclusive of the fees for maintenance.

5.2.1 Required Notice of Maintenance. Service Provider will provide SVCE notice as far in advance as reasonably possible for planning and coordination efforts prior to availability of any Upgrades that impact the SVCE's energyOrbit platform. For all other energyOrbit upgrades, Service Provider will provide SVCE periodic updates on planned upgrades, with reasonable details (i.e. Release Notes), of changes being made to the energyOrbit application at least 2 weeks prior to the availability of the change. At no time shall Service Provider implement code into the SVCE's production environment without receiving SVCE's prior approval and without allowing SVCE sufficient time to perform testing in the SVCE non-production environment. All releases and upgrades to the Salesforce Platform can be monitored in the SVCE environment Release Update page, available through Setup as described here https://help.salesforce.com/s/articleView?id=sf.release_updates_manage.htm&type=5

5.2.2 Acceptance of Non-Emergency Maintenance. Unless as otherwise agreed to by SVCE on a case-by-case basis, for non-emergency maintenance, SVCE shall have a ten (10) business day period to test any maintenance changes prior to Service Provider introducing such maintenance changes into production (the "Maintenance Acceptance Period"). In the event that SVCE rejects, for good cause, any maintenance changes during the Maintenance Acceptance Period, Service Provider shall not introduce such rejected maintenance changes into production. At the end of the Maintenance Acceptance Period, if SVCE has not rejected the maintenance changes, the maintenance changes shall be deemed to be accepted by SVCE and Service Provider shall be entitled to introduce the maintenance changes into production.

5.3 Configuration / Integration Services. Service Provider shall provide the Configuration / Integration Services, if any, described in the applicable SOW. Unless otherwise detailed in the applicable SOW, the Services Fees shall be inclusive of the fees for the Configuration / Integration Services.

5.4 Initial Training Services. Service Provider shall provide the Initial Training Services, if any, described in Exhibit A. The Services Fees shall be inclusive of the fees for the Initial Training Services. Additional Training Services will be delivered pursuant to a mutually agreed upon SOW.

6. Audit Rights of Service Provider. Service Provider shall have no right to conduct an on-premises audit of SVCE's compliance with the use of the Services. No more than once annually, Service Provider shall have the right to request from SVCE its certification of compliance with the permitted number of Authorized Users. Where the actual number of users exceeds the permitted number of Authorized Users, SVCE, at SVCE's sole election shall, within thirty (30) business days: (a) reduce the actual number of users so as to be in compliance with the permitted number of Authorized Users in which case no additional Services Fees shall be due to Service Provider; or, (b) acquire the appropriate number of Authorized Users' licenses at the rate specified in Exhibit A so as to be in compliance with the permitted number of Authorized Users.

7. Change Control Procedure. SVCE may, upon written notice, request changes to the scope of the Services. If SVCE requests an increase in the scope, SVCE shall notify Service Provider, and, not more than five (5) business days (or other mutually agreed upon period) after receiving the request, Service Provider shall notify SVCE whether or not the change has an associated cost impact. If SVCE approves, SVCE shall issue a change order, which will be executed by the Service Provider. SVCE shall have the right to decrease the scope, and the associated fees will be reduced accordingly.

8. Termination; Renewals.

8.1 Termination for Convenience. Without limiting the right of a party to terminate this Agreement as provided for in this Agreement, SVCE may terminate this Agreement for convenience upon not less than thirty (30) days prior written notice to the Service Provider.

8.2 Termination for Cause. Without limiting the right of a party to immediately terminate this Agreement for cause as provided for in this Agreement, if either party materially breaches any of its duties or obligations hereunder and such breach is not cured, or the breaching party is not diligently pursuing a cure to the non-breaching party's sole satisfaction, within thirty (30) calendar days after written notice of the breach, the non-breaching party may terminate this Agreement for cause as of a date specified in such notice.

8.3 Payments upon Termination. Upon the termination of this Agreement or any applicable Order or SOW, SVCE shall pay to Service Provider all undisputed amounts due and payable thereunder, if any. SVCE is entitled to a return of any prepaid fees where Service Provider fails to meet any performance standard related to the delivery of professional services detailed in a SOW; provided however, if SVCE terminates Service Provider's delivery to SVCE of any platform based on the SFDC platform detailed in Exhibit B for convenience (pursuant to Section 8.1), then Service Provider shall not be obligated to refund SVCE fees paid for the delivery of such SFDC platform.

8.4 Return of SVCE Data. Upon the termination of this Agreement, Service Provider shall, within one (1) business day following the termination of this Agreement, provide SVCE, without charge and without any conditions or contingencies whatsoever (including but not limited to the payment of any fees due to Service Provider), with a final extract of the SVCE Data in the format specified by SVCE. Further, Service Provider shall certify to SVCE the destruction of any SVCE Data within the possession or control of Service Provider, in accordance with Section 13.5, but such destruction shall occur only after the SVCE Data has been returned to SVCE. This Section shall survive the termination of this Agreement.

8.5 Renewals. Should the Services continue beyond the Initial Term, the Services Fees for the Renewal Term may be increased no more than three percent (3%) on an annualized per-user basis.

9. Transition Services. Service Provider will provide to SVCE and/or to the service provider selected by SVCE ("Successor Service Provider") assistance reasonably requested by SVCE in writing to effect the orderly transition of the Services, in whole or in part, to SVCE or to Successor Service Provider ("Transition Services") following the termination of this Agreement, in whole or in part. The Transition Services may include: (a) developing a plan for the orderly transition of the terminated Services from Service Provider to SVCE or Successor Service Provider; (b) if required, transferring the SVCE Data to Successor Service Provider; (c) using commercially reasonable efforts to assist SVCE in acquiring any necessary rights to legally and physically access and use any third-party technologies and documentation then being used by Service Provider in connection with the Services; (d) using commercially reasonable efforts to make available to SVCE, pursuant to mutually agreeable terms and conditions, any third-party services then being used by Service Provider in connection with the Services; and, (e) such other activities upon which the parties may agree in writing. All applicable terms and conditions of this Agreement shall apply to the Transition Services. This Section shall survive the termination of this Agreement.

10. Fees; Billing. Any sum due Service Provider for the Services for which payment is not otherwise specified shall be due and payable thirty (30) business days after receipt by SVCE of an invoice from Service Provider.

10.1 Billing Procedures. Service Provider shall bill to SVCE the sums due pursuant to Exhibit A by Service Provider's invoice, which shall contain: (a) SVCE's purchase order number, if any, and Service Provider's invoice number; (b) description of Services for which an amount is due; (c) the fees or portion thereof that are due; (d); taxes, if any; (e); any Performance Credits or other credits; and, (f) total amount due. Service Provider shall forward invoices in hardcopy format to 333 W. El Camino Real #330, Sunnyvale, CA 94087.

10.2 Taxes. Service Provider represents and warrants that it is an independent contractor for purposes of federal, state, and local taxes. Service Provider agrees that SVCE is not responsible to collect or withhold any such taxes, including income tax withholding and social security contributions, for Service Provider. Any and all taxes, interest, or penalties, including any federal, state, or local withholding or employment taxes, imposed, assessed, or levied as a result of this Agreement shall be paid or withheld by Service Provider.

10.3 Credits. As applicable, Exhibit A will detail any fee discounts or service credits owed by Service Provider to SVCE because of Service Provider's sole failure to achieve any performance standards detailed in Exhibit A.

10.4 Non-binding Terms. Any terms and conditions included in a Service Provider invoice shall be deemed to be solely for the convenience of the Service Provider, and no such term or condition shall be binding upon the SVCE or Service Provider to the extent that such terms conflict with this Agreement.

10.5 Auditable Records. Service Provider shall maintain accurate records of all fees billable to, and payments made by, SVCE in a format that will permit audit by SVCE for a period of no less than three (3) years from when a fee was incurred or a payment was made. The foregoing obligation of Service Provider shall survive the termination of this Agreement. For the term of this Agreement, upon SVCE's written request, Service Provider shall provide SVCE with a copy of its annual American Institute of Certified Public Accountants Service Organization Control (SOC) 1 type 2 report and SOC 2 type 2 report (for all Trust Services Principles).

10.6 Billing Reviews by Third-Parties. For purposes of determining the competitiveness and appropriateness of fees charged to SVCE by Service Provider, SVCE is entitled to disclose to a third-party this Agreement, and any other data pertaining to fees paid or payable by SVCE to Service Provider.

10.7 No Suspension of Services. Service Provider shall not suspend any part of the Services where: (a) SVCE is reasonably disputing any amount due to Service Provider; or, (b) any unpaid but undisputed amount due to Service Provider is less than ninety (90) days in arrears. Otherwise and without waiving its right to terminate pursuant to Section 8.2, Service Provider may suspend service in the event that an outstanding fee remains unpaid more than ninety (90) days in arrears and SVCE is not reasonably disputing any amount due to Service Provider.

11. Representations and Warranties.

11.1 Mutual. SVCE and Service Provider represent and warrant that:

11.1.1 it is a public entity or business duly incorporated, validly existing, and in good standing under the laws of its state of incorporation;

11.1.2 it has all requisite corporate power, financial capacity, and authority to execute, deliver, and perform its obligations under this Agreement;

11.1.3 the execution, delivery, and performance of this Agreement has been duly authorized by it and this Agreement constitutes the legal, valid, and binding agreement of it and is enforceable against it in accordance with its terms, except as the enforceability thereof may be limited by bankruptcy, insolvency, reorganizations, moratoriums, and similar laws affecting creditors' rights generally and by general equitable principles;

11.1.4 it shall comply with all applicable federal, state, local, or other laws and regulations applicable to the performance by it of its obligations under this Agreement and shall

obtain all applicable permits and licenses required of it in connection with its obligations under this Agreement; and,

11.1.5 there is no outstanding litigation, arbitrated matter or other dispute to which it is a party which, if decided unfavorably to it, would reasonably be expected to have a potential or actual material adverse effect on its ability to fulfill its obligations under this Agreement.

11.2 By Service Provider. Service Provider represents and warrants that:

11.2.1 it is in the business of providing the Services;

11.2.2 the Services are fit for the ordinary purposes for which they will be used;

11.2.3 it is possessed of superior knowledge with respect to the Services;

11.2.4 it is the lawful licensee or owner of the Services (excluding any SVCE Data therein) and has all the necessary rights in the Services to grant the use of the Services to SVCE;

11.2.5 as of the initial date of delivery, the Services and any other work performed by Service Provider hereunder shall not infringe upon any United States or foreign copyright, patent, trade secret, or other proprietary right, or misappropriate any trade secret, of any third-party, and that it has neither assigned nor otherwise entered into an agreement by which it purports to assign or transfer any right, title, or interest to any technology or intellectual property right that would conflict with its obligations under this Agreement;

11.2.6 it shall disclose upon SVCE's written request any third-party (which shall, for purposes of this Agreement, be deemed a subcontractor) whose intellectual property is incorporated into the Services or who is necessary for the performance of the Services and it shall maintain in-force written agreements with such third-party, if any, for the term of this Agreement;

11.2.7 it has the expertise to perform the Services in a competent, workmanlike, and professional manner and in accordance with the highest professional standards;

11.2.8 it will use its commercially reasonable efforts to ensure that no computer viruses, worms, malware, or similar items (collectively, a "Virus") are introduced into SVCE's computing and network environment by the Services, and that, where it transfers a Virus to SVCE through the Services, it shall reimburse SVCE the actual cost incurred by SVCE to remove or recover from the Virus, including the costs of persons employed by SVCE to perform such services;

11.2.9 the Services are free of any mechanism which may disable the Services and Service Provider warrants that no loss of SVCE Data will result from such items if present in the Services;

11.2.10 in the case of SVCE's reasonable dispute of any Service Provider invoice, it shall not withhold the performance of Services, including, without limitation, access and use of the Services, Technical Support, Maintenance, and extract of SVCE Data; and,

11.2.11 the Services will conform in all material respects to the specifications, functions, descriptions, standards, and criteria set forth in Exhibit A and the Documentation.

12. SVCE Data.

12.1 Ownership. SVCE's data ("SVCE Data," which shall also be known and treated by Service Provider as Confidential Information) shall include: (a) SVCE's and/or SVCE employees' data collected, accessed, used, processed, stored, or generated as the result of the SVCE's use of the Services; and, (b) personally identifiable information ("PII") collected, used, processed, stored, or generated as the result of the use of the Services, including, without limitation, any information that identifies an individual, such as an individual's social security number or other government-issued identification number, date of birth, address, telephone number, biometric data, mother's maiden name, email address, credit card information, or an individual's name in combination with any other of the elements listed herein. Except where subject to a third party's intellectual property rights, all SVCE Data is and shall remain the sole and exclusive property of SVCE and all right, title, and interest in the same belongs to SVCE. This Section shall survive the termination of this Agreement.

12.2 Service Provider Use of SVCE Data. Service Provider is provided a limited license to access SVCE Data for the sole and exclusive purpose of providing the Services, including a license to collect, process, store, generate, and display SVCE Data only to the extent necessary in the providing of the Services. Service Provider shall: (a) keep and maintain SVCE Data in strict confidence, using such degree of care as is appropriate and consistent with its obligations as further described in this Agreement and applicable law to avoid unauthorized access, use, disclosure, or loss; (b) use and disclose SVCE Data solely and exclusively for the purpose of providing the Services, such use and disclosure being in accordance with this Agreement, and applicable law; (c) allow access to SVCE Data only to those employees of Service Provider who are directly involved with and responsible for providing the Services; and, (d) not use, sell, rent, transfer, distribute, or otherwise disclose or make available SVCE Data for Service Provider's own purposes or for the benefit of anyone other than SVCE without SVCE's prior written consent. This Section shall survive the termination of this Agreement.

12.3 Access to, and Extraction of SVCE Data. SVCE shall have full and complete access to, and ability to download, its SVCE Data 24 hours per day, 7 days per week, except during authorized periods of maintenance by Service Provider. Further, Service Provider shall, within one (1) business day of SVCE's request, provide SVCE, without charge and without any conditions or contingencies whatsoever (including, but not limited to, the payment of any fees due to Service Provider), an extract of the SVCE Data in the format specified by SVCE. In the event SVCE gives Service Provider written notice of a "litigation hold" or request under the California Public Records Act (Gov. Code § 7920.000 *et seq*., "Public Records Act")., then as to all data identified in such notice or request, Service Provider shall, at no additional cost to SVCE, isolate and preserve all such data pending receipt of further direction from the SVCE.

12.4 Backup and Recovery of SVCE Data. As a part of the Services, Service Provider is responsible for maintaining a backup of SVCE Data and for an orderly and timely recovery of such data in the event that the Services may be interrupted. Unless otherwise described in Exhibit A, Service Provider shall maintain a contemporaneous backup of SVCE Data that can be recovered within two (2) hours at any point in time. Additionally, Service Provider shall store a backup of SVCE Data in an off-site (but within the continental United States) "hardened" facility no less than daily, maintaining the security of SVCE Data, the security requirements of which are further described herein. Any backups of SVCE Data shall not be considered in calculating storage used by SVCE.

12.5 Loss or Unauthorized Access to Data. In the event of any act, error or omission, negligence, misconduct, or breach that permits any unauthorized access to, or that compromises or is suspected to compromise the security, confidentiality, or integrity of SVCE Data or the physical, technical, administrative, or organizational safeguards put in place by Service Provider that relate to the protection of the security, confidentiality, or integrity of SVCE Data, Service Provider shall, as applicable: (a) notify SVCE as soon as practicable but no later than twenty-four (24) hours of confirmation of such occurrence; (b) reasonably cooperate with SVCE in investigating the occurrence, including making available all relevant records, logs, files, data reporting, and other materials required to comply with applicable law or as otherwise required by SVCE; (c) in the case of PII, at SVCE's sole election, (i) notify the affected individuals who comprise the PII as soon as

practicable but no later than is required to comply with applicable law including, but not limited to, the provisions of California Civil Code Section 1798.82, or, in the absence of any legally required notification period, within five (5) calendar days of the occurrence; or, (ii) reimburse SVCE for any reasonable costs in notifying the affected individuals; (d) in the case of PII, provide third-party credit and identity monitoring services to each of the affected individuals who comprise the PII for the period required to comply with applicable law, or, in the absence of any legally required monitoring services, for no less than twelve (12) months following the date of notification to such individuals; (e) perform or take any other actions required to comply with applicable law as a result of the occurrence; (f) without limiting Service Provider's obligations of indemnification as further described in this Agreement, indemnify, defend, and hold harmless SVCE for any and all Claims (as defined herein), including reasonable attorneys' fees, costs, and expenses incidental thereto, which may be suffered by, accrued against, charged to, or recoverable from SVCE in connection with the occurrence; (g) be responsible for recreating lost SVCE Data in the manner and on the schedule set by SVCE without charge to SVCE; (h) provide to SVCE a detailed plan within ten (10) calendar days of the occurrence describing the measures Service Provider will undertake to prevent a future occurrence and (i) upon conclusion of the occurrence, or at SVCE's request, provide to SVCE a comprehensive summary of the occurrence, including reason for occurrence, details of occurrence, how occurrence was addressed and any other information required by SVCE. Notification to affected individuals, as described above, shall be approved in writing by SVCE before delivery. This Section shall survive the termination of this Agreement.

13. Non-Disclosure of Confidential Information. The parties acknowledge that each party may be exposed to or acquire communication or data of the other party that is confidential, privileged communication not intended to be disclosed to third parties. The provisions of this Section shall survive the termination of this Agreement.

13.1 Meaning of Confidential Information. For the purposes of this Agreement, the term "Confidential Information" shall mean all information and any written document of a party that: (a) has been marked "confidential" or with words of similar meaning, at the time of disclosure by such party; (b) if disclosed orally or not marked "confidential" or with words of similar meaning, was subsequently summarized in writing by the disclosing party and marked "confidential" or with words of similar meaning; or, (c) should reasonably be recognized as confidential information of the disclosing party. Except for electric and gas usage information provided to Service Provider pursuant to this Agreement, the term "Confidential Information" does not include any information or documentation that was: (i) already in the possession of the receiving party without an obligation of confidentiality; (ii) developed independently by the receiving party, as demonstrated by the receiving party, without violating the disclosing party's proprietary rights; (iii) obtained from a source other than the disclosing party without an obligation of confidentiality; or, (iv) publicly available when received, or thereafter became publicly available (other than through any unauthorized disclosure by, through, or on behalf of, the receiving party). For purposes of this Agreement, in all cases and for all matters, SVCE Data shall be deemed to be Confidential Information.

13.2 Obligation of Confidentiality. The parties agree to hold all Confidential Information in strict confidence and not to copy, reproduce, sell, transfer, or otherwise dispose of, give or disclose such Confidential Information to third parties other than employees, agents, or subcontractors of a party who have a need to know in connection with this Agreement or to use such Confidential Information for any purposes whatsoever other than the performance of this Agreement, or as required by law. The parties agree to advise and require their respective employees, agents, and subcontractors of their obligations to keep all Confidential Information confidential.

13.3 Cooperation to Prevent Disclosure of Confidential Information. Each party shall use its best efforts to assist the other party in identifying and preventing any unauthorized use or disclosure of any Confidential Information. Without limiting the foregoing, each party shall advise the other party immediately in the event either party learns or has reason to believe that any person who has had access to Confidential Information has violated or intends to violate the terms of this Agreement and each party will cooperate with the other party in seeking injunctive or other equitable relief against any such person. It is understood that SVCE is subject to the Public Records Act. If a

request under the California Public Records Act is made to view Service Provider's Confidential Information, SVCE shall notify Service Provider of the request and the date that such records will be released to the requester unless Service Provider obtains a court order enjoining that disclosure. If Service Provider fails to obtain a court order enjoining that disclosure, SVCE will release the requested information on the date specified.

13.4 Remedies for Breach of Obligation of Confidentiality. Each party acknowledges that breach of its obligation of confidentiality may give rise to irreparable injury to the other party, which damage may be inadequately compensable in the form of monetary damages. Accordingly, a party may seek and obtain injunctive relief against the breach or threatened breach of the foregoing undertakings, in addition to any other legal remedies which may be available, to include, in the case of SVCE, at the sole election of SVCE, the immediate termination, without liability to SVCE, of this Agreement.

13.5 Surrender of Confidential Information upon Termination. Upon termination of this Agreement or an Exhibit A, in whole or in part, each party shall, within five (5) calendar days from the date of termination, return to the other party any and all Confidential Information received from the other party, or created or received by a party on behalf of the other party, which is in such party's possession, custody, or control; provided, however, that Service Provider shall return SVCE Data to SVCE following the timeframe and procedure described further in this Agreement. Should Service Provider or SVCE determine that the return of any SVCE Data or non-SVCE Data Confidential Information is not feasible, Service Provider shall destroy the data comprising such Confidential Information in compliance with the most current version of NIST standard SP800-88, or other standard acceptable to the SVCE, and shall certify the same in writing within five (5) calendar days from the date of termination to the other party.

14. Data Privacy and Information Security.

14.1 Undertaking by Service Provider. Without limiting Service Provider's obligation of confidentiality as further described herein, Service Provider shall be responsible for establishing, maintaining, and providing a written description to SVCE of, a data privacy and information security program, including physical, technical, administrative, and organizational safeguards, that comply with or are substantial similar to the security controls identified in the current version of NIST SP800-53, and that is designed to: (a) ensure the security and confidentiality of the SVCE Data; (b) protect against any anticipated threats or hazards to the security or integrity of the SVCE Data; (c) protect against unauthorized disclosure, access to, or use of the SVCE Data; (d) ensure the proper disposal of SVCE Data; and, (e) ensure that all employees, agents, and subcontractors of Service Provider, if any, comply with all of the foregoing. In no case shall the safeguards of Service Provider's data privacy and information security program used to protect SVCE Data be less stringent than the safeguards used by Service Provider for its own data.

If the Services include handling credit card information, then the Service Provider shall comply at all times with all applicable Payment Card Industry Data Security Standards (PCI-DSS). Service Provider agrees and warrants that it is responsible for the security of "cardholder data" that Service Provider possesses, stores, processes or transmits on behalf of the SVCE, and for any impact on the security of SVCE's cardholder data environment adversely affected by any failure of Company to maintain compliance with provisions of the PCI-DSS applicable to the Services.

14.2 Audit by Service Provider. No less than annually, Service Provider shall conduct a comprehensive independent third-party audit of its data privacy and information security program and provide such audit findings to SVCE. The required audit shall be a SOC 2 Type II (or successor standard) compliant audit, and Service Provider shall provide the audit findings in the form of an SOC 2 Type II report.

14.3 Right of Audit by SVCE. Without limiting any other audit rights of SVCE, SVCE shall have the right to review Service Provider's data privacy and information security program prior to the commencement of Services and from time to time during the term of this Agreement. During the

providing of the Services, on an ongoing basis from time to time and without notice, SVCE, at its own expense, shall be entitled to perform, or to have performed, an on-site audit of Service Provider's data privacy and information security program. In lieu of an on-site audit, upon request by SVCE, Service Provider agrees to complete, within forty-five (45 days) of receipt, an audit questionnaire provided by SVCE regarding Service Provider's data privacy and information security program.

14.4 Audit Findings. Service Provider shall implement any required safeguards as identified by SVCE or by any audit of Service Provider's data privacy and information security program.

14.5 Pattern of Violations. It shall be considered a material breach of this Agreement if Service Provider engages in a pattern or practice of accessing, storing, using, or disclosing the Confidential Information in violation of the contractual obligations described herein. Service Provider understands that if SVCE finds that Service Provider is engaged in a pattern or practice of accessing, storing, using, or disclosing Confidential Information in violation of this Agreement SVCE shall promptly cease all disclosures of Confidential Information to Service Provider. Service Provider further understands that if SVCE receives a customer complaint about Service Provider's misuse of data or other violation of the Disclosure Provisions, SVCE shall promptly cease disclosing that customer's information to Service Provider and shall notify the California Public Utilities Commission ("CPUC") of the complaint.

14.6 CPUC Compliance. Service Provider shall comply with the consumer protections concerning subsequent disclosure and use set forth in Attachment B to California Public Utilities Commission (CPUC) Decision No. 12-08-045.

14.7 Injunction, Specific Performance or Such Other Relief. Service Provider acknowledges that disclosure or misappropriation of any Confidential Information could cause irreparable harm to SVCE and/or SVCE Customers, the amount of which may be difficult to assess. Accordingly, Service Provider hereby confirms that the SVCE shall be entitled to apply to a court of competent jurisdiction or the CPUC for an injunction, specific performance or such other relief (without posting bond) as may be appropriate in the event of improper disclosure or misuse of its Confidential Information by Service Provider or its employees or representatives. Such right shall, however, be construed to be in addition to any other remedies available to the SVCE, in law or equity.

14.8 SVCE's Right to Termination for Deficiencies. SVCE reserves the right, at its sole election, to immediately terminate this Agreement or an applicable Order without limitation and without liability if SVCE reasonably determines that Service Provider fails or has failed to meet its obligations under this Section.

15. Proprietary Rights.

15.1 Pre-existing Materials. SVCE acknowledges that, in the course of performing the Services, Service Provider may use software and related processes, instructions, methods, and techniques that have been previously developed by Service Provider (collectively, the "Pre-existing Materials," which shall include the Services) and that the same shall remain the sole and exclusive property of Service Provider.

15.2 No License. Except as expressly set forth herein, no license is granted by either party to the other with respect to the Confidential Information or Pre-existing Materials. Nothing in this Agreement shall be construed to grant to either party any ownership or other interest, in the Confidential Information or Pre-existing Materials, except as may be provided under a license specifically applicable to such Confidential Information or Pre-existing Materials.

15.3 The provisions of this Section shall survive the termination of this Agreement.

16. Indemnification; Limitation of Liability; Insurance.

16.1 General Indemnification. Service Provider agrees to indemnify, defend, and hold harmless SVCE and its elected officials, officers, directors, agents, attorneys and employees (each, an "Indemnitee") from and against any and all liabilities, damages, losses, expenses, claims, demands, suits, fines, or judgments (each, a "Claim," and collectively, the "Claims"), including reasonable attorneys' fees, costs, and expenses incidental thereto, which may be suffered by, incurred by, accrued against, charged to, or recoverable from any Indemnitee, by reason of any third party Claim arising out of or relating to any act, error or omission, negligence, or misconduct of Service Provider, its officers, directors, agents, employees, and subcontractors, during the performance of this Agreement, including, without limitation, Claims arising out of or relating to: (a) bodily injury (including death) or damage to tangible personal or real property; (b) any payment required to be paid to subcontractors, if any, of Service Provider; (c) any material misrepresentation or breach of warranty of any representation or warranty set forth in this Agreement; (d) any destruction, or unauthorized access, use, or theft of SVCE Data (collectively, "cyber theft") or, (e) any material breach of any covenant set forth in this Agreement; provided, however, that the foregoing indemnity shall not apply to the extent that the applicable Claim resulted from the sole negligence or willful misconduct of an Indemnitee.

16.2 Proprietary Rights Indemnification. Service Provider agrees to indemnify, defend, and hold harmless Indemnitees from and against any and all Claims, including reasonable attorneys' fees, costs, and expenses incidental thereto, which may be suffered by, incurred by, accrued against, charged to, or recoverable from any Indemnitee, by reason of any third party Claim arising out of or relating to the Services allegedly or actually infringing or misappropriating any United States or foreign patent, copyright, trade secret, trademark, or other proprietary right. In the event that Service Provider is enjoined from providing the Services and such injunction is not dissolved within thirty (30) calendar days, or in the event that SVCE is adjudged, in any final order of a court of competent jurisdiction from which no appeal is taken, to have infringed upon or misappropriated any patent, copyright, trade secret, trademark, or other proprietary right in the access or use of the Services, then Service Provider shall, at its expense: (a) obtain for SVCE the right to continue using such Services; (b) replace or modify such Services so that they do not infringe upon or misappropriate such proprietary right and is free to be used by SVCE; or, (c) in the event that Service Provider is unable or determines, in its reasonable judgment, that it is commercially unreasonable to do either of the aforementioned, Service Provider shall reimburse to SVCE any prepaid fees and the full cost associated with any Transition Services.

16.3 Indemnification Procedures. Promptly after receipt by SVCE of a threat, notice, or filing of any Claim against an Indemnitee, SVCE shall give notice thereof to Service Provider, provided that failure to give or delay in giving such notice shall not relieve Service Provider of any liability it may have to the Indemnitee except to the extent that Service Provider demonstrates that the defense of the Claim is prejudiced thereby. Service Provider shall have sole control of the defense and of all negotiations for settlement of a Claim and SVCE shall not independently defend or respond to a Claim; provided, however, that: (a) SVCE may defend or respond to a Claim, at Service Provider's expense, if SVCE's counsel determines, in its sole discretion, that such defense or response is necessary to preclude a default judgment from being entered against an Indemnitee; and, (b) SVCE shall have the right, at its own expense, to monitor Service Provider's defense of a Claim. At Service Provider's request, SVCE shall reasonably cooperate with Service Provider in defending against or settling a Claim; provided, however, that Service Provider shall reimburse SVCE for all reasonable out-of-pocket costs incurred by SVCE (including, without limitation, reasonable attorneys' fees and expenses) in providing such cooperation.

16.4 Third-Party Beneficiaries. Nothing, express or implied, in this Agreement is intended to benefit, or to create or be construed to create any rights of enforcement in any persons or entities who are neither signatories to this Agreement nor Indemnitees.

16.5 Insurance. Unless otherwise approved in writing by SVCE's risk manager, Service Provider shall, at its own expense, procure and maintain in full force and effect during the term of this Agreement, policies of insurance, of the types and in the minimum amounts as follows, with responsible insurance carriers duly admitted and qualified in California covering the operations of Service Provider, pursuant to this Agreement: commercial general liability ($1,000,000 per occurrence, $2,000,000 aggregate); excess liability ($2,000,000 per occurrence, $2,000,000 aggregate); workers' compensation (statutory limits) and employers' liability ($500,000 per accident); cyber liability ($5,000,000 per occurrence) providing protection against claims and liabilities arising from: (i) errors and omissions in connection with maintaining security of SVCE Data; (ii) data breach including theft, destruction, and/or unauthorized use of SVCE Data; (iii) identity theft; and (iv) violation of privacy rights due to a breach of SVCE Data; and professional liability ($1,000,000 per occurrence, $1,000,000 aggregate). Any of the foregoing policy limits shall be subject to modification by the SVCE's risk manager upon thirty (30) days prior, written notice to Service Provider, and at any time prior to commencement of the Services.

The Indemnitees shall be named as additional insureds in the commercial general, cyber, and excess liability policies which shall contain standard cross liability clauses. Service Provider shall cause the liability it assumed under this Agreement to be specifically insured under the contractual liability section of the liability insurance policies. The liability policies shall be primary without right of contribution from any Indemnitee, and Service Provider waives all rights of subrogation with respect to said policies. Such policies shall require that SVCE be given no less than thirty (30) calendar days prior written notice of any cancellation thereof or material change therein. SVCE shall have the right to request an adjustment of the limits of liability for commercial general, cyber, and excess liability, and/or professional liability insurance as Service Provider's exposure to SVCE increases. Service Provider shall provide SVCE with certificates of insurance and original endorsements, evidencing all of the above coverage, including all special requirements specifically noted above, and shall provide SVCE with certificates of insurance evidencing renewal or substitution of such insurance thirty (30) calendar days prior to the effective date of such renewal or substitution.

17. General.

17.1 Relationship between SVCE and Service Provider. Service Provider represents and warrants that it is an independent contractor with no authority to contract for SVCE or in any way to bind or to commit SVCE to any agreement of any kind or to assume any liabilities of any nature in the name of or on behalf of SVCE. Under no circumstances shall Service Provider, or any of its staff, if any, hold itself out as or be considered an agent employee, joint venture, or partner of SVCE. In recognition of Service Provider's status as an independent contractor, SVCE shall carry no Workers' Compensation insurance or any health or accident insurance to cover Service Provider or Service Provider's agents or staff, if any. SVCE shall not pay any contributions to Social Security, unemployment insurance, federal or state withholding taxes, any other applicable taxes whether federal, state, or local, nor provide any other contributions or benefits which might be expected in an employer-employee relationship. Neither Service Provider nor its staff, if any, shall be eligible for, participate in, or accrue any direct or indirect benefit under any other compensation, benefit, or pension plan of SVCE.

17.2 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of California and the federal laws of the United States of America. Service Provider hereby consents and submits to the jurisdiction and forum of the state and federal courts in the County of Santa Clara, State of California, in all questions and controversies arising out of this Agreement.

17.3 Attorneys' Fees and Costs. In any arbitration, litigation, or other proceeding, informal or formal, by which one party either seeks to enforce this Agreement or seeks a declaration of any rights or obligations under this Agreement, each party shall pay its own costs and expenses, including but not limited to, reasonable attorneys' fees.

17.4 Compliance with Laws; SVCE Policies and Procedures. Service Provider agrees to comply with all applicable federal, state, and local laws, executive orders and regulations issued, where applicable. Service Provider shall comply with SVCE policies and procedures where the same are posted, conveyed, or otherwise made available to Service Provider.

17.5 Cooperation. Where agreement, approval, acceptance, consent or similar action by either party hereto is required by any provision of this Agreement, such action shall not be unreasonably delayed or withheld. Each party will cooperate with the other by, among other things, making available, as reasonably requested by the other, management decisions, information, approvals, and acceptances in order that each party may properly accomplish its obligations and responsibilities hereunder. Service Provider will cooperate with any SVCE supplier performing services, and all parties supplying hardware, software, communication services, and other services and products to SVCE, including, without limitation, the Successor Service Provider. Service Provider agrees to cooperate with such suppliers, and shall not commit or permit any act which may interfere with the performance of services by any such supplier.

17.6 Force Majeure; Excused Performance. Neither party shall be liable for delays or any failure to perform the Services or this Agreement due to causes beyond its reasonable control. Such delays include, but are not limited to, fire, explosion, flood or other natural catastrophe, governmental legislation, acts, orders, or regulation, strikes or labor difficulties, to the extent not occasioned by the fault or negligence of the delayed party. Any such excuse for delay shall last only as long as the event remains beyond the reasonable control of the delayed party. However, the delayed party shall use its best efforts to minimize the delays caused by any such event beyond its reasonable control. Where Service Provider fails to use its best efforts to minimize such delays, the delays shall be included in the determination of Service Level achievement. The delayed party must notify the other party promptly upon the occurrence of any such event, or performance by the delayed party will not be considered excused pursuant to this Section, and inform the other party of its plans to resume performance. A force majeure event does not excuse (a) SVCE from its payment obligations or (b) Service Provider from providing Services and fulfilling its responsibilities relating to the requirements of backup and recovery of SVCE Data. In no event shall any of the following constitute a force majeure event: (a) failure, inadequate performance, or unavailability of Service Provider's subcontractors, if any; or, (b) configuration changes, other changes, Viruses, or other errors or omissions introduced, or permitted to be introduced, by Service Provider that result in an outage or inability for SVCE to access or use the Services. Within thirty (30) calendar days following the Effective Date and on an annual basis thereafter until the termination of this Agreement, Service Provider shall provide its then-current business continuity plan ("Business Continuity Plan") to SVCE upon SVCE's request. The Business Continuity Plan shall include: (a) Services and SVCE Data backup and recovery procedures, including procedures and resources for disaster recovery; (b) fail-over procedures; and, (c) how Service Provider will interact with its business continuity suppliers, if any. Service Provider shall test its Business Continuity Plan on an annual basis until the termination of this Agreement and shall provide the test results to SVCE upon SVCE's request.

17.7 Advertising and Publicity. Service Provider shall not refer to SVCE directly or indirectly in any advertisement, news release, or publication, or use any SVCE logo, seal or mark, without prior written approval from SVCE.

17.8 No Waiver. The failure of either party at any time to require performance by the other party of any provision of this Agreement shall in no way affect that party's right to enforce such provisions, nor shall the waiver by either party of any breach of any provision of this Agreement be taken or held to be a waiver of any further breach of the same provision.

17.9 Notices. Any notice given pursuant to this Agreement shall be in writing and shall be given by personal service or by United States certified mail, return receipt requested, postage prepaid to the addresses appearing at the end of this Agreement, or as changed through written notice to the other party. Notice given by personal service shall be deemed effective on the date it is delivered to the

addressee, and notice mailed shall be deemed effective on the third day following its placement in the mail addressed to the addressee.

17.10 Assignment of Agreement. This Agreement and the obligations of Service Provider hereunder are personal to Service Provider. Neither Service Provider nor any successor, receiver, or assignee of Service Provider shall directly or indirectly assign this Agreement or the rights or duties created by this Agreement, whether such assignment is effected in connection with a sale of Service Provider's assets or stock or through merger, an insolvency proceeding or otherwise, without the prior written consent of SVCE. In the case of an assignment by Service Provider, Service Provider represents and warrants that it has all requisite rights and power to transfer any agreements or other rights with third-parties whose software is incorporated into the Services or who are necessary for the performance and use of the Services. SVCE, at SVCE's sole election, may assign any and all of its rights and obligations under this Agreement to any company that succeeds to substantially all of SVCE's business.

17.11 Time is of the Essence. Time is of the essence in every provision of this Agreement in which time for performance is a factor.

17.12 Counterparts; Facsimile/PDF/Electronic Signature. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same Agreement. The parties agree that a facsimile, PDF or electronic signature may substitute for and have the same legal effect as the original signature.

17.13 Entire Agreement. This Agreement and any and all attached exhibits, each of which is incorporated by reference herein, constitute the entire agreement between the parties and supersede any and all previous representations, understandings, or agreements between SVCE and Service Provider as to the subject matter hereof. No representation or promise not expressly set forth herein shall be binding. The provisions of this Agreement shall govern over any inconsistent or conflicting provisions contained in any exhibit hereto. This Agreement may only be amended by an instrument in writing signed by the parties. This Agreement shall be construed without regard to the party that drafted it. Any ambiguity shall not be interpreted against either party and shall, instead, be resolved in accordance with other applicable rules concerning the interpretation of contracts.

17.14 Cumulative Remedies. All rights and remedies of SVCE herein shall be in addition to all other rights and remedies available at law or in equity, including, without limitation, specific performance against Service Provider for the enforcement of this Agreement, and temporary and permanent injunctive relief.

17.15 No Recourse against Constituent Members of Authority. SVCE is organized as a Joint Powers SVCE in accordance with the Joint Powers Act of the State of California (Government Code Section 6500 et seq.) pursuant to a Joint Powers Agreement dated March 31, 2016, and is a public entity separate from its constituent members. SVCE shall solely be responsible for all debts, obligations and liabilities accruing and arising out of this Agreement. Service Provider shall have no rights and shall not make any claims, take any actions or assert any remedies against any of SVCE's constituent members in connection with this Agreement.

17.16 Non-Discrimination. In the performance of this Agreement, Service Provider, and any subcontractor of Service Provider shall not discriminate against any employee, subcontractor or applicant for employment because of race, color, religious creed, sex, gender, gender identity, gender expression, marital status, national origin, ancestry, age, physical disability, mental disability, medical condition, genetic information, sexual orientation, military or veteran status, or other basis prohibited by law, except as provided in Government Code section 12940. Service Provider shall have responsibility for compliance with this Section.

17.17 Conflict Of Interest. Service Provider warrants that it, its officers, employees, associates and subcontractors, presently have no interest, and will not acquire any interest, direct or indirect,

financial or otherwise, that would conflict in any way with the performance of this Agreement, and that it, its officers, employees, associates and subcontractors, will not employ any person having such an interest. Service Provider and its officers, employees, associates and subcontractors, if any, shall comply with all conflict of interest statutes of the State of California applicable to Service Provider's services under this Agreement, including the Political Reform Act (Gov. Code § 81000, et seq.) and Government Code Section 1090. During the term of this Agreement, Service Provider may perform similar services for other clients, but Service Provider and its officers, employees, associates and subcontractors shall not, without the SVCE Representative's prior written approval, perform work for another person or entity for whom Service Provider is not currently performing work that would require Service Provider or one of its officers, employees, associates or subcontractors to abstain from a decision under this Agreement pursuant to a conflict of interest statute. Service Provider shall incorporate a clause substantially similar to this Section into any subcontract that Service Provider executes in connection with the performance of this Agreement. Service Provider understands that it may be required to fill out a conflict of interest form if the services provided under this Agreement require Service Provider to make certain governmental decisions or serve in a staff SVCE, as defined in Title 2, Division 6, Section 18700 of the California Code of Regulations.

17.18 Severability. If any provision in this Agreement is held by a court of competent jurisdiction to be illegal, invalid, void, or unenforceable, the remaining provisions will nevertheless continue in full force without being impaired or invalidated in any way.

17.19 Final Payment Acceptance Constitutes Release. The acceptance by Service Provider of the final payment made under this Agreement shall operate as and be a release of SVCE from all claims and liabilities for compensation to Service Provider for anything done, furnished or relating to Service Provider's work or services. Acceptance of payment shall be any negotiation of SVCE's check or the failure to make a written extra compensation claim within ten calendar days of the receipt of that check. However, approval or payment by SVCE shall not constitute, nor be deemed, a release of the responsibility and liability of Service Provider, its employees, subcontractors and agents for the accuracy and competency of the information provided and/or work performed; nor shall such approval or payment be deemed to be an assumption of such responsibility or liability by SVCE for any defect or error in the work prepared by Service Provider, its employees, subcontractors and agents.

17.20 SVCE's Rights to Employ Other Consultants. SVCE reserves the right to employ other consultants in connection with the subject matter of the Services.

17.21 Inserted Provisions. Each provision and clause required by law to be inserted into the Agreement shall be deemed to be enacted herein, and the Agreement shall be read and enforced as though each were included herein. If through mistake or otherwise, any such provision is not inserted or is not correctly inserted, the Agreement shall be amended to make such insertion on application by either party.

17.22 Captions and Terms. The captions in this Agreement are for convenience only, are not a part of the Agreement and in no way affect, limit or amplify the terms or provisions of this Agreement.

17.23 Exhibits. The Exhibits referenced in this Agreement are attached hereto and incorporated herein by this reference as though set forth in full in the Agreement. If any inconsistency exists or arises between a provision of this Agreement and a provision of any exhibit, or between a provision of this Agreement and a provision of Service Provider's proposal, the provisions of this Agreement shall control.

17.24 Successors and Assigns. The terms and conditions of this Agreement shall be binding on the successors and assigns of the parties to this Agreement.

Executed on the dates set forth below by the undersigned authorized representative of SVCE and Service Provider to be effective as of the Effective Date.

RECOMMENDED FOR APPROVAL

_____
Enter Your Name, Enter Your Title

RECOMMENDED FOR APPROVAL

_____
Amrit Singh, Chief Financial Officer/Director of Administrative Services

SILICON VALLEY CLEAN ENERGY (SVCE)
By:
Name:
Title:
Date:

Address for Notice:

Aiqueous, LLC

By: _____
Name: Jon Ezrine
Title: CEO
Date:

Address for Notice:

EXHIBIT A

STATEMENT OF SERVICES, SUPPORT, AND SERVICE LEVEL AGREEMENT ("SLA")

This Exhibit A - Statement of Services and Service Level Agreement shall be incorporated in and made a part of the Agreement. If there is a conflict between the provisions contained in the Agreement and those contained in this Exhibit A, the provisions contained in the Agreement shall prevail.

Services Description. The AIQ/eO service means the application referred to as energyOrbit which has been developed by crmOrbit and is available to operate in conjunction with the salesforce.com© (SFDC) CRM and/or Salesforce Platform Service as a stand-alone product. Both editions are hosted by SFDC. The energyOrbit service also includes any energyOrbit service documentation and any other updates, or upgrades to such energyOrbit Service which may be provided by crmOrbit from time to time in connection with this service.

Start Date and End Date. The term of the engagement between SVCE and Service Provider ("AIQ/eO") for on-going support services shall be five years as defined in the Master Agreement between Silicon Valley Clean Energy and Aiqueous, LLC. Support services will begin following successful go-live and stabilization as defined in the project plan within the statement of work for portfolio management support – "Subject Area B".

Authorized Users and Services Fees. The number of authorized users, pricing model, billing frequency, and rates are defined in the initial and any subsequent Order Forms prepared by Service Provider and approved by SVCE.

Storage Threshold(s). Data and file storage are determined based on Salesforce edition and number of user licenses. Additional data and file storage can be added, as necessary, based on the rates set forth in the above-mentioned Order Form. Please review the following Salesforce article for a detailed overview https://help.salesforce.com/s/articleView?id=sf.overview_storage.htm&type=5

Storage Fees. See above Storage Threshold section.

Technical Support Description. Service Provider will provide to SVCE telephone and email support ("Technical Support") as defined in the Service Availability – Initial Contact and Response section below. Technical Support will include any research and resolution activity performed by Service Provider.

Service Availability – Initial Contact and Response

Business hours specific to the services covered in this SLA are as follows:

- Support Community: Monitored 7:00 A.M. to 6:00 P.M. Monday – Friday, Pacific Time Zone. Augmented Support: Monday-Thursday, 7 am-6 pm and 7:30 pm-midnight Pacific time & Friday, 7 am-6 pm Pacific time.
    - Service Requests received outside of office hours will be collected; no action, however, can be guaranteed until the next business day.
- Telephone support: 7:00 A.M. to 6:00 P.M. Monday – Friday, Pacific Time Zone
    - Calls received out of office hours will be forwarded to a mobile phone and best efforts will be made to answer / action the call; no action, however, can be guaranteed until the next business day.
- Email support: Monitored 7:00 A.M. to 6:00 P.M. Monday – Friday, Pacific Time Zone. Augmented Support: Monday-Thursday, 7 am-6 pm and 7:30 pm-midnight Pacific time & Friday, 7 am-6 pm Pacific time.
    - Emails received outside of office hours will be collected; no action, however, can be guaranteed until the next business day.
- Service Provider shall not offer support on the following days; inquiries received during these holidays will be addressed on the next business day.

Day or Date	Official Name

January 1	New Year's Day
Third Monday in February	Presidents' Day
Last Monday in May	Memorial Day
July 4	Independence Day
First Monday in September	Labor Day
Fourth Thursday in November	Thanksgiving Day
Friday after Thanksgiving	Day after Thanksgiving
December 25	Christmas

a) Request for Technical Support. Authorized Users will make Technical Support requests by calling or emailing Service Provider's Technical Support staff or by submitting a request via Service Provider's customer service web portal at https://energyorbit.force.com/support/. The Technical Support staff shall assign to the request the Problem Severity Level mutually decided by SVCE and Service Provider. Service request procedures are defined below.

i) SVCE's support team receives the request and, if appropriate, enters it into SVCE's current incident tracking system, according to current procedures.
ii) SVCE's support team relays the request, as applicable, to Service Provider using the appropriate service request mechanism based on issue severity. Note that the standard request mechanism is via the Service Provider's Customer Support Community, listed above.
iii) In the case of a disagreement regarding the issue classification or prioritization (i.e. severity), an 'off-cycle', escalated meeting shall be conducted to finalize and agree, in good faith, on the final issue severity.
iv) Service Provider handles the request according to the appropriate time frame, based on issue severity described above.
v) Issue continues to be jointly tracked through closure by SVCE's support team and Service Provider's support team, using SVCE's and Service Provider's support community.
vi) SVCE will set up (optional) Weekly or Semi-Monthly vendor meetings to review current incidents and monitor if service request is handled timely and accurately.

Service Tiers

Post implementation support is defined in the following table.

Tier	Responsible Party	Definition	Typical Tier Questions
1	SVCE	Tier 1 Support provides assistance with simple end-use questions (Internal or 3rd Party) for system navigation and basic / standard functionality.	• Login questions • Screen navigation • Basic report creation • General questions energyOrbit / Platform Provider end-user functionality (Global Search, Tab Setup, etc.) • Changes to page layouts, to the extent they can be controlled via the native Platform Provider's 'drag and drop' functionality.
2	Service Provider	Tier 2 Support provides answers to questions about eO / Platform Provider semi-complex functionality: security model, user profiles, email templates, audit data, questions, etc.	• First level triage - data / system trouble shooting • Advanced Reporting / Query • eO Functionality or Administrative Task • Flow or Validation Rule setup and configuration

		• Support provides answers and troubleshooting (i.e. associated with SVCE's customization objects) of complex functionality and data integrity issues • Questions about "Managed Package" or other non-SVCE customizations which are not associated with Company's core objects / extensions are routed to Tier 3 via one of the contact mechanisms listed in this agreement • Important Note: Service Provider will facilitate support for standard Platform Provider functionality as needed	• Changes to eO generated Page layouts to the extent not covered by Tier 1 • Data Integrity issues at screen level • Company Data import questions • General understanding of Contractor objects and relationships • Functionality around Company -specific customization objects / extensions • Data integrity issues • Scheduled and Batch imports / export issues • Metadata related questions • Defects associated with Platform Provider platform and customizations (i.e. project custom fields, validation rules, flows, extensions, etc.) • All Non-"Managed Package" code issues. (for code created by service provider) • Resolution of Tier 1 Issue Log / Defects • Investigation of security related issues
3	Service Provider	Tier 3 Support answers questions about "Managed Package" or other non-Company customizations which are not associated with Company's core objects/ extensions • Support provides technical assistance for areas such as new releases and defects in code or configuration that was implemented as part of in scope functionality • Important Note: Service Provider will facilitate support for standard Platform Provider functionality as needed.	• Advanced technical questions about the Managed Package • Data integrity questions about exported data sets implemented by the Contractor • Questions about system changes that require configuration of the "Managed Package" objects / flows. • Examples of support questions for the "Managed Package" include: • How does energyOrbit sort measure on the selection page by default? • Why aren't my incentives being • capped correctly? • How do I configure multi-phase • project payments? • What is the purpose of the • "Installation Summary" records? • Questions about Managed Package defects or defects in 'unmanaged' code or configuration that were implemented as part of 'in scope' functionality • Support and maintenance of code that is common to all customers (shared functionality)

Inquiry Settlement (Service Defect) Request and Response

The following definitions will be used for this agreement.

- CRITICAL: Defect Severity Level 1 (S1) – Defined as application is not available to all or substantial number of users and production processing is not available for any business purposes. (i.e. software does not operate. Excludes Internet connectivity issues).
- HIGH: Defect Severity Level 2 (S2) – Defined as part of production application is not working and there is no workaround; major functionality is inoperable or unusable for a small number of users.

Also defined as software does not meet in-scope business requirements without a manual work-around or a specific in-scope module of the software is not usable without a manual work-around. With respect to Data Integrity issues, High priority issues are where the data in the energyOrbit portal for one or more customers is incorrect or unavailable for users and no system workaround is available.

- MEDIUM: Defect Severity Level 3 (S3) – Defined as part of the application is not working for in-scope software features as intended, but a reasonable, jointly agreed-upon work-around exists leaving the essential functions intact and operable. With respect to Data Integrity issues, Medium priority issues are where some data (various customer accounts) in the energyOrbit portal is incorrect or unavailable for various users but a system workaround is available.
- LOW: Defect Severity Level 4 (S4) – Defined as minor cosmetic problems within in-scope features of the software that do not impact the established business processes. General support (G) – General end user questions about in-scope functionality falling under the 'General Tier 3' support category (defined above).
- Training requests (T) – Requests for training on in-scope features falling under the 'General Tier 3' support category (defined above).

SVCE inquiries to the support contact will be settled in a manner to achieve the Service Level objectives set forth in this SLA. Service Provider will attempt to resolve the inquiries during initial contact with SVCE. In more complicated cases, the inquiry may be settled by assigning a task to a support specialist. Service Provider will adhere to the following defect definitions; response and resolution (fix) timeframes. The defect designations will be mutually decided by SVCE and Service Provider. SVCE will assign the severity levels review with the Service Provider and prioritize each inquiry accordingly. SVCE will provide "best effort" to provide the necessary information on the case to allow initial assessment and subsequent analysis/resolution.

These SLAs apply to AIQ/eO Tier 2 and Tier 3 support, but do not apply to Inquiries tied to performance of the underlying SFDC, Formstack, DocuSign or other third party software systems used by SVCE.

In isolated cases, there may be an occasion where the identified resolution will require a period of time longer than the resolution goal. In those cases, and upon mutual agreement, the resolution goal on that particular case will be revised to reflect the agreed upon goal, and that goal will be used to measure performance. If no mutual agreement is reached, then the original terms and timeframes below shall remain in effect.

Table 1 – Response Time Targets

Request Type	Response Time	Initial Assessment	Update Frequency	Maximum Resolution Time	Notes
S1 Critical	During Business hours: 30 minutes Outside business hours: 2 hours	2 business hours	2 business hours	16 business hours Dor mutually agreed upon target	Defined as application is not available to all or substantial number of users and production processing is not available for any business purposes. (i.e. software does not operate).
S2 High	2 business hours	4 business hours	4 business hours	24 business hours (or mutually agreed upon target)	Defined as part of production application is not working and there is no workaround; major functionality is inoperable or unusable for a small number of users. Also defined as software does not meet in-

					scope business requirements without a manual work-around or a specific in-scope module of the software is not usable without a manual work-around. With respect to Data Integrity issues, High priority issues are where the data in the energyOrbit system is incorrect or unavailable for all users and no system workaround is available.
S3 Medium	8 business hours	24 business hours	Weekly	40 business hours	Defined as part of the application is not working for in-scope software features as intended, but a reasonable, jointly agreed-upon work-around exist leaving the essential functions intact and operable; non-major incident. With respect to Data Integrity issues, Medium priority issues are where some data (various customer accounts) in the energyOrbit portal is incorrect or unavailable for various users but a system workaround is available.
S4 Low	N/A	24 business hours	Weekly	80 business hours	Defined as minor cosmetic problems within in-scope features of the software that do not impact the established business processes.
G	N/A	8 business hours	Weekly	40 business hours	General end user questions about in-scope functionality falling under the 'General Tier 4' support category. General topics such as new feature estimates and general vendor application questions.
T	N/A	24 business hours	Weekly	2 business weeks (a) 4 business weeks (b)	(a) Training topics requiring less than 2 hours of preparation. (b) Training topics requiring more than 2 hours of preparation.

Performance goals will be established by severity level. Monthly, the performance for each level will be calculated using the statistics gathered by the case management system.

A grace period of 90 days will be established, during which the case management system will gather the necessary statistics to determine the current level of performance. At the end of that period, the goals will be established.

Service Credits If Service Provider fails to achieve the Maximum Resolution Time target for either a S1 or S2 request type as detailed in **Table 1** above, then Service Provider will issue to SVCE a "Service Credit" for each hour by which Service Provider missed such target subject to the following conditions.

1. Service Credits will be issued on a case-by-case basis for either a S1 or S2 request type, but the total number issued in each case will be capped at: (i) 16 hours for a S1 request type & (ii) 24 hours for a S2 request type.
2. SVCE may exchange earned Service Credits for the delivery by Service Provider of support services or professional services, but Service Credits may not be exchanged for software (SaaS) subscription fees. The value of each such Service Credit hour will equal one hour of such support services or professional services.
3. Any earned, but unused Service Credit will expire and be forfeited at the end of the annual term of this Agreement following the annual term in which such Service Credit was earned, provided however that SVCE shall be entitled to use such Service Credits up to and including one year following the expiration of the term of this Agreement. (By means of illustration, if an hour Service Credit is earned in the 3rd month of Year 1 of this Agreement, then such one hour Service Credit will expire at the end of the 12th month of Year 2 of this Agreement.)
4. Service Provider will not issue any monetary sum (or refund) for unexpired and unused Service Credits.

Service Level Agreement Reporting

Service Provider agrees to report on Service Level Agreement metrics to SVCE at least once every ninety days.

Support Limits

Support requests made to the Service Provider are subject to a monthly limitation as follows.

- Support incidents included on a monthly basis shall be referred to as 'standard' support incidents
- Prior to system go-live date, there is no monthly limitation on standard support incidents.
- From system go-live date and thereafter, up to 10 standard Tier 2 or Tier 3 support incidents (as defined above) per month are included as defined below:
    - Hours associated with support requests that exceed the monthly allowance will be billed to the customer using standard billing rates of the Service Provider.
- The following exclusions from the above limits apply:
    - S1 and S2 level energyOrbit managed package defects are NOT subject to the above limits at any time.
- Service Provider shall provide monthly summary reports listing used support incidents for that given month
- Unused standard support incidents shall not be carried over between months (i.e. no "rollover" of unused standard support).
- When both standard and added support are available, the standard support shall be applied first, with added support hours going into effect only when standard monthly support has been exhausted. (The intent is to allow SVCE to preserve added support for when it is most needed.)
- When both standard and added support are available, and standard support for the month has been exhausted, SVCE may elect to postpone handling of S3, S4, G, and T requests until the following month, rather than applying added support. (The intent is to allow SVCE maximum flexibility in applying added support.) In such cases:
- SVCE must notify Service Provider of the intent to postpone the resolution.
- The response time frames specified above shall not apply until the first work day of the following month.

System Responsiveness

The system response time shall allow for efficient user interaction with the system. A set of desirable 'baseline' benchmarks MAY be established by SVCE over the period of 60 days following the initial release. Such benchmarks shall be discussed in good faith and agreed-upon jointly by SVCE and the Service Provider and, once finalized, published as an addendum to this agreement. System features whose performance is later found by SVCE not in compliance with the published benchmarks shall be tracked as standard support incidents, with the appropriate severity and in accordance with agreed-upon incident response/resolution times. Some common examples are listed below:

- High Latency: This occurs when there is a delay between user actions and system responses, leading to slow system performance and decreased productivity.
- Slow Page Load Times: This occurs when pages take a long time to load, causing delays for users and leading to frustration and decreased productivity.

Either SVCE or the Service Provider may request a subsequent review of the established benchmarks and such review shall be jointly conducted in good faith. Any changes resulting from such a review shall be formally captured and published as an addendum to this agreement and shall supersede any previously published benchmarks.

Both SVCE and the Service Provider acknowledge that not all aspects of system responsiveness will be under the direct control of the Service Provider. Some examples of this include (1) network latencies between SVCE's and the Force.com (Salesforce) networks; (2) underlying (Force.com) platform issues; or (3) custom code developed either by SVCE or SVCE's agents. In such instances, the Service Provider shall not be held responsible for resolution of any such issues.

Implementation of energyOrbit software upgrades

Service Provider will provide SVCE notice as far in advance as reasonably possible for planning and coordination efforts prior to availability of any Upgrades that impact the SVCE's energyOrbit platform. For all other energyOrbit upgrades, Service Provider will provide SVCE periodic updates on planned upgrades, with reasonable details (i.e. Release Notes), of changes being made to the energyOrbit application at least 2 weeks prior to the availability of the change. At no time shall Service Provider implement code into the SVCE's production environment without receiving SVCE’s prior approval and without allowing SVCE sufficient time to perform testing in the SVCE non-production environment. All releases and upgrades to the Salesforce Platform can be monitored in the SVCE environment Release Update page, available through Setup as described here https://help.salesforce.com/s/articleView?id=sf.release_updates_manage.htm&type=5

Service Provider will provide SVCE notice as far in advance as reasonably possible for planning and coordination efforts prior to availability of any Upgrades that impact the integration between SVCE, Salesforce and energyOrbit platforms. For all other energyOrbit upgrades, Service Provider will provide SVCE periodic updates on planned upgrades, with reasonable details (i.e. Release Notes), of changes being made to the energyOrbit application at least 5 business days of availability of the change.

Platform Availability for energyOrbit

Platform availability for the Production Environment Service Level Agreement resides under the Master Service Agreement for Salesforce.com, Inc. (SFDC).

EXHIBIT B
SFDC Terms and Conditions

"AppExchange" means the online directory of on-demand applications that work with the Service, located at http://www.appexchange.com or at any successor websites.

"Reseller" means crmOrbit, Inc.

"**Reseller Application** means energyOrbit

"Platform" means the online, Web-based platform service provided by SFDC to Reseller in connection with Reseller's provision of the Reseller Application to You.

"SFDC Service" means the online, Web-based application and platform service generally made available to the public via http://www.salesforce.com and/or other designated websites, including associated offline components but excluding AppExchange applications.

"**SFDC**" means salesforce.com.

"Users" means Your employees, representatives, consultants, contractors or agents who are authorized to use the Service subject to the terms of these SFDC Service Terms of Use as a result of a subscription to the Reseller Application having been purchased for such User, and have been supplied user identifications and passwords by You (or by Salesforce.com or Reseller at Your request).

"You" and **"Your"** means the customer entity which has contracted to purchase subscriptions to use the Reseller Application subject to the conditions of these SFDC Service Terms of Use, together with any other terms required by Reseller.

"**Your Data**" means all electronic data or information submitted by You as and to the extent it resides in the Service.

1. Use of Service.

(a) Each User subscription to the Reseller Application shall entitle one User to use the Service via the Reseller Application, subject to the terms of these SFDC Service Terms of Use, together with any other terms required by Reseller. User subscriptions cannot be shared or used by more than one User (but may be reassigned from time to time to new Users who are replacing former Users who have terminated employment with You or otherwise changed job status or function and no longer require use of the Service). For clarity, Your subscription to use the Platform hereunder does not include a subscription to use the SFDC Service. If You wish to use the SFDC Service or any of its functionalities or services, or to create or use additional custom objects beyond those which appear in the Reseller Application in the form that it has been provided to You by Your Reseller, visit www.salesforce.com to contract directly with SFDC for such services. In the event Your access to the Reseller Application provides You with access to the SFDC Service generally or access to any SFDC Service functionality within it that is in excess to the functionality described in the Reseller Application's user guide, and You have not separately subscribed under a written contract with SFDC for such access, then You agree to not access and use such functionality, and You agree that Your use of such functionality, or Your creation or use of additional custom objects in the Reseller Application beyond that which appears in the Reseller Application in the form that it has been provided to You by your Reseller, would be a material breach of this Agreement.

(b) Notwithstanding any access You may have to the Platform or the SFDC Service via the Reseller Application, Reseller is the sole provider of the Reseller Application and You are entering into a contractual relationship solely with Reseller. In the event that Reseller ceases operations or otherwise ceases or fails to provide the Reseller Application, SFDC has no obligation to provide the Reseller Application or to refund You any fees paid by You to Reseller.

(c) You (i) are responsible for all activities occurring under Your User accounts; (ii) are responsible for the content of all Your Data; (iii) shall use commercially reasonable efforts to prevent unauthorized access to, or use of, the Platform and the SFDC Service, and shall notify Reseller or Salesforce.com promptly of any such unauthorized use You become aware of; and (iv) shall comply with all

applicable local, state, federal and foreign laws and regulations in using the Platform and the SFDC Service.

(d) You shall use the Platform and the SFDC Service solely for Your internal business purposes and shall not: (i) license, sublicense, sell, resell, rent, lease, transfer, assign, distribute, time share or otherwise commercially exploit or make the Platform or the SFDC Service available to any third party, other than to Users or as otherwise contemplated by these SFDC Service Terms of Use; (ii) send spam or otherwise duplicative or unsolicited messages in violation of applicable laws; (iii) send or store infringing, obscene, threatening, libelous, or otherwise unlawful or tortious material, including material that is harmful to children or violates third party privacy rights; (iv) send or store viruses, worms, time bombs, Trojan horses and other harmful or malicious code, files, scripts, agents or programs; (v) interfere with or disrupt the integrity or performance of the Platform or the SFDC Service or the data contained therein; or (vi) attempt to gain unauthorized access to the Platform or the SFDC Service or its related systems or networks.

(e) You shall not (i) modify, copy or create derivative works based on the Platform or the SFDC Service; (ii) frame or mirror any content forming part of the Platform or the SFDC Service, other than on Your own intranets or otherwise for Your own internal business purposes; (iii) reverse engineer the Platform or the SFDC Service; or (iv) access the Platform or the SFDC Service in order to (A) build a competitive product or service, or (B) copy any ideas, features, functions or graphics of the Platform or the SFDC Service.

2. **Third-Party Providers**. Reseller and other third-party providers, some of which may be listed on pages within SFDC's website and including providers of AppExchange applications, offer products and services related to the Platform, the SFDC Service, and/or the Reseller Application, including implementation, customization and other consulting services related to customers' use of the Platform and/or the SFDC Service, and applications (both offline and online) that interoperate with the Platform, SFDC Service, and/or the Reseller Application, such as by exchanging data with the Platform, the SFDC Service, and/or the Reseller Application, or by offering additional functionality within the user interface of the Platform, the SFDC Service, and/or the Reseller Application through use of the Platform and/or SFDC Service's application programming interface. SFDC does not warrant any such third-party providers or any of their products or services, including but not limited to the Reseller Application or any other product or service of Reseller, whether or not such products or services are designated by SFDC as "certified," "validated" or otherwise. Any exchange of data or other interaction between You and a third-party provider, including but not limited to the Reseller Application, and any purchase by You of any product or service offered by such third-party provider, including but not limited to the Reseller Application, is solely between You and such third-party provider. In addition, from time to time, certain additional functionality (not defined as part of the Platform or SFDC Service) may be offered by SFDC or Reseller to You, for an additional fee, on a pass-through or OEM basis pursuant to terms specified by the licensor and agreed to by You in connection with a separate purchase by You of such additional functionality. Your use of any such additional functionality shall be governed by such terms, which shall prevail in the event of any inconsistency with the terms of these SFDC Service Terms of Use.

3. **Proprietary Rights.** Subject to the limited rights expressly granted hereunder, SFDC reserves all rights, title and interest in and to the Platform and the SFDC Service, including all related intellectual property rights. No rights are granted to You hereunder other than as expressly set forth in these SFDC Service Terms of Use. The Platform and the SFDC Service is deemed SFDC confidential information, and You will not use it or disclose it to any third party except as permitted in these SFDC Service Terms of Use.

4. **Compelled Disclosure**. If either You or SFDC is compelled by law to disclose confidential information of the other party, it shall provide the other party with prior notice of such compelled disclosure (to the extent legally permitted) and reasonable assistance, at the other party's cost, if the other party wishes to contest the disclosure.

5. **Suggestions**. You agree that SFDC shall have a royalty-free, worldwide, transferable, sublicensable, irrevocable, perpetual license to use or incorporate into any SFDC products or services any suggestions, enhancement requests, recommendations or other feedback provided by You or Your Users relating to the operation of the Platform and/or the SFDC Service.

6. **Termination.** Your use of the Platform and the SFDC Service may be immediately terminated and/or suspended upon notice due to (a) a breach of the terms of these SFDC Service Terms of Use by You or any User, (b) the termination or expiration of Reseller's agreement with SFDC pursuant to which Reseller is providing the Platform as part of the Reseller Application to You, and/or (c) a breach by Reseller of its obligations to SFDC with respect to the subscriptions it is providing to You in connection with these SFDC Service Terms of Use.

7. **Subscriptions Non-Cancelable**. Subscriptions for the Platform and the SFDC Service are non-cancelable during a subscription term, unless otherwise specified in Your agreement with Reseller.

8. **Data Storage.** The Platform and SFDC Service includes a certain cumulative amount of storage per User subscription for no additional charge. Contact Your Reseller for additional information. Additional storage may be available for purchase from the Reseller.

9. **No Warranty.** SALESFORCE.COM MAKES NO WARRANTIES OF ANY KIND, INCLUDING BUT NOT LIMITED TO WITH RESPECT TO THE PLATFORM, THE SFDC SERVICE, AND/OR THE RESELLER APPLICATION, WHETHER EXPRESS, IMPLIED, STATUTORY OR OTHERWISE. SALESFORCE.COM MAKES NO REPRESENTATION, WARRANTY, OR GUARANTY AS TO THE RELIABILITY, TIMELINESS, QUALITY, SUITABILITY, AVAILABILITY, ACCURACY OR COMPLETENESS OF THE RESELLER APPLICATION. SALESFORCE.COM DOES NOT REPRESENT OR WARRANT THAT (A) THE RESELLER APPLICATION WILL BE AVAILABLE, SECURE, TIMELY, UNINTERRUPTED OR ERROR-FREE OR OPERATE IN COMBINATION WITH THE SALESFORCE.COM SERVICE OR ANY OTHER APPLICATION, SOFTWARE, HARDWARE, SYSTEM OR DATA, (B) THE RESELLER APPLICATION, THE PLATFORM OR THE SFDC SERVICE WILL MEET YOUR REQUIREMENTS OR EXPECTATIONS, (C) ANY DATA STORED USING THE RESELLER APPLICATION WILL BE ACCURATE, RELIABLE, OR SECURE, (D) ERRORS OR DEFECTS IN THE RESELLER APPLICATION, THE PLATFORM, OR THE SFDC SERVICE WILL BE CORRECTED, OR (E) THE RESELLER APPLICATION OR THE SYSTEMS USED BY RESELLER TO MAKE RESELLER APPLICATION AVAILABLE ARE FREE OF VIRUSES OR OTHER HARMFUL COMPONENTS. THE PLATFORM AND THE SFDC SERVICE IS PROVIDED STRICTLY ON AN "AS IS" BASIS. TO THE MAXIMUM EXTENT PERMITTED BY LAW, SALESFORCE.COM DISCLAIMS ALL CONDITIONS, REPRESENTATIONS AND WARRANTIES, WHETHER EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, WITH RESPECT TO RESELLER APPLICATION AND THE SERVICE, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT OF THIRD PARTY RIGHTS.

10. **No Liability.** IN NO EVENT SHALL SFDC HAVE ANY LIABILITY TO YOU OR ANY USER FOR ANY DAMAGES WHATSOVER, INCLUDING BUT NOT LIMITED TO DIRECT, INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE, OR CONSEQUENTIAL DAMAGES, OR DAMAGES BASED ON LOST PROFITS, HOWEVER CAUSED AND, WHETHER IN CONTRACT, TORT OR UNDER ANY OTHER THEORY OF LIABILITY, WHETHER OR NOT YOU HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

11. **Further Contact.** SFDC may contact You regarding new SFDC service features and offerings.

12. **Google Programs and Services.** Platform or SFDC Service features that interoperate with Google programs and services depend on the continuing availability of applicable Google application programming interfaces ("APIs") and programs for use with the Platform and the SFDC Service. If Google Inc. ceases to make such APIs and/or programs available on reasonable terms to SFDC, SFDC may cease providing such features without entitling You or Reseller to any refund, credit, or other compensation.

13. **Third Party Beneficiary.** SFDC shall be a third party beneficiary to the agreement between You and Reseller solely as it relates to these SFDC Service Terms of Use.

SILICON VALLEY CLEAN ENERGY

Staff Report – Item 1f

Item 1f:	**Authorize the Chief Executive Officer to Execute Service Agreements with 1) Arup; 2) Evergreen Economics; and 3) Opinion Dynamics for Data Analytics Support Services**
From:	Girish Balachandran, CEO
Prepared by:	Justin Zagunis, Director of Decarbonization Programs and Policy Rebecca Fang, Manager of Decarbonization Programs and Policy
Date:	12/13/2023

RECOMMENDATION

Staff recommends the Board approve and authorize the CEO to execute service agreements, with non-substantive changes, with Arup, Evergreen Economics, and Opinion Dynamics, collectively referred to as ("Master Consultant Agreements") for data analytics support services for a period of five years; and delegating authority to the CEO to spend in aggregate on these three agreements an amount not to exceed $2,000,000.

Subject to Board-appropriation of funds, projects may be assigned under the Master Consultant Agreements to one or more consultants on a task order basis. This is consistent with previous Master Consultant Agreements signed by SVCE and will allow staff to more easily perform data analytics tasks in support of various programs and organizational needs. All signed task orders will be added to a CEO report spreadsheet for reporting purposes.

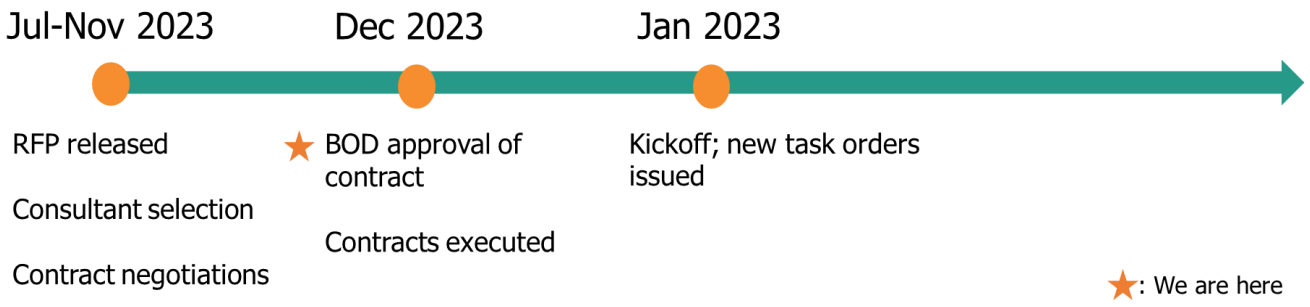
BACKGROUND

Since 2018, SVCE's decarbonization program offerings have been growing in number and expanding their reach. Over the last five years, the Board has allocated over $85 million to programs that provide community education, technical assistance, financial incentives, support for innovative technologies, and local policy development. We are currently running over 18 initiatives and customer-facing programs and have many more in the pipeline. As SVCE continues to mature and perform more complex, in-depth analysis of these efforts and answer key research questions about SVCE territory, staff needs more robust and responsive data analytical capabilities to maximize the impacts.

In the past, staff has issued solicitations for specific data-related analysis projects in support of programs, policy, and other cross-organization initiatives. Examples include solicitations for community energy resilience analysis, planning, and support (October 2020), innovative finance analysis (ongoing), and electrification solutions analysis (ongoing). Recognizing that each solicitation takes staff and Board time to review, approve, and execute contracts, staff has consolidated the previously distributed ad hoc efforts into a dedicated set of consulting resources selected via this single solicitation. Staff is seeking Board approval to execute the Master Consultant Agreements to support ongoing and future data analytics needs. With this additional resource, we hope to more efficiently and quickly gather and analyze data to inform program effectiveness, design, and future strategic direction.

ANALYSIS & DISCUSSION

SVCE staff solicited consultants for data analytics support through a competitive bid process, as shown below. The RFP garnered a strong response, with twenty-five qualified proposals spanning either a subset or all of the Topic Areas and Tasks listed in the RFP. SVCE conducted interviews with nine finalist teams in October. The evaluation panel for the finalist interviews consisted of four SVCE staff. Proposals submitted by Arup, Evergreen Economics, and Opinion Dynamics were selected as the finalists.



Arup

Arup has a deep bench of digital and energy subject matter experts across data and geospatial analysis, software solutions, energy, decarbonization, policy, and social equity. Relevant examples of past projects include: utilization of the SolarResilient tool for Ava Community Energy (formerly East Bay Community Energy), development of an EV site suitability platform and the assessment of electrification/efficiency potential for building stock for National Grid, and development of Clean Power Alliance's Local Programs for a Clean Energy Future Strategic Plan. Specific topics for which Arup may provide services under the proposed contract agreement include, but are not limited to, the following:

- Analyze distribution system or neighborhood capacity availability
- Create first-pass "electrification plans" for buildings in SVCE territory
- Panel capacity analysis based on consumption data and building characteristics
- Modeling distributed energy resource (DER) adoption in SVCE territory based on trends and local efforts to be used for load and GHG forecasting.
- Creation of maps, dashboards, and reports to synthesize and disseminate analysis learnings

Evergreen Economics

Evergreen Economics has experience conducting California-specific research for the IOUs, Community Choice Aggregators (CCAs), the CPUC, SMUD, and the CEC. Evergreen Economics conducts forward looking and retrospective research: program EM&V, market studies, needs assessments, baseline studies, codes and standards research, regulatory support, and program process and impact evaluations. Relevant examples of past projects include: completion of three Low Income Needs Assessments for the California IOUs and the CPUC, evaluation of the DAC-GT and CSGT programs for the CPUC Energy Division, and market characterization of commercial sector building decarbonization for Southern California Edison. Specific topics for which Evergreen Economics may provide services under the proposed contract agreement include, but are not limited to, the following:

- Evaluation of SVCE program impacts during/after programs; evaluation, measurement and verification (EM&V) and synthesis into learnings to help SVCE answer key research questions
- Analysis of demographic and other data to inform and evaluate equity in SVCE territory, programs, and policy
- Customer segmentation for program marketing and adoption potential analysis
- Creation of maps, dashboards, and reports to synthesize and disseminate analysis learnings

Opinion Dynamics

Opinion Dynamics has experience conducting strategic analyses and program evaluation across the state of California. Relevant examples of past projects include: load and equity analysis and mapping for Southern California Edison, evaluation of PG&E's EV Charging Management Pilots, development of Marin Clean Energy's first program impact evaluation, and evaluation of the Building Initiative for Low-Emissions Development (BUILD) and Technology and Equipment for Clean Heating (TECH) Initiatives. Specific topics for which Opinion Dynamics may provide services under the proposed contract agreement include, but are not limited to, the following:

- Evaluation of SVCE program impacts during/after programs; EM&V and synthesis into learnings to help SVCE answer key research questions
- Analysis of demographic and other data to inform and evaluate equity in SVCE territory, programs, and policy
- Analysis of load data and creation of models and algorithms to better disaggregate the data into end uses (equipment) in the home for use in understanding the existing building stock and targeted marketing.
- Analysis of load data to detect the presence of EV charging to supplement SVCE's existing vehicle data for use in understanding EV adoption in SVCE territory and targeted marketing.
- Creation of maps, dashboards, and reports to synthesize and disseminate analysis learnings

STRATEGIC PLAN

As referenced in SVCE's Strategic Plan Goal 15, Measures 4 and 5, the Master Consultant Agreements will enable the integration of additional data sources and provide data analytics support to SVCE to enable data-driven decision-making across the organization.

ALTERNATIVE

Do not authorize the CEO to execute the agreement with any of the three selected consultants. Staff would continue to issue individual solicitations for data analytics support on an as-needed basis, which would slow down the speed at which SVCE could react to opportunities and needs.

FISCAL IMPACT

Approval of these 5-year contracts with Arup, Evergreen Economics, and Opinion Dynamics for $2,000,000 will have no incremental fiscal impact at this time. Funding for work performed in task orders under these contracts will come out of budgets allocated by the Board to specific programs or initiatives, or will be included in department-level operating expenses. Therefore, the budget for these contracts is already reflected in the total programs allocation of $85 million (or will be allocated in a future Board appropriation), was included in the FY24 budget request approved by the Board, or will be requested in upcoming fiscal year budgets.

ATTACHMENTS

1. Draft agreement between SVCE and Arup for data analytics support services
2. Draft agreement between SVCE and Evergreen Economics for data analytics support services
3. Draft agreement between SVCE and Opinion Dynamics for data analytics support services

AGREEMENT BETWEEN THE SILICON VALLEY CLEAN ENERGY AUTHORITY
AND
Arup US, Inc.
FOR
Data Analytics Support

THIS AGREEMENT ("Agreement"), is entered into this 14th day of December, 2023, by and between the SILICON VALLEY CLEAN ENERGY AUTHORITY, an independent public agency, ("Authority"), and Arup US, Inc., a New York Corporation authorized to do business in California whose address is 560 Mission Street, Suite 700, San Franciso, CA 94105 (hereinafter referred to as "Consultant") (collectively referred to as the "Parties" and individually as a "Party").

RECITALS:

A. Authority is an independent public agency duly organized under the provisions of the Joint Exercise of Powers Act of the State of California (Government Code Section 6500 *et seq*.) ("Act") with the power to conduct its business and enter into agreements.

B. Consultant possesses the skill, experience, ability, background, certification and knowledge to provide the services described in this Agreement pursuant to the terms and conditions described herein.

C. Authority and Consultant desire to enter into an agreement for data analytics support upon the terms and conditions herein.

NOW, THEREFORE, the Parties mutually agree as follows:

1. **TERM**

The term of this Agreement shall commence on December 14, 2023, and shall terminate on December 13, 2028, unless terminated earlier as set forth herein.

2. **SERVICES TO BE PERFORMED**

Consultant shall perform each and every service set forth in Exhibit "A" pursuant to the schedule of performance set forth in Exhibit "B," both of which are attached hereto and incorporated herein by this reference.

3. **COMPENSATION TO CONSULTANT**

Consultant shall be compensated for services performed pursuant to this Agreement on a task order basis as directed by the Authority and based on the rates and terms set forth in Exhibit "C," which is attached hereto and incorporated herein by this reference.

4. **TIME**

Consultant and Authority agree that time is of critical importance regarding the performance of this Agreement and Consultant shall perform services as expeditiously as is required by the Standard of Care and in accordance with the agreed schedule.

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5. **STANDARD OF CARE**

Consultant agrees to perform all services required by this Agreement in a manner commensurate with the prevailing standards of specially trained professionals in the San Francisco Bay Area under similar circumstances (the "Standard of Care") and in a manner reasonably satisfactory to Authority and agrees that all services shall be performed by qualified and experienced personnel. Consultant shall be responsible to Authority for any errors or omissions that cause the services to fall below the Standard of Care in the performance of work pursuant to this Agreement. Should any errors caused by Consultant be found in such services or work product, Consultant shall correct the errors at no additional charge to Authority by redoing the professional work and/or revising the work product(s) called for in the Scope of Services to eliminate the errors. Should Consultant fail to make such correction in a reasonably timely manner, such correction may be made by Authority, and the cost thereof shall be charged to Consultant. In addition to all other available remedies, Authority may deduct the cost of such correction from any retention amount held by Authority or may withhold payment otherwise owed Consultant under this Agreement up to the amount of the cost of correction.

6. **INDEPENDENT PARTIES**

Authority and Consultant intend that the relationship between them created by this Agreement is that of an independent contractor. The manner and means of conducting the work are under the control of Consultant, except to the extent they are limited by statute, rule or regulation and the express terms of this Agreement. No civil service status or other right of employment will be acquired by virtue of Consultant's services. None of the benefits provided by Authority to its employees, including but not limited to, unemployment insurance, workers' compensation plans, vacation and sick leave are available from Authority to Consultant, its employees or agents. Deductions shall not be made for any state or federal taxes, FICA payments, PERS payments, or other purposes normally associated with an employer-employee relationship from any fees due Consultant. Payments of the above items, if required, are the responsibility of Consultant. Consultant shall indemnify and hold harmless Authority and its elected officials, officers, employees, servants, designated volunteers, and agents serving as independent contractors in the role of Authority officials, from any and all liability, damages, claims, costs and expenses of any nature to the extent arising from Consultant's personnel practices. Authority shall have the right to offset against the amount of any fees due to Consultant under this Agreement any amount due to Authority from Consultant as a result of Consultant's failure to promptly pay to Authority any reimbursement or indemnification arising under this section.

7. **NO RECOURSE AGAINST CONSTITUENT MEMBERS OF AUTHORITY**

Authority is organized as a Joint Powers Authority in accordance with the Joint Powers Act of the State of California (Government Code Section 6500 et seq.) pursuant to a Joint Powers Agreement dated March 31, 2016, and is a public entity separate from its constituent members. Authority shall solely be responsible for all debts, obligations and liabilities accruing and arising out of this Agreement. Consultant shall have no rights and shall not make any claims, take any actions or assert any remedies against any of Authority's constituent members in connection with this Agreement.

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8. **NON-DISCRIMINATION**

In the performance of this Agreement, Consultant, and any subconsultant under the Consultant, shall not discriminate against any employee, subcontractor or applicant for employment because of race, color, religious creed, sex, gender, gender identity, gender expression, marital status, national origin, ancestry, age, physical disability, mental disability, medical condition, genetic information, sexual orientation, military or veteran status, or other basis prohibited by law, except as provided in Government Code section 12940. Consultant shall have responsibility for compliance with this Section.

9. **HOLD HARMLESS AND INDEMNIFICATION**

A. General Indemnification. To the fullest extent permitted by law, Consultant shall, at its sole cost and expense, defend, hold harmless and indemnify Authority and its elected officials, officers, attorneys, agents, employees, designated volunteers, successors, assigns and those Authority agents serving as independent contractors in the role of Authority officials (collectively "Indemnitees"), from and against any and all damages, costs, expenses, liabilities, claims, demands, causes of action, proceedings, expenses, judgments, penalties, liens, and losses of any nature whatsoever, including fees of accountants, attorneys, or other professionals and all costs associated therewith and the payment of all consequential damages (collectively "Liabilities"), in law or equity, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to the acts or omissions of Consultant, its officers, agents, servants, employees, subcontractors, materialmen, consultants or their officers, agents, servants or employees (or any entity or individual that Consultant shall bear the legal liability thereof) in the performance of this Agreement, including the Indemnitees' active or passive negligence, except for Liabilities arising from the sole negligence or willful misconduct of the Indemnitees as determined by court decision or by the agreement of the Parties. Consultant shall defend the Indemnitees in any action or actions filed in connection with any Liabilities with counsel of the Indemnitees' choice, and shall pay all costs and expenses, including all attorneys' fees and experts' costs actually incurred in connection with such defense. Consultant shall reimburse the Indemnitees for any and all legal expenses and costs incurred by Indemnitees in connection therewith.

B. Intellectual Property Indemnification. Consultant hereby certifies that it owns, controls, or licenses and retains all right, title, and interest in and to any intellectual property it creates in relation to this Agreement, including all related patents, inventions, trademarks, and copyrights, all applications therefor, and all trade names, service marks, know how, and trade secrets (collectively referred to as "IP Rights"), except as otherwise expressly provided by this Agreement. Consultant warrants that the services to be provided pursuant to this Agreement do not infringe, violate, trespass, or constitute the unauthorized use or misappropriation of any IP Rights of any third party. Consultant shall indemnify, defend, and hold Indemnitees, harmless from and against any Liabilities by a third party that the services to be provided pursuant to this Agreement infringe or violate any third-party's IP Rights, provided any such right is enforceable in the United States. Such costs and expenses shall include reasonable attorneys' fees of counsel of Authority's choice, expert fees and all other costs and fees of litigation.

C. The acceptance of the services by Authority shall not operate as a waiver of these rights of indemnification. The hold harmless and indemnification provisions of this Section shall apply regardless of whether or not any insurance policies are determined to be applicable to the Liability.

D. Consultant's indemnifications and obligations under this section shall survive the

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expiration or termination of this Agreement.

10. **INSURANCE**

A. General Requirements. On or before the commencement of the term of this Agreement, Consultant shall furnish Authority with certificates showing the type, amount, class of operations covered, effective dates and dates of expiration of insurance coverage in compliance with the requirements listed in Exhibit "D," which is attached hereto and incorporated herein by this reference. Such insurance and certificates, which do not limit Consultant's indemnification obligations under this Agreement, shall also contain substantially the following statement: "Should any of the above insurance covered by this certificate be canceled or coverage reduced to the extent that it would affect this Agreement before the expiration date thereof, the insurer affording coverage shall provide thirty (30) days' advance written notice to the Authority by certified mail, Attention: Chief Executive Officer." Consultant shall maintain in force at all times during the performance of this Agreement all appropriate coverage of insurance required by this Agreement with an insurance company that is acceptable to Authority and licensed to do insurance business in the State of California. Endorsements naming the Authority as additional insured shall be submitted with the insurance certificates.

B. Subrogation Waiver. Consultant hereby grants to Authority, on behalf of any insurer providing comprehensive general and automotive liability insurance to either Consultant or Authority with respect to the services of Consultant herein, a waiver of any right to subrogation which any such insurer of Consultant may acquire against Authority by virtue of the payment of any loss under such insurance.

C. Failure to Secure or Maintain Insurance. If Consultant at any time during the term hereof should fail to secure or maintain the foregoing insurance, Authority shall be permitted to obtain such insurance in the Consultant's name or as an agent of the Consultant and shall be compensated by the Consultant for the costs of the insurance premiums at the maximum rate permitted by law and computed from the date written notice is received that the premiums have not been paid.

D. Additional Insured. Authority, its members, officers, employees and volunteers shall be named as additional insureds under all insurance coverages, except any professional liability insurance, required by this Agreement. The naming of an additional insured shall not affect any recovery to which such additional insured would be entitled under this policy if not named as such additional insured. An additional insured named herein shall not be held liable for any premium, deductible portion of any loss, or expense of any nature on this policy or any extension thereof. Any other insurance held by an additional insured shall not be required to contribute anything toward any loss or expense covered by the insurance provided by this policy.

E. Sufficiency of Insurance. The insurance limits required by Authority are not represented as being sufficient to protect Consultant. Consultant is advised to confer with Consultant's insurance broker to determine adequate coverage for Consultant.

F. Maximum Coverage and Limits. It shall be a requirement under this Agreement that any available insurance proceeds broader than or in excess of the specified minimum Insurance coverage requirements and/or limits shall be available to the additional insureds. Furthermore, the requirements for coverage and limits shall be the minimum coverage and limits specified in this Agreement, or the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named insured, whichever is greater.

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11. **CONFLICT OF INTEREST**

Consultant warrants that it, its officers, employees, associates and subcontractors, presently have no interest, and will not acquire any interest, direct or indirect, financial or otherwise, that would conflict in any way with the performance of this Agreement, and that it, its officers, employees, associates and subcontractors, will not employ any person having such an interest. Consultant and its officers, employees, associates and subcontractors, if any, shall comply with all conflict of interest statutes of the State of California applicable to Consultant's services under this Agreement, including the Political Reform Act (Gov. Code § 81000, et seq.) and Government Code Section 1090. During the term of this Agreement, Consultant may perform similar services for other clients, but Consultant and its officers, employees, associates and subcontractors shall not, without the Authority Representative's prior written approval, perform work for another person or entity for whom Consultant is not currently performing work that would require Consultant or one of its officers, employees, associates or subcontractors to abstain from a decision under this Agreement pursuant to a conflict of interest statute. Consultant shall incorporate a clause substantially similar to this section into any subcontract that Consultant executes in connection with the performance of this Agreement. Consultant understands that it may be required to fill out a conflict of interest form if the services provided under this Agreement require Consultant to make certain governmental decisions or serve in a staff Authority, as defined in Title 2, Division 6, Section 18700 of the California Code of Regulations.

12. **PROHIBITION AGAINST TRANSFERS**

Consultant shall not assign, sublease, hypothecate, or transfer this Agreement, or any interest therein, directly or indirectly, by operation of law or otherwise, without prior written consent of Authority. Any attempt to do so without such consent shall be null and void, and any assignee, sublessee, pledgee, or transferee shall acquire no right or interest by reason of such attempted assignment, hypothecation or transfer. However, claims for money by Consultant from Authority under this Agreement may be assigned to a bank, trust company or other financial institution without prior written consent. Written notice of such assignment shall be promptly furnished to Authority by Consultant.

The sale, assignment, transfer or other disposition of any of the issued and outstanding capital stock of Consultant, or of the interest of any general partner or joint venturer or syndicate member or cotenant, if Consultant is a partnership or joint venture or syndicate or cotenancy, which shall result in changing the control of Consultant, shall be construed as an assignment of this Agreement. Control means fifty percent (50%) or more of the voting power of the corporation.

13. **SUBCONTRACTOR APPROVAL**

Unless prior written consent from Authority is obtained through task order process, only those persons and subcontractors whose names are attached to this Agreement shall be used in the performance of this Agreement.

In the event that Consultant employs subcontractors, such subcontractors shall be required to furnish proof of workers' compensation insurance and shall also be required to carry general, automobile and professional liability insurance in substantial conformity to the insurance carried by Consultant. In addition, any work or services subcontracted hereunder shall be subject to each provision of this Agreement.

Consultant agrees to include within their subcontract(s) with any and all subcontractors the same requirements and provisions of this Agreement, including the indemnity and insurance

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requirements, to the extent they apply to the scope of the subcontractor's work. Subcontractors hired by Consultant shall agree to be bound to Consultant and Authority in the same manner and to the same extent as Consultant is bound to Authority under this Agreement. Subcontractors shall agree to include these same provisions within any sub-subcontract. Consultant shall provide a copy of the Indemnity and Insurance provisions of this Agreement to any subcontractor. Consultant shall require all subcontractors to provide valid certificates of insurance and the required endorsements prior to commencement of any work and will provide proof of compliance to Authority.

14. **REPORTS**

A. Each and every report, draft, work product, map, record and other document, hereinafter collectively referred to as "Report", reproduced, prepared or caused to be prepared by Consultant pursuant to or in connection with this Agreement, shall be the exclusive property of Authority upon distribution to Authority. Consultant shall not copyright any Report required by this Agreement and shall execute appropriate documents to assign to Authority the copyright to Reports created pursuant to this Agreement. Any Report, information and data prepared through this Agreement shall become the property of Authority, and all publication rights are reserved to Authority. Consultant may retain a copy of any Report furnished to the Authority pursuant to this Agreement. Notwithstanding, this Agreement does not restrict or deprive the Consultant of any of its rights or proprietary interests in any materials that existed prior to or are developed independently of the performance of Consultant's services pursuant to this Agreement (the "Pre-Existing Materials"). If any Pre-Existing Materials are delivered in connection with or as part of the performance of Consultant's services, the Consultant hereby grants the Authority a non-exclusive, world-wide, royalty-free, irrevocable license to use such Pre-Existing Materials to enable the full use and benefit of the Report(s).

B. All Reports prepared by Consultant may be used by Authority in execution or implementation of: (1) The original project for which Consultant was hired; (2) Completion of the original project by others; (3) Subsequent additions to the original project; and/or (4) Other Authority projects as Authority deems appropriate in its sole discretion.

C. Consultant shall, at such time and in such form as Authority may require, furnish reports concerning the status of services required under this Agreement.

D. All Reports shall also be provided in electronic format, both in the original file format (e.g., Microsoft Word) and in PDF format.

E. No Report, information or other data given to or prepared or assembled by Consultant pursuant to this Agreement that has not been publicly released shall be made available to any individual or organization by Consultant without prior approval by Authority.

F. Authority shall be the owner of and shall be entitled upon request to immediate possession of accurate reproducible copies of Reports or other pertinent data and information delivered by Consultant prior to termination of this Agreement or upon completion of the work pursuant to this Agreement.

15. **RECORDS**

Consultant shall maintain complete and accurate records with respect to costs, expenses, receipts and other such information required by Authority that relate to the performance of services under this Agreement, in sufficient detail to permit an evaluation of the services and costs. All

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such records shall be clearly identified and readily accessible. Consultant shall provide free access to such books and records to the representatives of Authority or its designees at all proper times, and gives Authority the right to examine and audit same, and to make transcripts therefrom as necessary, and to allow inspection of all work, data, documents, proceedings and activities related to this Agreement. Such records, together with supporting documents, shall be maintained for a minimum period of five (5) years after Consultant receives final payment from Authority for all services required under this agreement

16. **PARTY REPRESENTATIVES**

The Chief Executive Officer ("Authority Representative") shall represent the Authority in all matters pertaining to the services to be performed under this Agreement. Joerg Tonndorf (Consultant Representative") shall represent Consultant in all matters pertaining to the services to be performed under this Agreement.

17. **CONFIDENTIAL INFORMATION AND DOCUMENTS**

A. Consultant covenants that all data, reports, documents, discussion, or other information (collectively "Data") developed or received by Consultant or provided for performance of this Agreement are deemed confidential and shall not be disclosed or released by Consultant without prior written authorization by Authority. Authority shall grant such authorization if applicable law requires disclosure. Consultant, its officers, employees, agents, or subcontractors shall not without written authorization from the Authority Representative or unless requested in writing by the Authority's General Counsel, voluntarily provide declarations, letters of support, testimony at depositions, response to interrogatories or other information concerning the work performed under this Agreement or relating to any project or property located within the Authority. Response to a subpoena or court order shall not be considered "voluntary," provided Consultant gives Authority notice of such court order or subpoena.

B. Consultant shall promptly notify Authority should Consultant, its officers, employees, agents or subcontractors be served with any summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, request for admissions or other discovery request, court order or subpoena from any party regarding this Agreement and the work performed thereunder or with respect to any project or property located within the Authority. Authority may, but has no obligation to, represent Consultant or be present at any deposition, hearing or similar proceeding. Consultant agrees to cooperate fully with Authority and to provide Authority with the opportunity to review any response to discovery requests provided by Consultant. However, Authority's right to review any such response does not imply or mean the right by Authority to control, direct or rewrite the response.

C. It is understood that Authority is subject to the California Public Records Act (Gov. Code § 7920.000 *et seq*.). If a request under the California Public Records Act is made to view any documents Consultant provided to Authority, Authority shall notify Consultant of the request and the date that such records will be released to the requester unless Consultant obtains a court order enjoining that disclosure. If Consultant fails to obtain a court order enjoining that disclosure, Authority will release the requested information on the date specified.

D. In the event Authority gives Consultant written notice of a "litigation hold" or request under the Public Records Act, then as to all data identified in such notice or request, Consultant shall, at no additional cost to Authority, isolate and preserve all such data pending receipt of further direction from the Authority.

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E. Consultant agrees to comply with the confidentiality and data protection provisions set forth in Exhibit "E," attached hereto and incorporated herein by this reference.

F. Consultant's covenants under this section shall survive the expiration or termination of this Agreement.

18. **NOTICES**

Any notice, consent, request, demand, bill, invoice, report or other communication required or permitted under this Agreement shall be in writing and conclusively deemed effective: (a) on personal delivery, (b) on confirmed delivery by courier service during Consultant's and Authority's regular business hours, or (c) three Business Days after deposit in the United States mail, by first class mail, postage prepaid, and addressed to the Party to be notified as set forth below:

TO AUTHORITY:
333 W. El Camino Real
Suite 330
Sunnyvale CA 94087
Attention: Chief Executive Officer

TO CONSULTANT:
Joerg Tonndorf
Arup
1330 Broadway, 13th floor
Oakland, CA 94612

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19. **TERMINATION**

In the event Consultant fails or refuses to perform any of the provisions hereof at the time and in the manner required hereunder, Consultant shall be deemed in default in the performance of this Agreement. If Consultant fails to cure the default within the time specified (which shall be determined by the Authority but shall be not less than 10 days) and according to the requirements set forth in Authority's written notice of default, and in addition to any other remedy available to the Authority by law, the Authority Representative may terminate the Agreement by giving Consultant written notice thereof, which shall be effective immediately. The Authority Representative shall also have the option, at its sole discretion and without cause, of terminating this Agreement by giving seven (7) calendar days' prior written notice to Consultant as provided herein. Upon receipt of any notice of termination, Consultant shall immediately discontinue performance.

In the event of Authority's termination of this Agreement due to no fault or failure of performance by Consultant, Authority shall pay Consultant for services performed up to the effective date of termination. Upon termination, Consultant shall immediately deliver to the Authority any and all copies of studies, sketches, drawings, computations, and other material or products, whether or not completed, prepared by Consultant or given to Consultant, in connection with this Agreement. Such materials shall become the property of Authority. Consultant shall have no other claim against Authority by reason of such termination, including any claim for compensation.

20. **COMPLIANCE WITH LAWS**

Consultant shall keep itself informed of all applicable federal, state and local laws, ordinances, codes, regulations and requirements which may, in any manner, affect those employed by it or in any way affect the performance of its services pursuant to this Agreement. Consultant shall, at all times, observe and comply with all such laws and regulations, including, but not limited to the Americans with Disabilities Act, the Stored Communications Act, 18 U.S.C. Section 2701, et seq., California Civil Code Sections 1798.80 through 1798.84, and the California Consumer Privacy Act, Civil Code Section 1798.100 *et seq*. Authority, and its officers and employees, shall not be liable at law or in equity by reason of the failure of the Consultant to comply with this paragraph.

Consultant represents and agrees that all personnel engaged by Consultant in performing services are and shall be fully qualified and are authorized or permitted under state and local law to perform such services. Consultant represents and warrants to Authority that it has all licenses, permits, certificates, qualifications, and approvals required by law to provide the services and work required to perform services under this Agreement, including a business license. Consultant further represents and warrants that it shall keep in effect all such licenses, permits, and other approvals during the term of this Agreement.

21. **CONFLICT OF LAW**

This Agreement shall be interpreted under, and enforced by the laws of the State of California. The Agreement and obligations of the Parties are subject to all valid laws, orders, rules, and regulations of the authorities having jurisdiction over this Agreement (or the successors of those authorities). Any suits brought pursuant to this Agreement shall be filed with the Superior Court of the County of Santa Clara, State of California.

22. **ADVERTISEMENT**

Consultant shall not post, exhibit, display or allow to be posted, exhibited, displayed any signs, advertising, show bills, lithographs, posters or cards of any kind pertaining to the services performed under this Agreement unless prior written approval has been secured from Authority to do otherwise.

23. **WAIVER**

A waiver by Authority of any breach of any term, covenant, or condition contained herein shall not be deemed to be a waiver of any subsequent breach of the same or any other term, covenant, or condition contained herein, whether of the same or a different character.

24. **INTEGRATED CONTRACT**

This Agreement represents the full and complete understanding of every kind or nature whatsoever between the Parties, and all preliminary negotiations and agreements of whatsoever kind or nature are merged herein. No verbal agreement or implied covenant shall be held to vary the provisions hereof. Any modification of this Agreement will be effective only by a written document signed by both Authority and Consultant.

25. **AUTHORITY**

The individual(s) executing this Agreement represent and warrant that they have the legal Authority and authority to do so on behalf of their respective legal entities.

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26. **INSERTED PROVISIONS**

Each provision and clause required by law to be inserted into the Agreement shall be deemed to be enacted herein, and the Agreement shall be read and enforced as though each were included herein. If through mistake or otherwise, any such provision is not inserted or is not correctly inserted, the Agreement shall be amended to make such insertion on application by either Party.

27. **CAPTIONS AND TERMS**

The captions in this Agreement are for convenience only, are not a part of the Agreement and in no way affect, limit or amplify the terms or provisions of this Agreement.

28. **AUTHORITY'S RIGHTS TO EMPLOY OTHER CONSULTANTS**

Authority reserves the right to employ other consultants in connection with the subject matter of the Scope of Services.

29. **EXHIBITS**

The Exhibits referenced in this Agreement are attached hereto and incorporated herein by this reference as though set forth in full in the Agreement. If any inconsistency exists or arises between a provision of this Agreement and a provision of any exhibit, or between a provision of this Agreement and a provision of Consultant's proposal , the provisions of this Agreement shall control.

30. **FORCE MAJEURE**

Consultant shall not be liable for any failure to perform its obligations under this Agreement if Consultant presents acceptable evidence, in Authority's sole judgment, that such failure was due to acts of God, embargoes, inability to obtain labor or materials or reasonable substitutes for labor or materials, governmental restrictions, governmental regulations, governmental controls, judicial orders, enemy or hostile governmental action, civil commotion, fire or other casualty, or other causes beyond Consultant's reasonable control and not due to any act by Consultant.

31. **FINAL PAYMENT ACCEPTANCE CONSTITUTES RELEASE**

The acceptance by Consultant of the full and final payment with respect to each Task Order made under this Agreement shall operate as and be a release of Authority from all claims and liabilities for compensation to Consultant for anything done, furnished or relating to Consultant's work or services. Acceptance of payment shall be any negotiation of Authority's check or the failure to make a written extra compensation claim within ten calendar days of the receipt of that check. However, approval or payment by Authority shall not constitute, nor be deemed, a release of the responsibility and liability of Consultant, its employees, subcontractors and agents for the accuracy and competency of the information provided and/or work performed; nor shall such approval or payment be deemed to be an assumption of such responsibility or liability by Authority for any defect or error in the work prepared by Consultant, its employees, subcontractors and agents.

32. **ATTORNEY FEES**

In any litigation or other proceeding by which a Party seeks to enforce its rights under this

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Agreement (whether in contract, tort or both) or seeks a declaration of any rights or obligations under this Agreement, the prevailing Party shall be entitled to recover all attorneys' fees, experts' fees, and other costs actually incurred in connection with such litigation or other proceeding, in addition to all other relief to which that Party may be entitled.

33. **SEVERABILITY**

If any provision in this Agreement is held by a court of competent jurisdiction to be illegal, invalid, void, or unenforceable, the remaining provisions will nevertheless continue in full force without being impaired or invalidated in any way.

34. **SUCCESSORS AND ASSIGNS**

The terms and conditions of this Agreement shall be binding on the successors and assigns of the Parties to this Agreement.

35. **NO THIRD PARTY BENEFICIARIES INTENDED**

This Agreement is made solely for the benefit of the Parties to this Agreement and their respective successors and assigns, and no other person or entity may have or acquire a right by virtue of this Agreement.

36. **COUNTERPARTS; FACSIMILE/PDF/ELECTRONIC SIGNATURE**

This Agreement may be executed in multiple counterparts, all of which shall be deemed an original, and all of which will constitute one and the same instrument. The Parties agree that a facsimile, PDF or electronic signature may substitute for and have the same legal effect as the original signature.

37. **DRAFTING PARTY**

This Agreement shall be construed without regard to the Party that drafted it. Any ambiguity shall not be interpreted against either Party and shall, instead, be resolved in accordance with other applicable rules concerning the interpretation of contracts.

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IN WITNESS WHEREOF, the Parties have caused the Agreement to be executed as of the date set forth above.

RECOMMENDED FOR APPROVAL

_____

Joerg Tonndorf, Associate Principal

RECOMMENDED FOR APPROVAL

_____
Amrit Singh, Chief Financial Officer/Director of Administrative Services

CONSULTANT NAME
Arup

By: _____
Name: Joerg Tonndorf
Title: Associate Principal
Date: _____

SILICON VALLEY CLEAN ENERGY AUTHORITY
A Joint Powers Authority

By: _____
Name: Girish Balachandran
Title: Chief Executive Officer
Date: _____

APPROVED AS TO FORM:

_____
Counsel for Authority

ATTEST:

_____
Authority Clerk

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Exhibit A
Scope of Services

The services to be provided by Consultant to Authority under this Scope of Services may be varied and flexible based on Authority's specific requirements as they evolve over time. Areas in which Consultant may provide services to Authority are expected to include, but are not limited to, the below Topic Areas and Tasks. Specific tasks to be completed shall be effectuated by task order(s) agreed to by the Parties.

This Agreement does not guarantee a statement of work and Authority may employ multiple consultants to perform the services outlined in this Exhibit.

Topic Areas

1. Rate design
2. Load disaggregation to identify and understand types, age and efficiency of electric and gas appliances
3. EV detection from consumption data
4. Evaluation of program impacts during/after programs; evaluation, measurement and verification (EM&V) and synthesis into learnings to help Authority answer key research questions
5. Weather normalization of consumption data
6. Create first-pass "electrification plans" for buildings in service territory
7. Greenhouse gas emissions analyses (e.g., historical inventories, future scenario forecasts)
8. Customer segmentation for program marketing and adoption potential analysis
9. Distribution system or neighborhood capacity availability
10. Equity analysis and mapping
11. Panel capacity based on consumption data and building characteristics
12. Load forecasting
13. Rate optimization tool
14. Complex data analysis on large, disparate datasets using various tools (Google Cloud Platform, Excel, R, Python, etc.). Example datasets include:
    a. Interval electricity data
    b. Gas consumption data
    c. Customer attribute data
    d. Building characteristics data
    e. Distributed energy resource (DER) adoption data
    f. Marketing data
    g. Program participation data
    h. Census and equity data
    i. Rates and billing data
15. Perform spatial analysis and create interactive maps
16. Create dashboards and reports to track KPIs

Additional Topic Areas may be assigned, following the set of Tasks laid out below, where Consultant has clear relevant expertise.

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Tasks

1. Strategic Analysis Scoping: general support for Authority in identifying areas of opportunity for strategic analysis. Sample subtasks:
    - Provide expertise and exploratory analysis on existing datasets or third-party datasets
    - Synthesize/summarize other analyses performed for Authority or other entities
    - Engage with stakeholders to identify and prioritize key questions

2. Strategic Analysis Design and Execution: comprehensive support for designing and executing strategic analyses to answer key questions identified by Authority. Sample subtasks:
    - Based on described need and interest of Authority staff (e.g., research objectives), establish a plan to analyze available or new data
    - Create an Excel tool to be used by Authority staff (e.g., greenhouse gas emissions inventory and forecast tool)
    - Conduct analysis of large, disparate datasets using statistics, machine learning, and optimization algorithms
    - Create an interactive map to be published on Authority's website
    - Leverage a third-party tool to carry out analyses and train staff to become power users of the tool
    - Export and structure relevant data from a customer relationship management (CRM) system and database
    - Leverage Authority's data warehouse to conduct analysis, export data, and import data

3. Strategic Analysis Reporting: report on the results and learnings of strategic analyses. Sample subtasks:
    - Create a slide deck of results and learnings
    - Create a written report of results and learnings to be distributed internally or published
    - Hold presentation(s) to discuss results and learnings
    - Create a dashboard containing key metrics, maps, and visualizations

4. Miscellaneous Other Support: assist Authority in its overarching decarbonization mission by providing expertise and assistance on other topics and in other relevant fields. Sample subtasks:
    - On a time and materials basis, Authority may require additional work outside the rest of the scope. Future analyses will be unique and may require additional support. Analytics-adjacent activities (e.g. data cleaning, acquiring third-party datasets) may also require support from Consultant.

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Cooperation With Other Consultants

In the event Authority shall employ other consultants for services performed pursuant to this Agreement or otherwise, Consultant shall cooperate, coordinate with, and assist such consultants in a manner that will best further serve and protect the Authority's interests. Consultant shall not commit or permit any act which will interfere with the performance of work by any other consultant employed by Authority.

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Consultant Approach

Strategic analysis scoping

Consultant will work with the Authority to develop the right scope. The approach begins with a process of discovery, working alongside Authority staff to define specific needs and objectives of the task order and to complete a process of unpacking the available information, data cleaning and processing requirements, technical analysis workflows, and the ultimate use cases and endpoints for analysis, visualization, and program implementation. Through this discovery phase, Consultant will tailor the approach to the requirements of the task order as well as identify available processes, methods, and tools which can either be adopted directly or can be modified with limited effort.

Strategic analysis design & execution

Consultant may deliver across all of the topic areas as requested by Authority and deliver combined energy and data analysis projects that address many of the same fields and objectives of identifying energy efficiency and renewable opportunities, evaluating energy use and emissions, and informing energy and decarbonization strategy. Subtasks that might be needed to deliver a typical request under each topic area are illustrated in the table below and indicate what actions and relative effort could be required.

The following sections, highlight some of the unique challenges and opportunities expected to be addressed in approaching each of the Topic Areas, grouped by similarities.

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Table 1:Anticipated Level of effort (LOE)

Level of effort
- Low or none
- Medium
- High

Approach elements	Rate design	Load disaggregation	EV detections from consumption data	Evaluation of SVCE program	Weather normalization	GHG emissions analysis	Customer segmentation	Distribution system	Complex data analysis: Interval electricity data	Complex data analysis: Marketing data	Complex data analysis: Census and equity data	Spatial analysis	Create dashboards & reports to track KPIs
	Topic areas												
Develop program													
Risk assessment													
Method brainstorm													
Benchmarking													
Consultation / workshops													
UX approach													
Research / exploratory analysis													
Data collection													
Data processing & cleaning													
Simple data analysis													
Advanced data analysis (ML / AI)													
Develop algorithms													
Tool development (desktop)													
Tool development (web based)													
Leverage 3rd party tool / software													
GIS mapping													
Static dashboards													
Interactive dashboards													
Develop guidance material													
Summary reports / take aways													

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Load data & analytics

The scope can include ingesting, cleaning, managing, storing, and analyzing load data considering data security requirements with managing sensitive data where privacy is governed by CPUC rules Consultant will use automated cleaning techniques that focus on outlier identification and elimination, comparing expected mean values, time series averages, and extreme deviations, removal or reclassification of outlier profiles, and smoothing of points which indicate faulty periods of data.

To perform analysis on data for topics including **load disaggregation, weather normalization, EV detection, customer segmentation, panel capacity studies, load forecasting, or complex data analysis,** Consultant will first identify the basis for parsing the data to meet the need. This can include combining AMI data with some or all of the following:

- Tax assessor data to identify customer categories
- Weather data
- Vintage of buildings and use types
- Known energy efficiency standards and impacts
- Use signatures for appliances correlated to weather, time of day, and use
- Known use signatures on a sub-hourly basis that correlate to common appliances
- Approved strategic plans, code requirements, and
- targets for efficiency
- EV charging levels based on typical homeowner adoption and Level 1 and Level 2 charging signatures by power draw and duration

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The data analysis will be based on a combination of automated data analysis including machine learning techniques and expert insight. Through the combination of data sources, Consultant can correlate customers and identify outliers that may represent either misclassification or opportunity for efficiency. For load disaggregation and similar analysis, Consultant would use a combination of peer reviewed published studies documenting load signatures to train an ML model to search for particular appliance action and characterize the existing stock. Based on degree day correlation with building age and weather patterns, efficiency and fuel type across the buildings can be derived to identify opportunities for programs to improve efficiency and reduce carbon through replacement and fuel switching. Furthermore, with weather normalized data and land use projections, it is possible to inform how different policies, natural stock turnover, and service territory growth will impact the overall load.

Program analytics & rate impacts

The foundation of analyzing programs and rates is understanding customer use. Building on load data and possibly segmentation analytics or appliance characterization, Consultant can evaluate opportunities for program improvements, building electrification, and rate impacts on customer bills, including combinations of rate impacts and behind- the-meter technologies such

as solar and storage.

The work flow will start with an understanding of the key data that informs the studies anchored in existing customer use and classification. For electrification planning and program evaluation, Consultant will look at the opportunities to improve efficiency and switch fuels within different customer types. From the anticipated energy use of specific appliances or systems, Consultant can estimate a reduction (for efficiency) or increase (for fuel switching) expected. This can be informed by information of equipment working conditions, performance curves related to outdoor air temperature and load, and practical experience with real world conditions of operating equipment. These expected savings, backed by a whole building energy model if beneficial, would then be used to identify opportunities for electrification plans, or compared to post-program implementation performance in an EM&V setting.

Testing rate designs for numerous customers or to create a web-based rate optimization tool for customer use would include similar starting points, followed by a custom analytics toolbox to match up existing electricity and gas data with the new rate structures and determine the impact to a single or subset of customers. Total cost impact, average ratepayer impact, and other key metrics can be evaluated to present the impact of the proposed structure. Additionally, combining building analytics with rate design can lead to "what-if" scenarios where efficiency or behind-the-meter generation and storage are combined with rate changes to create value for the customer and drive toward energy reduction and carbon-free electricity growth.

Electric vehicles

The transportation sector is undergoing a paradigm shift as more consumers and manufacturers turn to ZEV. Consultant can develop data-driven solutions to support load serving entities and fleet operators in successfully transitioning to ZEVs and can support SVCE in E**V detection from consumption data and forecasting EV demand.**

The analysis can include the modeling of user behavior to generate actionable data that can be used in the design and optimization of electrified transit systems. Consultant can analyze user driving patterns – over time and geography – to derive charging patterns and convert them to likely load profiles and analyze the impact that these charging behaviors will have on energy costs or electrical infrastructure and can develop tailored solutions to minimize cost, increase resilience, and/or enhance sustainability. Power systems modelling, transport modelling, and GIS can be adopted to provide granular detail on EV location effectiveness. Temporal and spatial modelling of EV charging demand and supply provides clients with insight into the ideal locations and specifications for charging infrastructure. Furthermore, the granular insights on EV consumption and knowledge of charging levels, profiles, and vehicle data can demonstrate how these charging signatures might appear in customer data, enabling identification and characterization of EV charging.

Geospatial data evaluation

The Consultant will work with existing mapping data including **PG&E's capacity maps.** and publicly available ICA Map to understand initial feasibility of renewable and load potential on the grid. In addition, load forecast and distribution capacity data can be ingested and combined in a geospatial format with customer and load data, including available strategic growth maps and

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published plans from Authority's service territory to help identify where opportunity for growth and renewable penetration is available. This can help Authority target customer programs most effectively, down to the distribution line and address.

Mapping customer characteristics in a geospatial environment alongside CalEnviroScreen and census factors is core to understanding equity of programs and rates**.** Analysis of aging infrastructure, power outages, indoor and outdoor air pollution, and the impacts of climate change can be carried out to evaluate households and communities affected.

Greenhouse gas emissions

Greenhouse gas emissions can be evaluated on an annual and hourly basis, leveraging data from CAISO, WattTime, and other sources to include hourly emissions accounted against energy models results and operational data. This drives recommendations of efficiency and generation to clients at a building and portfolio scale in service of our mission toward decarbonization.

To consider that emissions will change over time with policy impacts and climate change Consultant's WeatherShift tool can be applied to enable designers and policymakers to understand more effectively how climate change will drive changes in building energy consumption and greenhouse gas emissions production. Combined with policy impacts and renewable development forecasts impacting hourly emissions, which can be drawn from commercial sources a range of projections for greenhouse gas emissions under various policy, technology, and climate scenarios can be developed.

Reporting & visualization

Consultant will leverage their approach to user experience (UX/UI) design to identify the specific needs of the Authority application with the aim to empower users and stakeholders with the ability to efficiently carry out tasks and make informed decisions quickly.

Consultant will begin assessing the requirements and proposed technology solution with Authority and consider other relevant stakeholders and end-users to understand the specific needs required to be incorporated into the SVCE application. This holistic and workshop-driven approach identifies the needs across a range of stakeholders and end-users.

Through the definition of user personas to reflect specific workflows and visual illustration of the functionality including, for example site selection, the selection or filtering of specific data sets, comparing land use and infrastructure scenarios as well as documentation and output options, Consultant will demonstrate the envisaged Authority application capabilities prior to implementation and to seek detailed feedback about the expected tool's functionality.

Consultant will capture findings in design documentation that is regularly shared and discussed with project stakeholders, who drive the solution that responds to their needs.

Stakeholder engagement

Engagement will primarily be with stakeholders within the Authority. The purpose of the engagement will be to seek input from staff and decisionmakers across the organization to inform decisions on program implementation, decarbonization, and other strategic aims. Therefore,

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particularly for more complex analyses, Consultant would seek to engage with the data, program, and strategic stakeholders withing the Authority during the discover and definition phases of the work, and again at the end to check that the approach and results meet Authority needs appropriately. This could include:

- Charettes to define user experience and requirements for dashboards and viewing platforms for analysis outputs
- Workshops to define the needed endpoints and uses of the data and requested analysis to ensure that the final outputs align with metrics utilized by SVCE to deploy a program
- Feedback sessions where we present the results of our analysis to ensure that the results are robust and meet the strategic needs of the organization

Additional considerations

Consultant is technology and data agnostic and—will work with the Authority to create the best solution for the problem at hand, regardless of platform, technology, or required data. Consultant can work in a variety of coding and analysis languages and data environments. Consultant's data processing, analysis, and reporting process, however, will be tailored to the unique needs of the topic area. Including Google Cloud Storage, Google BigQuery, Google Looker Studio, SQL, GitHub, Python, R, and ArcGIS—as well as other industry standard software for energy analysis and visualization solutions including PowerBI, Tableau, and custom web interfaces.

Data security plan

Data types, structure, and taxonomy will be documented and any personally identifiable information (PII) such as parcel ownership information will be excluded from Consultant's outputs. Hosting, operations and maintenance, support, and other tasks associated with cybersecurity relating to the final tool development and strategic analyses will be coordinated with the Authority during the development of each task order and documented in an information security plan to ensure all team members follow best practice. Consultant will give specific attention to data transmission and processing via external software and databases.

All work is guided by ISO 27001 providing a framework for establishing, implementing, maintaining, and continually improving an Information Security Management System (ISMS). Consultant will establish appropriate accountability and responsibility for cyber security and risk within the firm. At the heart of governance are policies and standards definition, implementation and enforcement related to cyber security, data privacy, threat and risk assessments, due diligence, etc.

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Exhibit B
Schedule of Performance

Work will be assigned by the Authority on a task order basis. Each task order shall assign work consistent with the Scope of Services, a not to exceed budget, and a schedule for performance of each such task, and shall be signed by both Parties and attached to this Agreement.

Exhibit C
Compensation

Authority shall compensate Consultant for professional services in accordance with the terms and conditions of this Agreement based on the rates and compensation schedule set forth below. Compensation shall be calculated based on the hourly rates set forth below up to the not to exceed budget amount set forth in each task order.

The compensation to be paid to Consultant under this Agreement for all services described in Exhibit "A" and reimbursable expenses shall be determined on a task order basis, which shall specify a labor estimate and a not to exceed amount. Any work performed or expenses incurred for which payment would result in a total exceeding the maximum amount of compensation set forth herein shall be at no cost to Authority unless previously approved in writing by Authority.

Rates

Personnel	Title	Hourly*
Cole Roberts	Principal	$420
Joerg Tonndorf, Heather Rosenburg, Zak Kostura	Associate Principal	$315
Rob Best, Karuna Philips, Terence Caulkins, Jeff Berg	Associate	$270
Samantha Lustado	Senior Engineer / Consultant II	$260
TBD	Senior Engineer Consultant I	$195
Kaiya Levine	Engineer / Consultant II	$185
Eric Ota	Engineer / Consultant I	$160
TBD	Graduate Consultant	$125
TBD	Administrative Support	$125

*Hourly rates are subject to an annual increase of 4% every April 1st starting April 2025. Hourly rates are linked to titles (positions) listed in second column. Team members are allocated based on their current title (position) at Arup. These positions are also subject to change.

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Invoices

Monthly Invoicing: In order to request payment, Consultant shall submit monthly invoices to the Authority describing the services performed and the applicable charges (including a summary of the work performed during that period, personnel who performed the services, hours worked, task(s) for which work was performed). Authority shall pay all undisputed invoice amounts within thirty (30) calendar days after receipt up to the maximum compensation set forth herein. Authority does not pay interest on past due amounts.

Reimbursable Expenses
Administrative, overhead, secretarial time or overtime, word processing, photocopying, in house printing, insurance and other ordinary business expenses are included within the scope of payment for services and are not reimbursable expenses. Travel expenses must be authorized in advance in writing by Authority.

License Fees
If a task order requires the use of third-party software for which Authority does not currently have a license or for which computational tasks requiring the dedication of cloud resources at cost would be required, we will include an expense allowance with the appropriate fees in our task order scope.

Additional Services
Consultant shall provide additional services outside of the services identified in Exhibit A only by advance written authorization from Authority Representative prior to commencement of any additional services. Consultant shall submit, at the Authority Representative's request, a detailed written proposal including a description of the scope of additional services, schedule, and proposed maximum compensation. Any changes mutually agreed upon by the Parties, and any increase or decrease in compensation, shall be incorporated by written amendments to this Agreement.

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Exhibit D
Insurance Requirements and Proof of Insurance

Consultant shall maintain the following minimum insurance coverage:

A. **COVERAGE**:

(1) **Workers' Compensation**:
Statutory coverage as required by the State of California.

(2) **Liability**:
Commercial general liability coverage with minimum limits of $1,000,000 per occurrence and $2,000,000 aggregate for bodily injury and property damage. ISO occurrence Form CG 0001 or equivalent is required.

(3) **Automotive**:
Comprehensive automotive liability coverage with minimum limits of $1,000,000 per accident for bodily injury and property damage. ISO Form CA 0001 or equivalent is required.

(4) **Professional Liability**
Professional liability insurance which includes coverage for the professional acts, errors and omissions of Consultant in the amount of at least $1,000,000 per claim.

(5) **Cybersecurity Liability**
Cybersecurity liability (including costs arising from data destruction, hacking or intentional breaches, crisis management activity related to data breaches, and legal claims for security breach, privacy violations, and notification costs of $3,000,000 US per occurrence.

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Exhibit E
Confidentiality and Data Security Requirements

Subject to the terms and conditions of the Agreement, current proprietary and confidential information of Authority regarding customers of Authority ("Authority Customers") and/or other confidential information (collectively "Confidential Information") may be disclosed to Consultant from time to time in connection herewith solely for the purposes set forth in the Agreement. Such disclosure is subject to the following legal continuing representations and warranties by Consultant:

1. The Confidential Information disclosed to Consultant in connection herewith may include, without limitation, the following information about Authority Customers: (a) names; (b) addresses; (c) telephone numbers and email addresses; (d) service agreement numbers and account numbers; (e) meter and other identification numbers; (f) Authority-designated account numbers; (g) electricity and gas usage (including monthly usage, monthly maximum demand, electrical or gas consumption, HP load, and other data detailing electricity or gas needs and patterns of usage); (h) billing information (including rate schedule, baseline zone, CARE participation, end use code (heat source) service voltage, medical baseline, meter cycle, bill cycle, balanced payment plan and other plans); (i) payment / deposit status; (j) number of units; and (k) other similar information specific to Authority Customers individually or in the aggregate. Confidential Information shall also include specifically any copies, drafts, revisions, analyses, summaries, extracts, memoranda, reports and other materials prepared by Consultant or its representatives that are derived from or based on Confidential Information disclosed by Authority, regardless of the form of media in which it is prepared, recorded or retained.

2. Except for electric and gas usage information provided to Consultant pursuant to this Agreement, Confidential Information does not include information that Consultant proves (a) was properly in the possession of Consultant at the time of disclosure; (b) is or becomes publicly known through no fault of Consultant, its employees or representatives; or (c) was independently developed by Consultant, its employees or representatives without access to any Confidential Information.

3. From the Effective Date, no portion of the Confidential Information may be disclosed, disseminated or appropriated by Consultant, or used for any purpose other than the purposes set forth in the Agreement.

4. Consultant shall, at all times until completion of performance under the terms of the contract or as required by law, whichever period is longer, keep the Confidential Information in the strictest confidence and shall take all reasonable measures to prevent unauthorized or improper disclosure or use of Confidential Information. Consultant shall implement and maintain reasonable security procedures and practices appropriate to the nature of the information, to protect the personal information from unauthorized access, destruction, use, modification, or disclosure and prohibits the use of the data for purposes not set forth in the Agreement. Specifically, Consultant shall restrict access to Confidential Information, and to materials prepared in connection therewith, to those employees or

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representatives of Consultant who have a "need to know" such Confidential Information in the course of their duties with respect to the Consultant program and who agree to be bound by the nondisclosure and confidentiality obligations of this Agreement. Prior to disclosing any Confidential Information to its employees or representatives, Consultant shall require such employees or representatives to whom Confidential Information is to be disclosed to review this Agreement and to agree to be bound by the terms of this Agreement. Consultant shall not disclose Confidential Information or otherwise make it available, in any form or manner, to any other person or entity that is not Consultant's employee or representative (a "Third Party"), except where that Third Party has separately entered into a nondisclosure agreement with Authority. Without limiting Consultant's obligation of confidentiality as further described herein, specific to each Task Order Consultant shall discuss with Authority the need and format for establishing, maintaining, and providing a written description to Authority of, a data privacy and information security program, including physical, technical, administrative, and organizational safeguards, that comply with or are substantial similar to the security controls identified in the current version of NIST SP800-53, and that is designed to: (a) ensure the security and confidentiality of the Authority's Data; (b) protect against any anticipated threats or hazards to the security or integrity of the Data; (c) protect against unauthorized disclosure, access to, or use of the Data; (d) ensure the proper disposal of Data; and, (e) ensure that all employees, agents, and subcontractors of Consultant, if any, comply with all of the foregoing. In no case shall the safeguards of Consultant's data privacy and information security program used to protect Data be less stringent than the safeguards used by Consultant for its own data. If the services include handling credit card information for payments, then the Consultant shall comply at all times with all applicable Payment Card Industry Data Security Standards (PCI-DSS). Consultant agrees and warrants that it is responsible for the security of "cardholder data" that Consultant possesses, stores, processes or transmits on behalf of the Authority, and for any impact on the security of Authority's cardholder data environment adversely affected by any failure of Company to maintain compliance with provisions of the PCI-DSS applicable to the services. No less than annually, Consultant shall conduct a comprehensive independent third-party audit of its data privacy and information security program and provide such audit findings to Authority. The required audit shall be a SAS-70 (or successor standard) compliant audit, and Consultant shall provide the audit findings in the form of an SAS-70 Type II report.

5. Notwithstanding the above, Consultant may disclose Confidential Information to the extent required by an order, subpoena, or lawful process requiring the disclosure of such Confidential Information issued by a court or other governmental authority of competent jurisdiction, provided that Consultant notifies Authority immediately upon receipt thereof to allow Authority to seek protective treatment for such Confidential Information.

6. In the event of any act, error or omission, negligence, misconduct, or breach that permits any unauthorized access to, or that compromises or is suspected to compromise the security, confidentiality, or integrity of the Authority's Data or the physical, technical, administrative, or organizational safeguards put in place by Consultant that relate to the protection of the security, confidentiality, or integrity of the Data, Consultant shall, as applicable: (a) notify Authority as soon as practicable but no later than twenty-four (24) hours of becoming aware of such occurrence; (b) cooperate with Authority in

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investigating the occurrence, including making available all relevant records, logs, files, data reporting, and other materials required to comply with applicable law or as otherwise required by Authority; (c) in the case of Confidential Information, at Authority's sole election, (i) notify the affected individuals who comprise the Confidential Information as soon as practicable but no later than is required to comply with applicable law including, but not limited to, the provisions of California Civil Code Section 1798.82, or, in the absence of any legally required notification period, within five (5) calendar days of becoming aware of the occurrence; or, (ii) reimburse Authority for any costs in notifying the affected individuals; (d) in the case of Confidential Information, provide third-party credit and identity monitoring services to each of the affected individuals who comprise the Confidential Information for the period required to comply with applicable law, or, in the absence of any legally required monitoring services, for no less than twelve (12) months following the date of notification to such individuals; (e) perform or take any other actions required to comply with applicable law as a result of the occurrence; (f) without limiting Consultant's obligations of indemnification as further described in this Agreement, indemnify, defend, and hold harmless Authority for any and all Claims (as defined herein), including reasonable attorneys' fees, costs, and expenses incidental thereto, which may be suffered by, accrued against, charged to, or recoverable from Authority in connection with the occurrence; (g) be responsible for recreating lost Data in the manner and on the schedule set by Authority without charge to Authority; (h) provide to Authority a detailed plan within ten (10) calendar days of the occurrence describing the measures Consultant will undertake to prevent a future occurrence and (i) upon conclusion of the occurrence, or at Authority's request, provide to Authority a comprehensive summary of the occurrence, including reason for occurrence, details of occurrence, how occurrence was addressed and any other information required by Authority, which shall be executed by Consultant and may be relied upon by Authority as a true and accurate account of the occurrence. Notification to affected individuals, as described above, shall comply with applicable law, be written in plain language, and contain, at a minimum: name and contact information of Consultant's representative; a description of the nature of the loss; a list of the types of data involved; the known or approximate date of the loss; how such loss may affect the affected individual; what steps Consultant has taken to protect the affected individual; what steps the affected individual can take to protect himself or herself; contact information for major credit card reporting agencies; and, information regarding the credit and identity monitoring services to be provided by Consultant. This Section shall survive the termination of this Agreement.

7. It shall be considered a material breach of this Agreement if Consultant engages in a pattern or practice of accessing, storing, using, or disclosing the Confidential Information in violation of the contractual obligations described herein. Consultant understands that if Authority finds that Consultant is engaged in a pattern or practice of accessing, storing, using, or disclosing Confidential Information in violation of this Agreement Authority shall promptly cease all disclosures of Confidential Information to Consultant. Consultant further understands that if Authority receives a customer complaint about Consultant's misuse of data or other violation of the Disclosure Provisions, Authority shall promptly cease disclosing that customer's information to Consultant and shall notify the California Public Utilities Commission of the complaint.

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8. Consultant shall be liable for the actions of, or any disclosure or use by, its employees or representatives contrary to this Agreement; however, such liability shall not limit or prevent any actions by Authority directly against such employees or representatives for improper disclosure and/or use. In no event shall Consultant or its employees or representatives take any actions related to Confidential Information that are inconsistent with holding Confidential Information in strict confidence. Consultant shall immediately notify Authority in writing if it becomes aware of the possibility of any misuse or misappropriation of the Confidential Information by Consultant or any of its employees or representatives. However, nothing in this Agreement shall obligate the Authority to monitor or enforce the Consultant's compliance with the terms of this Agreement.

9. Consultant shall comply with the consumer protections concerning subsequent disclosure and use set forth in Attachment B to California Public Utilities Commission (CPUC) Decision No. 12-08-045.

10. In addition to any other requirements set forth in the Agreement, within ten (10) business days of receipt of Authority's written request, and at Authority's option, Consultant will either return to Authority all tangible Confidential Information, including but not limited to all electronic files, documentation, notes, plans, drawings, and copies thereof, or will provide Authority with written certification that all such tangible Confidential Information of Authority has been destroyed.

11. Consultant acknowledges that disclosure or misappropriation of any Confidential Information could cause irreparable harm to Authority and/or Authority Customers, the amount of which may be difficult to assess. Accordingly, Consultant hereby confirms that the Authority shall be entitled to apply to a court of competent jurisdiction or the California Public Utilities Commission for an injunction, specific performance or such other relief (without posting bond) as may be appropriate in the event of improper disclosure or misuse of its Confidential Information by Consultant or its employees or representatives. Such right shall, however, be construed to be in addition to any other remedies available to the Authority, in law or equity.

12. In addition to all other remedies, Consultant shall indemnify and hold harmless Authority, its officers, employees, or agents from and against and claims, actions, suits, liabilities, damages, losses, expenses and costs (including reasonable attorneys' fees, costs and disbursements) attributable to actions or non-actions of Consultant and/or its employees and/or its representatives in connection with the use or disclosure of Confidential Information.

13. When Consultant fully performs the purposes set forth in the Agreement, or if at any time Consultant ceases performance or Authority requires Consultant cease performance of the purposes set forth in the Agreement, Consultant shall promptly return or destroy (with written notice to Authority itemizing the materials destroyed) all Confidential Information then in its possession at the direction of Authority. Notwithstanding the foregoing, the nondisclosure obligations of this Agreement shall survive any termination of this Agreement.

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AGREEMENT BETWEEN THE SILICON VALLEY CLEAN ENERGY AUTHORITY
AND
Evergreen Economics
FOR
Data Analytics Support

THIS AGREEMENT ("Agreement"), is entered into this 14th day of December 2023, by and between the SILICON VALLEY CLEAN ENERGY AUTHORITY, an independent public agency, ("Authority"), and Evergreen Economics, a S-Corp whose address is 1500 SW 1st Ave, Suite 1000, Portland, OR 97201 (hereinafter referred to as "Consultant") (collectively referred to as the "Parties" and individually as a "Party").

RECITALS:

A. Authority is an independent public agency duly organized under the provisions of the Joint Exercise of Powers Act of the State of California (Government Code Section 6500 *et seq*.) ("Act") with the power to conduct its business and enter into agreements.

B. Consultant possesses the skill, experience, ability, background, certification and knowledge to provide the services described in this Agreement pursuant to the terms and conditions described herein.

C. Authority and Consultant desire to enter into an agreement for data analytics support upon the terms and conditions herein.

NOW, THEREFORE, the Parties mutually agree as follows:

1. **TERM**

The term of this Agreement shall commence on December 14, 2023, and shall terminate on December 13, 2028, unless terminated earlier as set forth herein.

2. **SERVICES TO BE PERFORMED**

Consultant shall perform each and every service set forth in Exhibit "A" pursuant to the schedule of performance set forth in Exhibit "B," both of which are attached hereto and incorporated herein by this reference.

3. **COMPENSATION TO CONSULTANT**

Consultant shall be compensated for services performed pursuant to this Agreement on a task order basis as directed by the Authority and based on the rates and terms set forth in Exhibit "C," which is attached hereto and incorporated herein by this reference.

4. **TIME IS OF THE ESSENCE**

Consultant and Authority agree that time is of the essence regarding the performance of this Agreement.

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5. **STANDARD OF CARE**

Consultant agrees to perform all services required by this Agreement in a manner commensurate with the prevailing standards of specially trained professionals in the San Francisco Bay Area under similar circumstances and in a manner reasonably satisfactory to Authority and agrees that all services shall be performed by qualified and experienced personnel. Consultant shall be responsible to Authority for any errors or omissions in the performance of work pursuant to this Agreement. Should any errors caused by Consultant be found in such services or products, Consultant shall correct the errors at no additional charge to Authority by redoing the professional work and/or revising the work product(s) called for in the Scope of Services to eliminate the errors. Should Consultant fail to make such correction in a reasonably timely manner, such correction may be made by Authority, and the cost thereof shall be charged to Consultant. In addition to all other available remedies, Authority may deduct the cost of such correction from any retention amount held by Authority or may withhold payment otherwise owed Consultant under this Agreement up to the amount of the cost of correction.

6. **INDEPENDENT PARTIES**

Authority and Consultant intend that the relationship between them created by this Agreement is that of an independent contractor. The manner and means of conducting the work are under the control of Consultant, except to the extent they are limited by statute, rule or regulation and the express terms of this Agreement. No civil service status or other right of employment will be acquired by virtue of Consultant's services. None of the benefits provided by Authority to its employees, including but not limited to, unemployment insurance, workers' compensation plans, vacation and sick leave are available from Authority to Consultant, its employees or agents. Deductions shall not be made for any state or federal taxes, FICA payments, PERS payments, or other purposes normally associated with an employer-employee relationship from any fees due Consultant. Payments of the above items, if required, are the responsibility of Consultant. Consultant shall indemnify and hold harmless Authority and its elected officials, officers, employees, servants, designated volunteers, and agents serving as independent contractors in the role of Authority officials, from any and all liability, damages, claims, costs and expenses of any nature to the extent arising from Consultant's personnel practices. Authority shall have the right to offset against the amount of any fees due to Consultant under this Agreement any amount due to Authority from Consultant as a result of Consultant's failure to promptly pay to Authority any reimbursement or indemnification arising under this section.

7. **NO RECOURSE AGAINST CONSTITUENT MEMBERS OF AUTHORITY**

Authority is organized as a Joint Powers Authority in accordance with the Joint Powers Act of the State of California (Government Code Section 6500 et seq.) pursuant to a Joint Powers Agreement dated March 31, 2016, and is a public entity separate from its constituent members. Authority shall solely be responsible for all debts, obligations and liabilities accruing and arising out of this Agreement. Consultant shall have no rights and shall not make any claims, take any actions or assert any remedies against any of Authority's constituent members in connection with this Agreement.

8. **NON-DISCRIMINATION**

In the performance of this Agreement, Consultant, and any subconsultant under the

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Consultant, shall not discriminate against any employee, subcontractor or applicant for employment because of race, color, religious creed, sex, gender, gender identity, gender expression, marital status, national origin, ancestry, age, physical disability, mental disability, medical condition, genetic information, sexual orientation, military or veteran status, or other basis prohibited by law, except as provided in Government Code section 12940. Consultant shall have responsibility for compliance with this Section.

9. **HOLD HARMLESS AND INDEMNIFICATION**

A. General Indemnification. To the fullest extent permitted by law, Consultant shall, at its sole cost and expense, defend, hold harmless and indemnify Authority and its elected officials, officers, attorneys, agents, employees, designated volunteers, successors, assigns and those Authority agents serving as independent contractors in the role of Authority officials (collectively "Indemnitees"), from and against any and all damages, costs, expenses, liabilities, claims, demands, causes of action, proceedings, expenses, judgments, penalties, liens, and losses of any nature whatsoever, including fees of accountants, attorneys, or other professionals and all costs associated therewith and the payment of all consequential damages (collectively "Liabilities"), in law or equity, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to the acts or omissions of Consultant, its officers, agents, servants, employees, subcontractors, materialmen, consultants or their officers, agents, servants or employees (or any entity or individual that Consultant shall bear the legal liability thereof) in the performance of this Agreement, including the Indemnitees' active or passive negligence, except for Liabilities arising from the sole negligence or willful misconduct of the Indemnitees as determined by court decision or by the agreement of the Parties. Consultant shall defend the Indemnitees in any action or actions filed in connection with any Liabilities with counsel of the Indemnitees' choice, and shall pay all costs and expenses, including all attorneys' fees and experts' costs actually incurred in connection with such defense. Consultant shall reimburse the Indemnitees for any and all legal expenses and costs incurred by Indemnitees in connection therewith.

B. Intellectual Property Indemnification. Consultant hereby certifies that it owns, controls, or licenses and retains all right, title, and interest in and to any intellectual property it uses in relation to this Agreement, including the design, look, feel, features, source code, content, and other technology relating to any part of the services and including all related patents, inventions, trademarks, and copyrights, all applications therefor, and all trade names, service marks, know how, and trade secrets (collectively referred to as "IP Rights"), except as otherwise expressly provided by this Agreement. Consultant warrants that the services to be provided pursuant to this Agreement do not infringe, violate, trespass, or constitute the unauthorized use or misappropriation of any IP Rights of any third party. Consultant shall indemnify, defend, and hold Indemnitees, harmless from and against any Liabilities by a third party that the services to be provided pursuant to this Agreement infringe or violate any third-party's IP Rights, provided any such right is enforceable in the United States. Such costs and expenses shall include reasonable attorneys' fees of counsel of Authority's choice, expert fees and all other costs and fees of litigation.

C. The acceptance of the services by Authority shall not operate as a waiver of these rights of indemnification. The hold harmless and indemnification provisions of this Section shall apply regardless of whether or not any insurance policies are determined to be applicable to the Liability.

D. Consultant's indemnifications and obligations under this section shall survive the

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expiration or termination of this Agreement.

10. **INSURANCE**

A. General Requirements. On or before the commencement of the term of this Agreement, Consultant shall furnish Authority with certificates showing the type, amount, class of operations covered, effective dates and dates of expiration of insurance coverage in compliance with the requirements listed in Exhibit "D," which is attached hereto and incorporated herein by this reference. Such insurance and certificates, which do not limit Consultant's indemnification obligations under this Agreement, shall also contain substantially the following statement: "Should any of the above insurance covered by this certificate be canceled or coverage reduced before the expiration date thereof, the insurer affording coverage shall provide thirty (30) days' advance written notice to the Authority by certified mail, Attention: Chief Executive Officer." Consultant shall maintain in force at all times during the performance of this Agreement all appropriate coverage of insurance required by this Agreement with an insurance company that is acceptable to Authority and licensed to do insurance business in the State of California. Endorsements naming the Authority as additional insured shall be submitted with the insurance certificates.

B. Subrogation Waiver. Consultant agrees that in the event of loss due to any of the perils for which he/she has agreed to provide comprehensive general and automotive liability insurance, Consultant shall look solely to his/her/its insurance for recovery. Consultant hereby grants to Authority, on behalf of any insurer providing comprehensive general and automotive liability insurance to either Consultant or Authority with respect to the services of Consultant herein, a waiver of any right to subrogation which any such insurer of Consultant may acquire against Authority by virtue of the payment of any loss under such insurance.

C. Failure to Secure or Maintain Insurance. If Consultant at any time during the term hereof should fail to secure or maintain the foregoing insurance, Authority shall be permitted to obtain such insurance in the Consultant's name or as an agent of the Consultant and shall be compensated by the Consultant for the costs of the insurance premiums at the maximum rate permitted by law and computed from the date written notice is received that the premiums have not been paid.

D. Additional Insured. Authority, its members, officers, employees and volunteers shall be named as additional insureds under all insurance coverages, except any professional liability insurance, required by this Agreement. The naming of an additional insured shall not affect any recovery to which such additional insured would be entitled under this policy if not named as such additional insured. An additional insured named herein shall not be held liable for any premium, deductible portion of any loss, or expense of any nature on this policy or any extension thereof. Any other insurance held by an additional insured shall not be required to contribute anything toward any loss or expense covered by the insurance provided by this policy.

E. Sufficiency of Insurance. The insurance limits required by Authority are not represented as being sufficient to protect Consultant. Consultant is advised to confer with Consultant's insurance broker to determine adequate coverage for Consultant.

F. Maximum Coverage and Limits. It shall be a requirement under this Agreement that any available insurance proceeds broader than or in excess of the specified minimum Insurance coverage requirements and/or limits shall be available to the additional insureds. Furthermore, the requirements for coverage and limits shall be the minimum coverage and limits specified in this Agreement, or the broader coverage and maximum limits of coverage of any insurance policy or

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proceeds available to the named insured, whichever is greater.

11. **CONFLICT OF INTEREST**

Consultant warrants that it, its officers, employees, associates and subcontractors, presently have no interest, and will not acquire any interest, direct or indirect, financial or otherwise, that would conflict in any way with the performance of this Agreement, and that it, its officers, employees, associates and subcontractors, will not employ any person having such an interest. Consultant and its officers, employees, associates and subcontractors, if any, shall comply with all conflict of interest statutes of the State of California applicable to Consultant's services under this Agreement, including the Political Reform Act (Gov. Code § 81000, et seq.) and Government Code Section 1090. During the term of this Agreement, Consultant may perform similar services for other clients, but Consultant and its officers, employees, associates and subcontractors shall not, without the Authority Representative's prior written approval, perform work for another person or entity for whom Consultant is not currently performing work that would require Consultant or one of its officers, employees, associates or subcontractors to abstain from a decision under this Agreement pursuant to a conflict of interest statute. Consultant shall incorporate a clause substantially similar to this section into any subcontract that Consultant executes in connection with the performance of this Agreement. Consultant understands that it may be required to fill out a conflict of interest form if the services provided under this Agreement require Consultant to make certain governmental decisions or serve in a staff Authority, as defined in Title 2, Division 6, Section 18700 of the California Code of Regulations.

12. **PROHIBITION AGAINST TRANSFERS**

Consultant shall not assign, sublease, hypothecate, or transfer this Agreement, or any interest therein, directly or indirectly, by operation of law or otherwise, without prior written consent of Authority. Any attempt to do so without such consent shall be null and void, and any assignee, sublessee, pledgee, or transferee shall acquire no right or interest by reason of such attempted assignment, hypothecation or transfer. However, claims for money by Consultant from Authority under this Agreement may be assigned to a bank, trust company or other financial institution without prior written consent. Written notice of such assignment shall be promptly furnished to Authority by Consultant.

The sale, assignment, transfer or other disposition of any of the issued and outstanding capital stock of Consultant, or of the interest of any general partner or joint venturer or syndicate member or cotenant, if Consultant is a partnership or joint venture or syndicate or cotenancy, which shall result in changing the control of Consultant, shall be construed as an assignment of this Agreement. Control means fifty percent (50%) or more of the voting power of the corporation.

13. **SUBCONTRACTOR APPROVAL**

Unless prior written consent from Authority is obtained, only those persons and subcontractors whose names are attached to this Agreement shall be used in the performance of this Agreement.

In the event that Consultant employs subcontractors, such subcontractors shall be required to furnish proof of workers' compensation insurance and shall also be required to carry general, automobile and professional liability insurance in substantial conformity to the insurance carried by Consultant. In addition, any work or services subcontracted hereunder shall be subject to each provision of this Agreement.

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Consultant agrees to include within their subcontract(s) with any and all subcontractors the same requirements and provisions of this Agreement, including the indemnity and insurance requirements, to the extent they apply to the scope of the subcontractor's work. Subcontractors hired by Consultant shall agree to be bound to Consultant and Authority in the same manner and to the same extent as Consultant is bound to Authority under this Agreement. Subcontractors shall agree to include these same provisions within any sub-subcontract. Consultant shall provide a copy of the Indemnity and Insurance provisions of this Agreement to any subcontractor. Consultant shall require all subcontractors to provide valid certificates of insurance and the required endorsements prior to commencement of any work and will provide proof of compliance to Authority.

14. **REPORTS**

A. Each and every report, draft, work product, map, record and other document, hereinafter collectively referred to as "Report", reproduced, prepared or caused to be prepared by Consultant pursuant to or in connection with this Agreement, shall be the exclusive property of Authority. Consultant shall not copyright any Report required by this Agreement and shall execute appropriate documents to assign to Authority the copyright to Reports created pursuant to this Agreement. Any Report, information and data acquired or required by this Agreement shall become the property of Authority, and all publication rights are reserved to Authority. Consultant may retain a copy of any Report furnished to the Authority pursuant to this Agreement.

B. All Reports prepared by Consultant may be used by Authority in execution or implementation of: (1) The original project for which Consultant was hired; (2) Completion of the original project by others; (3) Subsequent additions to the original project; and/or (4) Other Authority projects as Authority deems appropriate in its sole discretion.

C. Consultant shall, at such time and in such form as Authority may require, furnish reports concerning the status of services required under this Agreement.

D. All Reports shall also be provided in electronic format, both in the original file format (e.g., Microsoft Word) and in PDF format.

E. No Report, information or other data given to or prepared or assembled by Consultant pursuant to this Agreement that has not been publicly released shall be made available to any individual or organization by Consultant without prior approval by Authority.

F. Authority shall be the owner of and shall be entitled upon request to immediate possession of accurate reproducible copies of Reports or other pertinent data and information gathered or computed by Consultant prior to termination of this Agreement or upon completion of the work pursuant to this Agreement.

15. **RECORDS**

Consultant shall maintain complete and accurate records with respect to costs, expenses, receipts and other such information required by Authority that relate to the performance of services under this Agreement, in sufficient detail to permit an evaluation of the services and costs. All such records shall be clearly identified and readily accessible. Consultant shall provide free access to such books and records to the representatives of Authority or its designees at all proper times, and gives Authority the right to examine and audit same, and to make transcripts therefrom as necessary, and to allow inspection of all work, data, documents, proceedings and activities related to this Agreement. Such records, together with supporting documents, shall be maintained for a minimum period of five (5) years after Consultant receives final payment from Authority for all

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services required under this agreement

16. **PARTY REPRESENTATIVES**

The Chief Executive Officer ("Authority Representative") shall represent the Authority in all matters pertaining to the services to be performed under this Agreement. Tami Rasmussen (Consultant Representative") shall represent Consultant in all matters pertaining to the services to be performed under this Agreement.

17. **CONFIDENTIAL INFORMATION AND DOCUMENTS**

A. Consultant covenants that all data, reports, documents, discussion, or other information (collectively "Data") developed or received by Consultant or provided for performance of this Agreement are deemed confidential and shall not be disclosed or released by Consultant without prior written authorization by Authority. Authority shall grant such authorization if applicable law requires disclosure. Consultant, its officers, employees, agents, or subcontractors shall not without written authorization from the Authority Representative or unless requested in writing by the Authority's General Counsel, voluntarily provide declarations, letters of support, testimony at depositions, response to interrogatories or other information concerning the work performed under this Agreement or relating to any project or property located within the Authority. Response to a subpoena or court order shall not be considered "voluntary," provided Consultant gives Authority notice of such court order or subpoena.

B. Consultant shall promptly notify Authority should Consultant, its officers, employees, agents or subcontractors be served with any summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, request for admissions or other discovery request, court order or subpoena from any party regarding this Agreement and the work performed thereunder or with respect to any project or property located within the Authority. Authority may, but has no obligation to, represent Consultant or be present at any deposition, hearing or similar proceeding. Consultant agrees to cooperate fully with Authority and to provide Authority with the opportunity to review any response to discovery requests provided by Consultant. However, Authority's right to review any such response does not imply or mean the right by Authority to control, direct or rewrite the response.

C. It is understood that Authority is subject to the California Public Records Act (Gov. Code § 7920.000 *et seq*.). If a request under the California Public Records Act is made to view any documents Consultant provided to Authority, Authority shall notify Consultant of the request and the date that such records will be released to the requester unless Consultant obtains a court order enjoining that disclosure. If Consultant fails to obtain a court order enjoining that disclosure, Authority will release the requested information on the date specified.

D. In the event Authority gives Consultant written notice of a "litigation hold" or request under the Public Records Act, then as to all data identified in such notice or request, Consultant shall, at no additional cost to Authority, isolate and preserve all such data pending receipt of further direction from the Authority.

E. Consultant agrees to comply with the confidentiality and data protection provisions set forth in Exhibit "E," attached hereto and incorporated herein by this reference.

F. Consultant's covenants under this section shall survive the expiration or termination of this Agreement.

18. **NOTICES**

Any notice, consent, request, demand, bill, invoice, report or other communication required

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or permitted under this Agreement shall be in writing and conclusively deemed effective: (a) on personal delivery, (b) on confirmed delivery by courier service during Consultant's and Authority's regular business hours, or (c) three Business Days after deposit in the United States mail, by first class mail, postage prepaid, and addressed to the Party to be notified as set forth below:

TO AUTHORITY:
333 W. El Camino Real
Suite 330
Sunnyvale CA 94087
Attention: Chief Executive Officer

TO CONSULTANT:
Steve Grover
Evergreen Economics
1500 SW 1st Ave, Suite 1000
Portland, OR 97201

19. **TERMINATION**

In the event Consultant fails or refuses to perform any of the provisions hereof at the time and in the manner required hereunder, Consultant shall be deemed in default in the performance of this Agreement. If Consultant fails to cure the default within the time specified (which shall be determined by the Authority but shall be not less than 10 days) and according to the requirements set forth in Authority's written notice of default, and in addition to any other remedy available to the Authority by law, the Authority Representative may terminate the Agreement by giving Consultant written notice thereof, which shall be effective immediately. The Authority Representative shall also have the option, at its sole discretion and without cause, of terminating this Agreement by giving seven (7) calendar days' prior written notice to Consultant as provided herein. Upon receipt of any notice of termination, Consultant shall immediately discontinue performance.

In the event of Authority's termination of this Agreement due to no fault or failure of performance by Consultant, Authority shall pay Consultant for services satisfactorily performed up to the effective date of termination. Upon termination, Consultant shall immediately deliver to the Authority any and all copies of studies, sketches, drawings, computations, and other material or products, whether or not completed, prepared by Consultant or given to Consultant, in connection with this Agreement. Such materials shall become the property of Authority. Consultant shall have no other claim against Authority by reason of such termination, including any claim for compensation.

20. **COMPLIANCE WITH LAWS**

Consultant shall keep itself informed of all applicable federal, state and local laws, ordinances, codes, regulations and requirements which may, in any manner, affect those employed by it or in any way affect the performance of its services pursuant to this Agreement. Consultant shall, at all times, observe and comply with all such laws and regulations, including, but not limited to the Americans with Disabilities Act, the Stored Communications Act, 18 U.S.C. Section 2701, et seq., California Civil Code Sections 1798.80 through 1798.84, and the California Consumer

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Privacy Act, Civil Code Section 1798.100 *et seq*. Authority, and its officers and employees, shall not be liable at law or in equity by reason of the failure of the Consultant to comply with this paragraph.

Consultant represents and agrees that all personnel engaged by Consultant in performing services are and shall be fully qualified and are authorized or permitted under state and local law to perform such services. Consultant represents and warrants to Authority that it has all licenses, permits, certificates, qualifications, and approvals required by law to provide the services and work required to perform services under this Agreement, including a business license. Consultant further represents and warrants that it shall keep in effect all such licenses, permits, and other approvals during the term of this Agreement.

21. **CONFLICT OF LAW**

This Agreement shall be interpreted under, and enforced by the laws of the State of California. The Agreement and obligations of the Parties are subject to all valid laws, orders, rules, and regulations of the authorities having jurisdiction over this Agreement (or the successors of those authorities). Any suits brought pursuant to this Agreement shall be filed with the Superior Court of the County of Santa Clara, State of California.

22. **ADVERTISEMENT**

Consultant shall not post, exhibit, display or allow to be posted, exhibited, displayed any signs, advertising, show bills, lithographs, posters or cards of any kind pertaining to the services performed under this Agreement unless prior written approval has been secured from Authority to do otherwise.

23. **WAIVER**

A waiver by Authority of any breach of any term, covenant, or condition contained herein shall not be deemed to be a waiver of any subsequent breach of the same or any other term, covenant, or condition contained herein, whether of the same or a different character.

24. **INTEGRATED CONTRACT**

This Agreement represents the full and complete understanding of every kind or nature whatsoever between the Parties, and all preliminary negotiations and agreements of whatsoever kind or nature are merged herein. No verbal agreement or implied covenant shall be held to vary the provisions hereof. Any modification of this Agreement will be effective only by a written document signed by both Authority and Consultant.

25. **AUTHORITY**

The individual(s) executing this Agreement represent and warrant that they have the legal Authority and authority to do so on behalf of their respective legal entities.

26. **INSERTED PROVISIONS**

Each provision and clause required by law to be inserted into the Agreement shall be deemed to be enacted herein, and the Agreement shall be read and enforced as though each were included herein. If through mistake or otherwise, any such provision is not inserted or is not correctly inserted, the Agreement shall be amended to make such insertion on application by either Party.

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27. **CAPTIONS AND TERMS**

The captions in this Agreement are for convenience only, are not a part of the Agreement and in no way affect, limit or amplify the terms or provisions of this Agreement.

28. **AUTHORITY'S RIGHTS TO EMPLOY OTHER CONSULTANTS**

Authority reserves the right to employ other consultants in connection with the subject matter of the Scope of Services.

29. **EXHIBITS**

The Exhibits referenced in this Agreement are attached hereto and incorporated herein by this reference as though set forth in full in the Agreement. If any inconsistency exists or arises between a provision of this Agreement and a provision of any exhibit, or between a provision of this Agreement and a provision of Consultant's proposal, the provisions of this Agreement shall control.

30. **FORCE MAJEURE**

Consultant shall not be liable for any failure to perform its obligations under this Agreement if Consultant presents acceptable evidence, in Authority's sole judgment, that such failure was due to acts of God, embargoes, inability to obtain labor or materials or reasonable substitutes for labor or materials, governmental restrictions, governmental regulations, governmental controls, judicial orders, enemy or hostile governmental action, civil commotion, fire or other casualty, or other causes beyond Consultant's reasonable control and not due to any act by Consultant.

31. **FINAL PAYMENT ACCEPTANCE CONSTITUTES RELEASE**

The acceptance by Consultant of the final payment made under this Agreement shall operate as and be a release of Authority from all claims and liabilities for compensation to Consultant for anything done, furnished or relating to Consultant's work or services. Acceptance of payment shall be any negotiation of Authority's check or the failure to make a written extra compensation claim within ten calendar days of the receipt of that check. However, approval or payment by Authority shall not constitute, nor be deemed, a release of the responsibility and liability of Consultant, its employees, subcontractors and agents for the accuracy and competency of the information provided and/or work performed; nor shall such approval or payment be deemed to be an assumption of such responsibility or liability by Authority for any defect or error in the work prepared by Consultant, its employees, subcontractors and agents.

32. **ATTORNEY FEES**

In any litigation or other proceeding by which a Party seeks to enforce its rights under this Agreement (whether in contract, tort or both) or seeks a declaration of any rights or obligations under this Agreement, the prevailing Party shall be entitled to recover all attorneys' fees, experts' fees, and other costs actually incurred in connection with such litigation or other proceeding, in addition to all other relief to which that Party may be entitled.

33. **SEVERABILITY**

If any provision in this Agreement is held by a court of competent jurisdiction to be illegal,

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invalid, void, or unenforceable, the remaining provisions will nevertheless continue in full force without being impaired or invalidated in any way.

34. **SUCCESSORS AND ASSIGNS**

The terms and conditions of this Agreement shall be binding on the successors and assigns of the Parties to this Agreement.

35. **NO THIRD PARTY BENEFICIARIES INTENDED**

This Agreement is made solely for the benefit of the Parties to this Agreement and their respective successors and assigns, and no other person or entity may have or acquire a right by virtue of this Agreement.

36. **COUNTERPARTS; FACSIMILE/PDF/ELECTRONIC SIGNATURE**

This Agreement may be executed in multiple counterparts, all of which shall be deemed an original, and all of which will constitute one and the same instrument. The Parties agree that a facsimile, PDF or electronic signature may substitute for and have the same legal effect as the original signature.

37. **DRAFTING PARTY**

This Agreement shall be construed without regard to the Party that drafted it. Any ambiguity shall not be interpreted against either Party and shall, instead, be resolved in accordance with other applicable rules concerning the interpretation of contracts.

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IN WITNESS WHEREOF, the Parties have caused the Agreement to be executed as of the date set forth above.

RECOMMENDED FOR APPROVAL

_____
Steve Grover, President

RECOMMENDED FOR APPROVAL

_____
Amrit Singh, Chief Financial Officer/Director of Administrative Services

CONSULTANT NAME
Evergreen Economics By: _____

Name: Steve Grover
Title: President
Date: _____

A Joint Powers Authority

By: _____
Name: Girish Balachandran
Title: Chief Executive Officer
Date: _____

SILICON VALLEY CLEAN ENERGY AUTHORITY

APPROVED AS TO FORM:

_____
Counsel for Authority

ATTEST:

_____
Authority Clerk

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Exhibit A
Scope of Services

The services to be provided by Consultant to Authority under this Scope of Services may be varied and flexible based on Authority's specific requirements as they evolve over time. Areas in which Consultant may provide services to Authority are expected to include, but are not limited to, the below Topic Areas and Tasks. Specific tasks to be completed shall be effectuated by task order(s) agreed to by the Parties.

This Agreement does not guarantee a statement of work and Authority may employ multiple consultants to perform the services outlined in this Exhibit.

Topic Areas

1. Evaluation of program impacts during/after programs; evaluation, measurement and verification (EM&V) and synthesis into learnings to help Authority answer key research questions
2. Customer segmentation for program marketing and adoption potential analysis
3. Equity analysis and mapping
4. Complex data analysis on large, disparate datasets using various tools (Google Cloud Platform, Excel, R, Python, etc.). Example datasets include:
    a. Interval electricity data
    b. Gas consumption data
    c. Customer attribute data
    d. Building characteristics data
    e. Distributed energy resource (DER) adoption data
    f. Marketing data
    g. Program participation data
    h. Census and equity data
    i. Rates and billing data
5. Perform spatial analysis and create interactive maps
6. Create dashboards and reports to track KPIs

Additional Topic Areas may be assigned, following the set of Tasks laid out below, where Consultant has clear relevant expertise.

Tasks

1. Strategic Analysis Scoping: general support for Authority in identifying areas of opportunity for strategic analysis. Sample subtasks:
    - Provide expertise and exploratory analysis on existing datasets or third-party datasets
    - Synthesize/summarize other analyses performed for Authority or other entities
    - Engage with stakeholders to identify and prioritize key questions

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2. Strategic Analysis Design and Execution: comprehensive support for designing and executing strategic analyses to answer key questions identified by Authority. Sample subtasks:
    - Based on described need and interest of Authority staff (e.g., research objectives), establish a plan to analyze available or new data
    - Create an Excel tool to be used by Authority staff (e.g., greenhouse gas emissions inventory and forecast tool)
    - Conduct analysis of large, disparate datasets using statistics, machine learning, and optimization algorithms
    - Create an interactive map to be published on Authority's website
    - Leverage a third-party tool to carry out analyses and train staff to become power users of the tool
    - Export and structure relevant data from a customer relationship management (CRM) system and database
    - Leverage Authority's data warehouse to conduct analysis, export data, and import data

3. Strategic Analysis Reporting: report on the results and learnings of strategic analyses. Sample subtasks:
    - Create a slide deck of results and learnings
    - Create a written report of results and learnings to be distributed internally or published
    - Hold presentation(s) to discuss results and learnings
    - Create a dashboard containing key metrics, maps, and visualizations

4. Miscellaneous Other Support: assist Authority in its overarching decarbonization mission by providing expertise and assistance on other topics and in other relevant fields. Sample subtasks:
    - On a time and materials basis, Authority may require additional work outside the rest of the scope. Future analyses will be unique and may require additional support. Analytics-adjacent activities (e.g. data cleaning, acquiring third-party datasets) may also require support from Consultant.

Cooperation With Other Consultants

In the event Authority shall employ other consultants for services performed pursuant to this Agreement or otherwise, Consultant shall cooperate, coordinate with, and assist such consultants in a manner that will best further serve and protect the Authority's interests. Consultant shall not commit or permit any act which will interfere with the performance of work by any other consultant employed by Authority.

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Exhibit B
Schedule of Performance

Work will be assigned by the Authority on a task order basis. Each task order shall assign work consistent with the Scope of Services, a not to exceed budget, and a schedule for performance of each such task, and shall be signed by both Parties and attached to this Agreement.

Exhibit C
Compensation

Authority shall compensate Consultant for professional services in accordance with the terms and conditions of this Agreement based on the rates and compensation schedule set forth below. Compensation shall be calculated based on the hourly rates set forth below up to the not to exceed budget amount set forth in each task order.

The compensation to be paid to Consultant under this Agreement for all services described in Exhibit "A" and reimbursable expenses shall be determined on a task order basis, which shall specify a labor estimate and a not to exceed amount. Any work performed or expenses incurred for which payment would result in a total exceeding the maximum amount of compensation set forth herein shall be at no cost to Authority unless previously approved in writing by Authority.

Rates

Personnel	Title	Hourly Rate					
		2023	2024	2025	2026	2027	2028
Tami Rasmussen Ted Helvoigt	Senior Vice President	$235	$235	$240	$240	$245	$245
Kevin Price Ingo Bensch	Vice President	$230	$230	$235	$235	$240	$240
Martha Wudka Jesse Emge Gerry Valle	Principal Consultant	$210	$220	$225	$225	$230	$230
Sarah Monohon Zhazira Alisheva	Senior Consultant	$195	$210	$210	$215	$220	$220
Kayla Kirksey, Hans Lehndorff	Consultant	$185	$190	$190	$200	$200	$210
Liandra Chapman	Senior Analyst	$175	$180	$180	$190	$190	$200
Sherab Dorji Nada Nakahara Kara Hardman	Analyst	$160	$160	$165	$170	$170	$175
Tricia McCracken Nick McMillan Jenny Fraser	Administrative Support	$115	$120	$120	$125	$125	$130

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Invoices

Monthly Invoicing: In order to request payment, Consultant shall submit monthly invoices to the Authority describing the services performed and the applicable charges (including a summary of the work performed during that period, personnel who performed the services, hours worked, task(s) for which work was performed). Authority shall pay all undisputed invoice amounts within thirty (30) calendar days after receipt up to the maximum compensation set forth herein. Authority does not pay interest on past due amounts.

Reimbursable Expenses
Administrative, overhead, secretarial time or overtime, word processing, photocopying, in house printing, insurance and other ordinary business expenses are included within the scope of payment for services and are not reimbursable expenses. Travel expenses must be authorized in advance in writing by Authority

Additional Services
Consultant shall provide additional services outside of the services identified in Exhibit A only by advance written authorization from Authority Representative prior to commencement of any additional services. Consultant shall submit, at the Authority Representative's request, a detailed written proposal including a description of the scope of additional services, schedule, and proposed maximum compensation. Any changes mutually agreed upon by the Parties, and any increase or decrease in compensation, shall be incorporated by written amendments to this Agreement.

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Exhibit D
Insurance Requirements and Proof of Insurance

Consultant shall maintain the following minimum insurance coverage:

A. **COVERAGE**:

(1) **Workers' Compensation**:
Statutory coverage as required by the State of California.

(2) **Liability**:
Commercial general liability coverage with minimum limits of $1,000,000 per occurrence and $2,000,000 aggregate for bodily injury and property damage. ISO occurrence Form CG 0001 or equivalent is required.

(3) **Automotive**:
Comprehensive automotive liability coverage with minimum limits of $1,000,000 per accident for bodily injury and property damage. ISO Form CA 0001 or equivalent is required.

(4) **Professional Liability**
Professional liability insurance which includes coverage for the professional acts, errors and omissions of Consultant in the amount of at least $1,000,000.

(5) **Privacy and Cybersecurity Liability**
Privacy and cybersecurity liability (including costs arising from data destruction, hacking or intentional breaches, crisis management activity related to data breaches, and legal claims for security breach, privacy violations, and notification costs of at least $5,000,000 US per occurrence.

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Exhibit E
Confidentiality and Data Security Requirements

Subject to the terms and conditions of the Agreement, current proprietary and confidential information of Authority regarding customers of Authority ("Authority Customers") and/or other confidential information (collectively "Confidential Information") may be disclosed to Consultant from time to time in connection herewith solely for the purposes set forth in the Agreement. Such disclosure is subject to the following legal continuing representations and warranties by Consultant:

1. The Confidential Information disclosed to Consultant in connection herewith may include, without limitation, the following information about Authority Customers: (a) names; (b) addresses; (c) telephone numbers and email addresses; (d) service agreement numbers and account numbers; (e) meter and other identification numbers; (f) Authority-designated account numbers; (g) electricity and gas usage (including monthly usage, monthly maximum demand, electrical or gas consumption, HP load, and other data detailing electricity or gas needs and patterns of usage); (h) billing information (including rate schedule, baseline zone, CARE participation, end use code (heat source) service voltage, medical baseline, meter cycle, bill cycle, balanced payment plan and other plans); (i) payment / deposit status; (j) number of units; and (k) other similar information specific to Authority Customers individually or in the aggregate. Confidential Information shall also include specifically any copies, drafts, revisions, analyses, summaries, extracts, memoranda, reports and other materials prepared by Consultant or its representatives that are derived from or based on Confidential Information disclosed by Authority, regardless of the form of media in which it is prepared, recorded or retained.

2. Except for electric and gas usage information provided to Consultant pursuant to this Agreement, Confidential Information does not include information that Consultant proves (a) was properly in the possession of Consultant at the time of disclosure; (b) is or becomes publicly known through no fault of Consultant, its employees or representatives; or (c) was independently developed by Consultant, its employees or representatives without access to any Confidential Information.

3. From the Effective Date, no portion of the Confidential Information may be disclosed, disseminated or appropriated by Consultant, or used for any purpose other than the purposes set forth in the Agreement.

4. Consultant shall, at all times and in perpetuity, keep the Confidential Information in the strictest confidence and shall take all reasonable measures to prevent unauthorized or improper disclosure or use of Confidential Information. Consultant shall implement and maintain reasonable security procedures and practices appropriate to the nature of the information, to protect the personal information from unauthorized access, destruction, use, modification, or disclosure and prohibits the use of the data for purposes not set forth in the Agreement. Specifically, Consultant shall restrict access to Confidential Information, and to materials prepared in connection therewith, to those employees or representatives of Consultant who have a "need to know" such Confidential Information in the course of

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their duties with respect to the Consultant program and who agree to be bound by the nondisclosure and confidentiality obligations of this Agreement. Prior to disclosing any Confidential Information to its employees or representatives, Consultant shall require such employees or representatives to whom Confidential Information is to be disclosed to review this Agreement and to agree to be bound by the terms of this Agreement. Consultant shall not disclose Confidential Information or otherwise make it available, in any form or manner, to any other person or entity that is not Consultant's employee or representative (a "Third Party"), except where that Third Party has separately entered into a nondisclosure agreement with Authority. Without limiting Consultant's obligation of confidentiality as further described herein, Consultant shall be responsible for establishing, maintaining, and providing a written description to Authority of, a data privacy and information security program, including physical, technical, administrative, and organizational safeguards, that comply with or are substantial similar to the security controls identified in the current version of NIST SP800-53, and that is designed to: (a) ensure the security and confidentiality of the Authority's Data; (b) protect against any anticipated threats or hazards to the security or integrity of the Data; (c) protect against unauthorized disclosure, access to, or use of the Data; (d) ensure the proper disposal of Data; and, (e) ensure that all employees, agents, and subcontractors of Consultant, if any, comply with all of the foregoing. In no case shall the safeguards of Consultant's data privacy and information security program used to protect Data be less stringent than the safeguards used by Consultant for its own data. If the services include handling credit card information, then the Consultant shall comply at all times with all applicable Payment Card Industry Data Security Standards (PCI-DSS). Consultant agrees and warrants that it is responsible for the security of "cardholder data" that Consultant possesses, stores, processes or transmits on behalf of the Authority, and for any impact on the security of Authority's cardholder data environment adversely affected by any failure of Company to maintain compliance with provisions of the PCI-DSS applicable to the services. No less than annually, Consultant shall conduct a comprehensive independent third-party audit of its data privacy and information security program and provide such audit findings to Authority. The required audit shall be a SAS-70 (or successor standard) compliant audit, and Consultant shall provide the audit findings in the form of an SAS-70 Type II report.

5. Notwithstanding the above, Consultant may disclose Confidential Information to the extent required by an order, subpoena, or lawful process requiring the disclosure of such Confidential Information issued by a court or other governmental authority of competent jurisdiction, provided that Consultant notifies Authority immediately upon receipt thereof to allow Authority to seek protective treatment for such Confidential Information.

6. In the event of any act, error or omission, negligence, misconduct, or breach that permits any unauthorized access to, or that compromises or is suspected to compromise the security, confidentiality, or integrity of the Authority's Data or the physical, technical, administrative, or organizational safeguards put in place by Consultant that relate to the protection of the security, confidentiality, or integrity of the Data, Consultant shall, as applicable: (a) notify Authority as soon as practicable but no later than twenty-four (24) hours of becoming aware of such occurrence; (b) cooperate with Authority in investigating the occurrence, including making available all relevant records, logs, files, data reporting, and other materials required to comply with applicable law or as otherwise

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required by Authority; (c) in the case of Confidential Information, at Authority's sole election, (i) notify the affected individuals who comprise the Confidential Information as soon as practicable but no later than is required to comply with applicable law including, but not limited to, the provisions of California Civil Code Section 1798.82, or, in the absence of any legally required notification period, within five (5) calendar days of becoming aware of the occurrence; or, (ii) reimburse Authority for any costs in notifying the affected individuals; (d) in the case of Confidential Information, provide third-party credit and identity monitoring services to each of the affected individuals who comprise the Confidential Information for the period required to comply with applicable law, or, in the absence of any legally required monitoring services, for no less than twelve (12) months following the date of notification to such individuals; (e) perform or take any other actions required to comply with applicable law as a result of the occurrence; (f) without limiting Consultant's obligations of indemnification as further described in this Agreement, indemnify, defend, and hold harmless Authority for any and all Claims (as defined herein), including reasonable attorneys' fees, costs, and expenses incidental thereto, which may be suffered by, accrued against, charged to, or recoverable from Authority in connection with the occurrence; (g) be responsible for recreating lost Data in the manner and on the schedule set by Authority without charge to Authority; (h) provide to Authority a detailed plan within ten (10) calendar days of the occurrence describing the measures Consultant will undertake to prevent a future occurrence and (i) upon conclusion of the occurrence, or at Authority's request, provide to Authority a comprehensive summary of the occurrence, including reason for occurrence, details of occurrence, how occurrence was addressed and any other information required by Authority, which shall be executed by Consultant and may be relied upon by Authority as a true and accurate account of the occurrence. Notification to affected individuals, as described above, shall comply with applicable law, be written in plain language, and contain, at a minimum: name and contact information of Consultant's representative; a description of the nature of the loss; a list of the types of data involved; the known or approximate date of the loss; how such loss may affect the affected individual; what steps Consultant has taken to protect the affected individual; what steps the affected individual can take to protect himself or herself; contact information for major credit card reporting agencies; and, information regarding the credit and identity monitoring services to be provided by Consultant. This Section shall survive the termination of this Agreement.

7. It shall be considered a material breach of this Agreement if Consultant engages in a pattern or practice of accessing, storing, using, or disclosing the Confidential Information in violation of the contractual obligations described herein. Consultant understands that if Authority finds that Consultant is engaged in a pattern or practice of accessing, storing, using, or disclosing Confidential Information in violation of this Agreement Authority shall promptly cease all disclosures of Confidential Information to Consultant. Consultant further understands that if Authority receives a customer complaint about Consultant's misuse of data or other violation of the Disclosure Provisions, Authority shall promptly cease disclosing that customer's information to Consultant and shall notify the California Public Utilities Commission of the complaint.

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8. Consultant shall be liable for the actions of, or any disclosure or use by, its employees or representatives contrary to this Agreement; however, such liability shall not limit or prevent any actions by Authority directly against such employees or representatives for improper disclosure and/or use. In no event shall Consultant or its employees or representatives take any actions related to Confidential Information that are inconsistent with holding Confidential Information in strict confidence. Consultant shall immediately notify Authority in writing if it becomes aware of the possibility of any misuse or misappropriation of the Confidential Information by Consultant or any of its employees or representatives. However, nothing in this Agreement shall obligate the Authority to monitor or enforce the Consultant's compliance with the terms of this Agreement.

9. Consultant shall comply with the consumer protections concerning subsequent disclosure and use set forth in Attachment B to California Public Utilities Commission (CPUC) Decision No. 12-08-045.

10. In addition to any other requirements set forth in the Agreement, within ten (10) business days of receipt of Authority's written request, and at Authority's option, Consultant will either return to Authority all tangible Confidential Information, including but not limited to all electronic files, documentation, notes, plans, drawings, and copies thereof, or will provide Authority with written certification that all such tangible Confidential Information of Authority has been destroyed.

11. Consultant acknowledges that disclosure or misappropriation of any Confidential Information could cause irreparable harm to Authority and/or Authority Customers, the amount of which may be difficult to assess. Accordingly, Consultant hereby confirms that the Authority shall be entitled to apply to a court of competent jurisdiction or the California Public Utilities Commission for an injunction, specific performance or such other relief (without posting bond) as may be appropriate in the event of improper disclosure or misuse of its Confidential Information by Consultant or its employees or representatives. Such right shall, however, be construed to be in addition to any other remedies available to the Authority, in law or equity.

12. In addition to all other remedies, Consultant shall indemnify and hold harmless Authority, its officers, employees, or agents from and against and claims, actions, suits, liabilities, damages, losses, expenses and costs (including reasonable attorneys' fees, costs and disbursements) attributable to actions or non-actions of Consultant and/or its employees and/or its representatives in connection with the use or disclosure of Confidential Information.

13. When Consultant fully performs the purposes set forth in the Agreement, or if at any time Consultant ceases performance or Authority requires Consultant cease performance of the purposes set forth in the Agreement, Consultant shall promptly return or destroy (with written notice to Authority itemizing the materials destroyed) all Confidential Information then in its possession at the direction of Authority. Notwithstanding the foregoing, the nondisclosure obligations of this Agreement shall survive any termination of this Agreement.

DRAFT

AGREEMENT BETWEEN THE SILICON VALLEY CLEAN ENERGY AUTHORITY
AND
Opinion Dynamics Corporation
FOR
Data Analytics Support

THIS AGREEMENT ("Agreement"), is entered into this 14th day of December, 2023, by and between the SILICON VALLEY CLEAN ENERGY AUTHORITY, an independent public agency, ("Authority"), and Opinion Dynamics Corporation, a Massachusetts Corporation whose address is 130 Turner St., Suite 520, Waltham, MA 02453 (hereinafter referred to as "Consultant") (collectively referred to as the "Parties" and individually as a "Party").

RECITALS:

A. Authority is an independent public agency duly organized under the provisions of the Joint Exercise of Powers Act of the State of California (Government Code Section 6500 *et seq*.) ("Act") with the power to conduct its business and enter into agreements.

B. Consultant possesses the skill, experience, ability, background, certification and knowledge to provide the services described in this Agreement pursuant to the terms and conditions described herein.

C. Authority and Consultant desire to enter into an agreement for data analytics support upon the terms and conditions herein.

NOW, THEREFORE, the Parties mutually agree as follows:

1. **TERM**

The term of this Agreement shall commence on December 14, 2023, and shall terminate on December 13, 2028, unless terminated earlier as set forth herein.

2. **SERVICES TO BE PERFORMED**

Consultant shall perform each and every service set forth in Exhibit "A" pursuant to the schedule of performance set forth in Exhibit "B," both of which are attached hereto and incorporated herein by this reference.

3. **COMPENSATION TO CONSULTANT**

Consultant shall be compensated for services performed pursuant to this Agreement on a task order basis as directed by the Authority and based on the rates and terms set forth in Exhibit "C," which is attached hereto and incorporated herein by this reference.

4. **TIME IS OF THE ESSENCE**

Consultant and Authority agree that time is of the essence regarding the performance of this Agreement.

5. **STANDARD OF CARE**

Consultant agrees to perform all services required by this Agreement in a manner commensurate with the prevailing standards of specially trained professionals in the San Francisco Bay Area under similar circumstances and in a manner reasonably satisfactory to Authority and agrees that all services shall be performed by qualified and experienced personnel. Consultant shall be responsible to Authority for any errors or omissions in the performance of work pursuant to this Agreement. Should any errors caused by Consultant be found in such services or products, Consultant shall correct the errors at no additional charge to Authority by redoing the professional work and/or revising the work product(s) called for in the Scope of Services to eliminate the errors. Should Consultant fail to make such correction in a reasonably timely manner, such correction may be made by Authority, and the cost thereof shall be charged to Consultant. In addition to all other available remedies, Authority may deduct the cost of such correction from any retention amount held by Authority or may withhold payment otherwise owed Consultant under this Agreement up to the amount of the cost of correction.

6. **INDEPENDENT PARTIES**

Authority and Consultant intend that the relationship between them created by this Agreement is that of an independent contractor. The manner and means of conducting the work are under the control of Consultant, except to the extent they are limited by statute, rule or regulation and the express terms of this Agreement. No civil service status or other right of employment will be acquired by virtue of Consultant's services. None of the benefits provided by Authority to its employees, including but not limited to, unemployment insurance, workers' compensation plans, vacation and sick leave are available from Authority to Consultant, its employees or agents. Deductions shall not be made for any state or federal taxes, FICA payments, PERS payments, or other purposes normally associated with an employer-employee relationship from any fees due Consultant. Payments of the above items, if required, are the responsibility of Consultant. Consultant shall indemnify and hold harmless Authority and its elected officials, officers, employees, servants, designated volunteers, and agents serving as independent contractors in the role of Authority officials, from any and all liability, damages, claims, costs and expenses of any nature to the extent arising from Consultant's personnel practices. Authority shall have the right to offset against the amount of any fees due to Consultant under this Agreement any amount due to Authority from Consultant as a result of Consultant's failure to promptly pay to Authority any reimbursement or indemnification arising under this section.

7. **NO RECOURSE AGAINST CONSTITUENT MEMBERS OF AUTHORITY**

Authority is organized as a Joint Powers Authority in accordance with the Joint Powers Act of the State of California (Government Code Section 6500 et seq.) pursuant to a Joint Powers Agreement dated March 31, 2016, and is a public entity separate from its constituent members. Authority shall solely be responsible for all debts, obligations and liabilities accruing and arising out of this Agreement. Consultant shall have no rights and shall not make any claims, take any actions or assert any remedies against any of Authority's constituent members in connection with this Agreement.

8. **NON-DISCRIMINATION**

In the performance of this Agreement, Consultant, and any subconsultant under the

Consultant, shall not discriminate against any employee, subcontractor or applicant for employment because of race, color, religious creed, sex, gender, gender identity, gender expression, marital status, national origin, ancestry, age, physical disability, mental disability, medical condition, genetic information, sexual orientation, military or veteran status, or other basis prohibited by law, except as provided in Government Code section 12940. Consultant shall have responsibility for compliance with this Section.

9. **HOLD HARMLESS AND INDEMNIFICATION**

A. General Indemnification. To the fullest extent permitted by law, Consultant shall, at its sole cost and expense, defend, hold harmless and indemnify Authority and its elected officials, officers, attorneys, agents, employees, designated volunteers, successors, assigns and those Authority agents serving as independent contractors in the role of Authority officials (collectively "Indemnitees"), from and against any and all damages, costs, expenses, liabilities, claims, demands, causes of action, proceedings, expenses, judgments, penalties, liens, and losses of any nature whatsoever, including fees of accountants, attorneys, or other professionals and all costs associated therewith and the payment of all consequential damages (collectively "Liabilities"), in law or equity, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to the acts or omissions of Consultant, its officers, agents, servants, employees, subcontractors, materialmen, consultants or their officers, agents, servants or employees (or any entity or individual that Consultant shall bear the legal liability thereof) in the performance of this Agreement, including the Indemnitees' active or passive negligence, except for Liabilities arising from the sole negligence or willful misconduct of the Indemnitees as determined by court decision or by the agreement of the Parties. Consultant shall defend the Indemnitees in any action or actions filed in connection with any Liabilities with counsel of the Indemnitees' choice, and shall pay all costs and expenses, including all attorneys' fees and experts' costs actually incurred in connection with such defense. Consultant shall reimburse the Indemnitees for any and all legal expenses and costs incurred by Indemnitees in connection therewith.

B. Intellectual Property Indemnification. Consultant hereby certifies that it owns, controls, or licenses and retains all right, title, and interest in and to any intellectual property it uses in relation to this Agreement, including the design, look, feel, features, source code, content, and other technology relating to any part of the services and including all related patents, inventions, trademarks, and copyrights, all applications therefor, and all trade names, service marks, know how, and trade secrets (collectively referred to as "IP Rights"), except as otherwise expressly provided by this Agreement. Consultant warrants that the services to be provided pursuant to this Agreement do not infringe, violate, trespass, or constitute the unauthorized use or misappropriation of any IP Rights of any third party. Consultant shall indemnify, defend, and hold Indemnitees, harmless from and against any Liabilities by a third party that the services to be provided pursuant to this Agreement infringe or violate any third-party's IP Rights, provided any such right is enforceable in the United States. Such costs and expenses shall include reasonable attorneys' fees of counsel of Authority's choice, expert fees and all other costs and fees of litigation.

C. The acceptance of the services by Authority shall not operate as a waiver of these rights of indemnification. The hold harmless and indemnification provisions of this Section shall apply regardless of whether or not any insurance policies are determined to be applicable to the Liability.

D. Consultant's indemnifications and obligations under this section shall survive the

expiration or termination of this Agreement.

10. **INSURANCE**

A. General Requirements. On or before the commencement of the term of this Agreement, Consultant shall furnish Authority with certificates showing the type, amount, class of operations covered, effective dates and dates of expiration of insurance coverage in compliance with the requirements listed in Exhibit "D," which is attached hereto and incorporated herein by this reference. Such insurance and certificates, which do not limit Consultant's indemnification obligations under this Agreement, shall also contain substantially the following statement: "Should any of the above insurance covered by this certificate be canceled or coverage reduced before the expiration date thereof, the insurer affording coverage shall provide thirty (30) days' advance written notice to the Authority by certified mail, Attention: Chief Executive Officer." Consultant shall maintain in force at all times during the performance of this Agreement all appropriate coverage of insurance required by this Agreement with an insurance company that is acceptable to Authority and licensed to do insurance business in the State of California. Endorsements naming the Authority as additional insured shall be submitted with the insurance certificates.

B. Subrogation Waiver. Consultant agrees that in the event of loss due to any of the perils for which he/she has agreed to provide comprehensive general and automotive liability insurance, Consultant shall look solely to his/her/its insurance for recovery. Consultant hereby grants to Authority, on behalf of any insurer providing comprehensive general and automotive liability insurance to either Consultant or Authority with respect to the services of Consultant herein, a waiver of any right to subrogation which any such insurer of Consultant may acquire against Authority by virtue of the payment of any loss under such insurance.

C. Failure to Secure or Maintain Insurance. If Consultant at any time during the term hereof should fail to secure or maintain the foregoing insurance, Authority shall be permitted to obtain such insurance in the Consultant's name or as an agent of the Consultant and shall be compensated by the Consultant for the costs of the insurance premiums at the maximum rate permitted by law and computed from the date written notice is received that the premiums have not been paid.

D. Additional Insured. Authority, its members, officers, employees and volunteers shall be named as additional insureds under all insurance coverages, except any professional liability insurance, required by this Agreement. The naming of an additional insured shall not affect any recovery to which such additional insured would be entitled under this policy if not named as such additional insured. An additional insured named herein shall not be held liable for any premium, deductible portion of any loss, or expense of any nature on this policy or any extension thereof. Any other insurance held by an additional insured shall not be required to contribute anything toward any loss or expense covered by the insurance provided by this policy.

E. Sufficiency of Insurance. The insurance limits required by Authority are not represented as being sufficient to protect Consultant. Consultant is advised to confer with Consultant's insurance broker to determine adequate coverage for Consultant.

F. Maximum Coverage and Limits. It shall be a requirement under this Agreement that any available insurance proceeds broader than or in excess of the specified minimum Insurance coverage requirements and/or limits shall be available to the additional insureds. Furthermore, the requirements for coverage and limits shall be the minimum coverage and limits specified in this Agreement, or the broader coverage and maximum limits of coverage of any insurance policy or

proceeds available to the named insured, whichever is greater.

11. **CONFLICT OF INTEREST**

Consultant warrants that it, its officers, employees, associates and subcontractors, presently have no interest, and will not acquire any interest, direct or indirect, financial or otherwise, that would conflict in any way with the performance of this Agreement, and that it, its officers, employees, associates and subcontractors, will not employ any person having such an interest. Consultant and its officers, employees, associates and subcontractors, if any, shall comply with all conflict of interest statutes of the State of California applicable to Consultant's services under this Agreement, including the Political Reform Act (Gov. Code § 81000, et seq.) and Government Code Section 1090. During the term of this Agreement, Consultant may perform similar services for other clients, but Consultant and its officers, employees, associates and subcontractors shall not, without the Authority Representative's prior written approval, perform work for another person or entity for whom Consultant is not currently performing work that would require Consultant or one of its officers, employees, associates or subcontractors to abstain from a decision under this Agreement pursuant to a conflict of interest statute. Consultant shall incorporate a clause substantially similar to this section into any subcontract that Consultant executes in connection with the performance of this Agreement. Consultant understands that it may be required to fill out a conflict of interest form if the services provided under this Agreement require Consultant to make certain governmental decisions or serve in a staff Authority, as defined in Title 2, Division 6, Section 18700 of the California Code of Regulations.

12. **PROHIBITION AGAINST TRANSFERS**

Consultant shall not assign, sublease, hypothecate, or transfer this Agreement, or any interest therein, directly or indirectly, by operation of law or otherwise, without prior written consent of Authority. Any attempt to do so without such consent shall be null and void, and any assignee, sublessee, pledgee, or transferee shall acquire no right or interest by reason of such attempted assignment, hypothecation or transfer. However, claims for money by Consultant from Authority under this Agreement may be assigned to a bank, trust company or other financial institution without prior written consent. Written notice of such assignment shall be promptly furnished to Authority by Consultant.

The sale, assignment, transfer or other disposition of any of the issued and outstanding capital stock of Consultant, or of the interest of any general partner or joint venturer or syndicate member or cotenant, if Consultant is a partnership or joint venture or syndicate or cotenancy, which shall result in changing the control of Consultant, shall be construed as an assignment of this Agreement. Control means fifty percent (50%) or more of the voting power of the corporation.

13. **SUBCONTRACTOR APPROVAL**

Unless prior written consent from Authority is obtained, only those persons and subcontractors whose names are attached to this Agreement shall be used in the performance of this Agreement.

In the event that Consultant employs subcontractors, such subcontractors shall be required to furnish proof of workers' compensation insurance and shall also be required to carry general, automobile and professional liability insurance in substantial conformity to the insurance carried by Consultant. In addition, any work or services subcontracted hereunder shall be subject to each provision of this Agreement.

Consultant agrees to include within their subcontract(s) with any and all subcontractors the same requirements and provisions of this Agreement, including the indemnity and insurance requirements, to the extent they apply to the scope of the subcontractor's work. Subcontractors hired by Consultant shall agree to be bound to Consultant and Authority in the same manner and to the same extent as Consultant is bound to Authority under this Agreement. Subcontractors shall agree to include these same provisions within any sub-subcontract. Consultant shall provide a copy of the Indemnity and Insurance provisions of this Agreement to any subcontractor. Consultant shall require all subcontractors to provide valid certificates of insurance and the required endorsements prior to commencement of any work and will provide proof of compliance to Authority.

14. **REPORTS**

A. Each and every report, draft, work product, map, record and other document, hereinafter collectively referred to as "Report", reproduced, prepared or caused to be prepared by Consultant pursuant to or in connection with this Agreement, shall be the exclusive property of Authority. Consultant shall not copyright any Report required by this Agreement and shall execute appropriate documents to assign to Authority the copyright to Reports created pursuant to this Agreement. Any Report, information and data acquired or required by this Agreement shall become the property of Authority, and all publication rights are reserved to Authority. Consultant may retain a copy of any Report furnished to the Authority pursuant to this Agreement.

B. All Reports prepared by Consultant may be used by Authority in execution or implementation of: (1) The original project for which Consultant was hired; (2) Completion of the original project by others; (3) Subsequent additions to the original project; and/or (4) Other Authority projects as Authority deems appropriate in its sole discretion.

C. Consultant shall, at such time and in such form as Authority may require, furnish reports concerning the status of services required under this Agreement.

D. All Reports shall also be provided in electronic format, both in the original file format (e.g., Microsoft Word) and in PDF format.

E. No Report, information or other data given to or prepared or assembled by Consultant pursuant to this Agreement that has not been publicly released shall be made available to any individual or organization by Consultant without prior approval by Authority.

F. Authority shall be the owner of and shall be entitled upon request to immediate possession of accurate reproducible copies of Reports or other pertinent data and information gathered or computed by Consultant prior to termination of this Agreement or upon completion of the work pursuant to this Agreement.

15. **RECORDS**

Consultant shall maintain complete and accurate records with respect to costs, expenses, receipts and other such information required by Authority that relate to the performance of services under this Agreement, in sufficient detail to permit an evaluation of the services and costs. All such records shall be clearly identified and readily accessible. Consultant shall provide free access to such books and records to the representatives of Authority or its designees at all proper times, and gives Authority the right to examine and audit same, and to make transcripts therefrom as necessary, and to allow inspection of all work, data, documents, proceedings and activities related to this Agreement. Such records, together with supporting documents, shall be maintained for a minimum period of five (5) years after Consultant receives final payment from Authority for all

services required under this agreement

16. **PARTY REPRESENTATIVES**

The Chief Executive Officer ("Authority Representative") shall represent the Authority in all matters pertaining to the services to be performed under this Agreement. Megan Campbell, Senior Vice President (Consultant Representative") shall represent Consultant in all matters pertaining to the services to be performed under this Agreement.

17. **CONFIDENTIAL INFORMATION AND DOCUMENTS**

A. Consultant covenants that all data, reports, documents, discussion, or other information (collectively "Data") developed or received by Consultant or provided for performance of this Agreement are deemed confidential and shall not be disclosed or released by Consultant without prior written authorization by Authority. Authority shall grant such authorization if applicable law requires disclosure. Consultant, its officers, employees, agents, or subcontractors shall not without written authorization from the Authority Representative or unless requested in writing by the Authority's General Counsel, voluntarily provide declarations, letters of support, testimony at depositions, response to interrogatories or other information concerning the work performed under this Agreement or relating to any project or property located within the Authority. Response to a subpoena or court order shall not be considered "voluntary," provided Consultant gives Authority notice of such court order or subpoena.

B. Consultant shall promptly notify Authority should Consultant, its officers, employees, agents or subcontractors be served with any summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, request for admissions or other discovery request, court order or subpoena from any party regarding this Agreement and the work performed thereunder or with respect to any project or property located within the Authority. Authority may, but has no obligation to, represent Consultant or be present at any deposition, hearing or similar proceeding. Consultant agrees to cooperate fully with Authority and to provide Authority with the opportunity to review any response to discovery requests provided by Consultant. However, Authority's right to review any such response does not imply or mean the right by Authority to control, direct or rewrite the response.

C. It is understood that Authority is subject to the California Public Records Act (Gov. Code § 7920.000 *et seq*.). If a request under the California Public Records Act is made to view any documents Consultant provided to Authority, Authority shall notify Consultant of the request and the date that such records will be released to the requester unless Consultant obtains a court order enjoining that disclosure. If Consultant fails to obtain a court order enjoining that disclosure, Authority will release the requested information on the date specified.

D. In the event Authority gives Consultant written notice of a "litigation hold" or request under the Public Records Act, then as to all data identified in such notice or request, Consultant shall, at no additional cost to Authority, isolate and preserve all such data pending receipt of further direction from the Authority.

E. Consultant agrees to comply with the confidentiality and data protection provisions set forth in Exhibit "E," attached hereto and incorporated herein by this reference.

F. Consultant's covenants under this section shall survive the expiration or termination of this Agreement.

18. **NOTICES**

Any notice, consent, request, demand, bill, invoice, report or other communication required

or permitted under this Agreement shall be in writing and conclusively deemed effective: (a) on personal delivery, (b) on confirmed delivery by courier service during Consultant's and Authority's regular business hours, or (c) three Business Days after deposit in the United States mail, by first class mail, postage prepaid, and addressed to the Party to be notified as set forth below:

TO AUTHORITY:
333 W. El Camino Real
Suite 330
Sunnyvale CA 94087
Attention: Chief Executive Officer

TO CONSULTANT:
Thomas Medlin, C.F.O.
Opinion Dynamics Corporation
130 Turner St., Suite 520
Waltham, MA 02453

19. **TERMINATION**

In the event Consultant fails or refuses to perform any of the provisions hereof at the time and in the manner required hereunder, Consultant shall be deemed in default in the performance of this Agreement. If Consultant fails to cure the default within the time specified (which shall be determined by the Authority but shall be not less than 10 days) and according to the requirements set forth in Authority's written notice of default, and in addition to any other remedy available to the Authority by law, the Authority Representative may terminate the Agreement by giving Consultant written notice thereof, which shall be effective immediately. The Authority Representative shall also have the option, at its sole discretion and without cause, of terminating this Agreement by giving seven (7) calendar days' prior written notice to Consultant as provided herein. Upon receipt of any notice of termination, Consultant shall immediately discontinue performance.

In the event of Authority's termination of this Agreement due to no fault or failure of performance by Consultant, Authority shall pay Consultant for services satisfactorily performed up to the effective date of termination. Upon termination, Consultant shall immediately deliver to the Authority any and all copies of studies, sketches, drawings, computations, and other material or products, whether or not completed, prepared by Consultant or given to Consultant, in connection with this Agreement. Such materials shall become the property of Authority. Consultant shall have no other claim against Authority by reason of such termination, including any claim for compensation.

20. **COMPLIANCE WITH LAWS**

Consultant shall keep itself informed of all applicable federal, state and local laws, ordinances, codes, regulations and requirements which may, in any manner, affect those employed by it or in any way affect the performance of its services pursuant to this Agreement. Consultant shall, at all times, observe and comply with all such laws and regulations, including, but not limited to the Americans with Disabilities Act, the Stored Communications Act, 18 U.S.C. Section 2701, et seq., California Civil Code Sections 1798.80 through 1798.84, and the California Consumer

Privacy Act, Civil Code Section 1798.100 *et seq*. Authority, and its officers and employees, shall not be liable at law or in equity by reason of the failure of the Consultant to comply with this paragraph.

Consultant represents and agrees that all personnel engaged by Consultant in performing services are and shall be fully qualified and are authorized or permitted under state and local law to perform such services. Consultant represents and warrants to Authority that it has all licenses, permits, certificates, qualifications, and approvals required by law to provide the services and work required to perform services under this Agreement, including a business license. Consultant further represents and warrants that it shall keep in effect all such licenses, permits, and other approvals during the term of this Agreement.

21. **CONFLICT OF LAW**

This Agreement shall be interpreted under, and enforced by the laws of the State of California. The Agreement and obligations of the Parties are subject to all valid laws, orders, rules, and regulations of the authorities having jurisdiction over this Agreement (or the successors of those authorities). Any suits brought pursuant to this Agreement shall be filed with the Superior Court of the County of Santa Clara, State of California.

22. **ADVERTISEMENT**

Consultant shall not post, exhibit, display or allow to be posted, exhibited, displayed any signs, advertising, show bills, lithographs, posters or cards of any kind pertaining to the services performed under this Agreement unless prior written approval has been secured from Authority to do otherwise.

23. **WAIVER**

A waiver by Authority of any breach of any term, covenant, or condition contained herein shall not be deemed to be a waiver of any subsequent breach of the same or any other term, covenant, or condition contained herein, whether of the same or a different character.

24. **INTEGRATED CONTRACT**

This Agreement represents the full and complete understanding of every kind or nature whatsoever between the Parties, and all preliminary negotiations and agreements of whatsoever kind or nature are merged herein. No verbal agreement or implied covenant shall be held to vary the provisions hereof. Any modification of this Agreement will be effective only by a written document signed by both Authority and Consultant.

25. **AUTHORITY**

The individual(s) executing this Agreement represent and warrant that they have the legal Authority and authority to do so on behalf of their respective legal entities.

26. **INSERTED PROVISIONS**

Each provision and clause required by law to be inserted into the Agreement shall be deemed to be enacted herein, and the Agreement shall be read and enforced as though each were included herein. If through mistake or otherwise, any such provision is not inserted or is not correctly inserted, the Agreement shall be amended to make such insertion on application by either Party.

27. **CAPTIONS AND TERMS**

The captions in this Agreement are for convenience only, are not a part of the Agreement and in no way affect, limit or amplify the terms or provisions of this Agreement.

28. **AUTHORITY'S RIGHTS TO EMPLOY OTHER CONSULTANTS**

Authority reserves the right to employ other consultants in connection with the subject matter of the Scope of Services.

29. **EXHIBITS**

The Exhibits referenced in this Agreement are attached hereto and incorporated herein by this reference as though set forth in full in the Agreement. If any inconsistency exists or arises between a provision of this Agreement and a provision of any exhibit, or between a provision of this Agreement and a provision of Consultant's proposal, the provisions of this Agreement shall control.

30. **FORCE MAJEURE**

Consultant shall not be liable for any failure to perform its obligations under this Agreement if Consultant presents acceptable evidence, in Authority's sole judgment, that such failure was due to acts of God, embargoes, inability to obtain labor or materials or reasonable substitutes for labor or materials, governmental restrictions, governmental regulations, governmental controls, judicial orders, enemy or hostile governmental action, civil commotion, fire or other casualty, or other causes beyond Consultant's reasonable control and not due to any act by Consultant.

31. **FINAL PAYMENT ACCEPTANCE CONSTITUTES RELEASE**

The acceptance by Consultant of the final payment made under this Agreement shall operate as and be a release of Authority from all claims and liabilities for compensation to Consultant for anything done, furnished or relating to Consultant's work or services. Acceptance of payment shall be any negotiation of Authority's check or the failure to make a written extra compensation claim within ten calendar days of the receipt of that check. However, approval or payment by Authority shall not constitute, nor be deemed, a release of the responsibility and liability of Consultant, its employees, subcontractors and agents for the accuracy and competency of the information provided and/or work performed; nor shall such approval or payment be deemed to be an assumption of such responsibility or liability by Authority for any defect or error in the work prepared by Consultant, its employees, subcontractors and agents.

32. **ATTORNEY FEES**

In any litigation or other proceeding by which a Party seeks to enforce its rights under this Agreement (whether in contract, tort or both) or seeks a declaration of any rights or obligations under this Agreement, the prevailing Party shall be entitled to recover all attorneys' fees, experts' fees, and other costs actually incurred in connection with such litigation or other proceeding, in addition to all other relief to which that Party may be entitled.

33. **SEVERABILITY**

If any provision in this Agreement is held by a court of competent jurisdiction to be illegal,

invalid, void, or unenforceable, the remaining provisions will nevertheless continue in full force without being impaired or invalidated in any way.

34. **SUCCESSORS AND ASSIGNS**

The terms and conditions of this Agreement shall be binding on the successors and assigns of the Parties to this Agreement.

35. **NO THIRD PARTY BENEFICIARIES INTENDED**

This Agreement is made solely for the benefit of the Parties to this Agreement and their respective successors and assigns, and no other person or entity may have or acquire a right by virtue of this Agreement.

36. **COUNTERPARTS; FACSIMILE/PDF/ELECTRONIC SIGNATURE**

This Agreement may be executed in multiple counterparts, all of which shall be deemed an original, and all of which will constitute one and the same instrument. The Parties agree that a facsimile, PDF or electronic signature may substitute for and have the same legal effect as the original signature.

37. **DRAFTING PARTY**

This Agreement shall be construed without regard to the Party that drafted it. Any ambiguity shall not be interpreted against either Party and shall, instead, be resolved in accordance with other applicable rules concerning the interpretation of contracts.

IN WITNESS WHEREOF, the Parties have caused the Agreement to be executed as of the date set forth above.

RECOMMENDED FOR APPROVAL

_____
Thomas Medlin, Chief Financial Officer

RECOMMENDED FOR APPROVAL

_____
Amrit Singh, Chief Financial Officer/Director of Administrative Services

CONSULTANT NAME
Opinion Dynamics Corporation By: _____

Name: Bradley Kates_____
Title: ____ Chief Executive Officer
_____
Date: _____

SILICON VALLEY CLEAN ENERGY AUTHORITY

APPROVED AS TO FORM:

_____
Counsel for Authority

ATTEST:

_____
Authority Clerk

A Joint Powers Authority

By: _____
Name: Girish Balachandran
Title: Chief Executive Officer
Date: _____

Exhibit A
Scope of Services

The services to be provided by Consultant to Authority under this Scope of Services may be varied and flexible based on Authority's specific requirements as they evolve over time. Areas in which Consultant may provide services to Authority are expected to include, but are not limited to, the below Topic Areas and Tasks. Specific tasks to be completed shall be effectuated by task order(s) agreed to by the Parties.

This Agreement does not guarantee a statement of work and Authority may employ multiple consultants to perform the services outlined in this Exhibit.

Topic Areas

1. Rate design
2. Load disaggregation to identify and understand types, age and efficiency of electric and gas appliances
3. EV detection from consumption data
4. Evaluation of program impacts during/after programs; evaluation, measurement and verification (EM&V) and synthesis into learnings to help Authority answer key research questions
5. Weather normalization of consumption data
6. Create first-pass "electrification plans" for buildings in service territory
7. Greenhouse gas emissions analyses (e.g., historical inventories, future scenario forecasts)
8. Customer segmentation for program marketing and adoption potential analysis
9. Distribution system or neighborhood capacity availability
10. Equity analysis and mapping
11. Panel capacity based on consumption data and building characteristics
12. Load forecasting
13. Rate optimization tool
14. Complex data analysis on large, disparate datasets using various tools (Google Cloud Platform, Excel, R, Python, etc.). Example datasets include:
    a. Interval electricity data
    b. Gas consumption data
    c. Customer attribute data
    d. Building characteristics data
    e. Distributed energy resource (DER) adoption data
    f. Marketing data
    g. Program participation data
    h. Census and equity data
    i. Rates and billing data
15. Perform spatial analysis and create interactive maps
16. Create dashboards and reports to track KPIs

Additional Topic Areas may be assigned, following the set of Tasks laid out below, where Consultant has clear relevant expertise.

Tasks

1. Strategic Analysis Scoping: general support for Authority in identifying areas of opportunity for strategic analysis. Sample subtasks:
    - Provide expertise and exploratory analysis on existing datasets or third-party datasets
    - Synthesize/summarize other analyses performed for Authority or other entities
    - Engage with stakeholders to identify and prioritize key questions

2. Strategic Analysis Design and Execution: comprehensive support for designing and executing strategic analyses to answer key questions identified by Authority. Sample subtasks:
    - Based on described need and interest of Authority staff (e.g., research objectives), establish a plan to analyze available or new data
    - Create an Excel tool to be used by Authority staff (e.g., greenhouse gas emissions inventory and forecast tool)
    - Conduct analysis of large, disparate datasets using statistics, machine learning, and optimization algorithms
    - Create an interactive map to be published on Authority's website
    - Leverage a third-party tool to carry out analyses and train staff to become power users of the tool
    - Export and structure relevant data from a customer relationship management (CRM) system and database
    - Leverage Authority's data warehouse to conduct analysis, export data, and import data

3. Strategic Analysis Reporting: report on the results and learnings of strategic analyses. Sample subtasks:
    - Create a slide deck of results and learnings
    - Create a written report of results and learnings to be distributed internally or published
    - Hold presentation(s) to discuss results and learnings
    - Create a dashboard containing key metrics, maps, and visualizations

4. Miscellaneous Other Support: assist Authority in its overarching decarbonization mission by providing expertise and assistance on other topics and in other relevant fields. Sample subtasks:
    - On a time and materials basis, Authority may require additional work outside the rest of the scope. Future analyses will be unique and may require additional support. Analytics-adjacent activities (e.g. data cleaning, acquiring third-party datasets) may also require support from Consultant.

Cooperation With Other Consultants

In the event Authority shall employ other consultants for services performed pursuant to this Agreement or otherwise, Consultant shall cooperate, coordinate with, and assist such consultants in a manner that will best further serve and protect the Authority's interests. Consultant shall not commit or permit any act which will interfere with the performance of work by any other consultant employed by Authority.

Exhibit B
Schedule of Performance

Work will be assigned by the Authority on a task order basis. Each task order shall assign work consistent with the Scope of Services, a not to exceed budget, and a schedule for performance of each such task, and shall be signed by both Parties and attached to this Agreement.

Exhibit C
Compensation

Authority shall compensate Consultant for professional services in accordance with the terms and conditions of this Agreement based on the rates and compensation schedule set forth below. Compensation shall be calculated based on the hourly rates set forth below up to the not to exceed budget amount set forth in each task order.

The compensation to be paid to Consultant under this Agreement for all services described in Exhibit "A" and reimbursable expenses shall be determined on a task order basis, which shall specify a labor estimate and a not to exceed amount. Any work performed or expenses incurred for which payment would result in a total exceeding the maximum amount of compensation set forth herein shall be at no cost to Authority unless previously approved in writing by Authority.

Rates

Personnel	Title	Hourly
Megan Campbell	Senior Vice President	$262
Olivia Patterson	Senior Vice President	$262
Dr. Jordan Wilkerson	Vice President	$262
Dr. Ellen Steiner	Vice President	$262
Kessie Avseikova	Vice President	$262
Bob Ramirez	Senior Director	$245
Sunil Maheshwari	Principal	$224
Jayden Wilson	Associate Director	$224
Danielle Fulmer	Associate Director	$224
Dr. Jordan Folks	Associate Director	$224
Hilary Polis	Associate Director	$224
Dan McMartin	Director	$229
Erin Kempster	Director	$229
Abhishek Jaiswal	Associate Lead Data Engineer	$224
Laura Small	Associate Lead Data Scientist	$224
Dr. Kevin Ketchman	Associate Lead Engineer	$224
TBD	Principal Consultant	$217
TBD	Managing Consultant	$200
TBD	Senior Consultant	$195
TBD	Consultant	$190
TBD	Associate Consultant	$159
TBD	Technical Editor/Graphic Designer	$151
TBD	Interviewing Staff	$58

Invoices

Monthly Invoicing: In order to request payment, Consultant shall submit monthly invoices to the Authority describing the services performed and the applicable charges (including a summary of the work performed during that period, personnel who performed the services, hours worked, task(s) for which work was performed). Authority shall pay all undisputed invoice amounts within thirty (30) calendar days after receipt up to the maximum compensation set forth herein. Authority does not pay interest on past due amounts.

Reimbursable Expenses

Administrative, overhead, secretarial time or overtime, word processing, photocopying, in house printing, insurance and other ordinary business expenses are included within the scope of payment for services and are not reimbursable expenses. Travel expenses must be authorized in advance in writing by Authority

Additional Services

Consultant shall provide additional services outside of the services identified in Exhibit A only by advance written authorization from Authority Representative prior to commencement of any additional services. Consultant shall submit, at the Authority Representative's request, a detailed written proposal including a description of the scope of additional services, schedule, and proposed

maximum compensation. Any changes mutually agreed upon by the Parties, and any increase or decrease in compensation, shall be incorporated by written amendments to this Agreement.

Exhibit D
Insurance Requirements and Proof of Insurance

Consultant shall maintain the following minimum insurance coverage:

A. **COVERAGE**:

(1) **Workers' Compensation**:
Statutory coverage as required by the State of California.

(2) **Liability**:
Commercial general liability coverage with minimum limits of $1,000,000 per occurrence and $2,000,000 aggregate for bodily injury and property damage. ISO occurrence Form CG 0001 or equivalent is required.

(3) **Automotive**:
Comprehensive automotive liability coverage with minimum limits of $1,000,000 per accident for bodily injury and property damage. ISO Form CA 0001 or equivalent is required.

(4) **Professional Liability**
Professional liability insurance which includes coverage for the professional acts, errors and omissions of Consultant in the amount of at least $1,000,000.

(5) **Privacy and Cybersecurity Liability**
Privacy and cybersecurity liability (including costs arising from data destruction, hacking or intentional breaches, crisis management activity related to data breaches, and legal claims for security breach, privacy violations, and notification costs of at least $5,000,000 US per occurrence.

Exhibit E
Confidentiality and Data Security Requirements

Subject to the terms and conditions of the Agreement, current proprietary and confidential information of Authority regarding customers of Authority ("Authority Customers") and/or other confidential information (collectively "Confidential Information") may be disclosed to Consultant from time to time in connection herewith solely for the purposes set forth in the Agreement. Such disclosure is subject to the following legal continuing representations and warranties by Consultant:

1. The Confidential Information disclosed to Consultant in connection herewith may include, without limitation, the following information about Authority Customers: (a) names; (b) addresses; (c) telephone numbers and email addresses; (d) service agreement numbers and account numbers; (e) meter and other identification numbers; (f) Authority-designated account numbers; (g) electricity and gas usage (including monthly usage, monthly maximum demand, electrical or gas consumption, HP load, and other data detailing electricity or gas needs and patterns of usage); (h) billing information (including rate schedule, baseline zone, CARE participation, end use code (heat source) service voltage, medical baseline, meter cycle, bill cycle, balanced payment plan and other plans); (i) payment / deposit status; (j) number of units; and (k) other similar information specific to Authority Customers individually or in the aggregate. Confidential Information shall also include specifically any copies, drafts, revisions, analyses, summaries, extracts, memoranda, reports and other materials prepared by Consultant or its representatives that are derived from or based on Confidential Information disclosed by Authority, regardless of the form of media in which it is prepared, recorded or retained.

2. Except for electric and gas usage information provided to Consultant pursuant to this Agreement, Confidential Information does not include information that Consultant proves (a) was properly in the possession of Consultant at the time of disclosure; (b) is or becomes publicly known through no fault of Consultant, its employees or representatives; or (c) was independently developed by Consultant, its employees or representatives without access to any Confidential Information.

3. From the Effective Date, no portion of the Confidential Information may be disclosed, disseminated or appropriated by Consultant, or used for any purpose other than the purposes set forth in the Agreement.

4. Consultant shall, at all times and in perpetuity, keep the Confidential Information in the strictest confidence and shall take all reasonable measures to prevent unauthorized or improper disclosure or use of Confidential Information. Consultant shall implement and maintain reasonable security procedures and practices appropriate to the nature of the information, to protect the personal information from unauthorized access, destruction, use, modification, or disclosure and prohibits the use of the data for purposes not set forth in the Agreement. Specifically, Consultant shall restrict access to Confidential Information, and to materials prepared in connection therewith, to those employees or representatives of Consultant who have a "need to know" such Confidential Information in the course of

their duties with respect to the Consultant program and who agree to be bound by the nondisclosure and confidentiality obligations of this Agreement. Prior to disclosing any Confidential Information to its employees or representatives, Consultant shall require such employees or representatives to whom Confidential Information is to be disclosed to review this Agreement and to agree to be bound by the terms of this Agreement. Consultant shall not disclose Confidential Information or otherwise make it available, in any form or manner, to any other person or entity that is not Consultant's employee or representative (a "Third Party"), except where that Third Party has separately entered into a nondisclosure agreement with Authority. Without limiting Consultant's obligation of confidentiality as further described herein, Consultant shall be responsible for establishing, maintaining, and providing a written description to Authority of, a data privacy and information security program, including physical, technical, administrative, and organizational safeguards, that comply with or are substantial similar to the security controls identified in the current version of NIST SP800-53, and that is designed to: (a) ensure the security and confidentiality of the Authority's Data; (b) protect against any anticipated threats or hazards to the security or integrity of the Data; (c) protect against unauthorized disclosure, access to, or use of the Data; (d) ensure the proper disposal of Data; and, (e) ensure that all employees, agents, and subcontractors of Consultant, if any, comply with all of the foregoing. In no case shall the safeguards of Consultant's data privacy and information security program used to protect Data be less stringent than the safeguards used by Consultant for its own data. If the services include handling credit card information, then the Consultant shall comply at all times with all applicable Payment Card Industry Data Security Standards (PCI-DSS). Consultant agrees and warrants that it is responsible for the security of "cardholder data" that Consultant possesses, stores, processes or transmits on behalf of the Authority, and for any impact on the security of Authority's cardholder data environment adversely affected by any failure of Company to maintain compliance with provisions of the PCI-DSS applicable to the services. No less than annually, Consultant shall conduct a comprehensive independent third-party audit of its data privacy and information security program and provide such audit findings to Authority. The required audit shall be a SAS-70 (or successor standard) compliant audit, and Consultant shall provide the audit findings in the form of an SAS-70 Type II report.

5. Notwithstanding the above, Consultant may disclose Confidential Information to the extent required by an order, subpoena, or lawful process requiring the disclosure of such Confidential Information issued by a court or other governmental authority of competent jurisdiction, provided that Consultant notifies Authority immediately upon receipt thereof to allow Authority to seek protective treatment for such Confidential Information.

6. In the event of any act, error or omission, negligence, misconduct, or breach that permits any unauthorized access to, or that compromises or is suspected to compromise the security, confidentiality, or integrity of the Authority's Data or the physical, technical, administrative, or organizational safeguards put in place by Consultant that relate to the protection of the security, confidentiality, or integrity of the Data, Consultant shall, as applicable: (a) notify Authority as soon as practicable but no later than twenty-four (24) hours of becoming aware of such occurrence; (b) cooperate with Authority in investigating the occurrence, including making available all relevant records, logs, files, data reporting, and other materials required to comply with applicable law or as otherwise

required by Authority; (c) in the case of Confidential Information, at Authority's sole election, (i) notify the affected individuals who comprise the Confidential Information as soon as practicable but no later than is required to comply with applicable law including, but not limited to, the provisions of California Civil Code Section 1798.82, or, in the absence of any legally required notification period, within five (5) calendar days of becoming aware of the occurrence; or, (ii) reimburse Authority for any costs in notifying the affected individuals; (d) in the case of Confidential Information, provide third-party credit and identity monitoring services to each of the affected individuals who comprise the Confidential Information for the period required to comply with applicable law, or, in the absence of any legally required monitoring services, for no less than twelve (12) months following the date of notification to such individuals; (e) perform or take any other actions required to comply with applicable law as a result of the occurrence; (f) without limiting Consultant's obligations of indemnification as further described in this Agreement, indemnify, defend, and hold harmless Authority for any and all Claims (as defined herein), including reasonable attorneys' fees, costs, and expenses incidental thereto, which may be suffered by, accrued against, charged to, or recoverable from Authority in connection with the occurrence; (g) be responsible for recreating lost Data in the manner and on the schedule set by Authority without charge to Authority; (h) provide to Authority a detailed plan within ten (10) calendar days of the occurrence describing the measures Consultant will undertake to prevent a future occurrence and (i) upon conclusion of the occurrence, or at Authority's request, provide to Authority a comprehensive summary of the occurrence, including reason for occurrence, details of occurrence, how occurrence was addressed and any other information required by Authority, which shall be executed by Consultant and may be relied upon by Authority as a true and accurate account of the occurrence. Notification to affected individuals, as described above, shall comply with applicable law, be written in plain language, and contain, at a minimum: name and contact information of Consultant's representative; a description of the nature of the loss; a list of the types of data involved; the known or approximate date of the loss; how such loss may affect the affected individual; what steps Consultant has taken to protect the affected individual; what steps the affected individual can take to protect himself or herself; contact information for major credit card reporting agencies; and, information regarding the credit and identity monitoring services to be provided by Consultant. This Section shall survive the termination of this Agreement.

7. It shall be considered a material breach of this Agreement if Consultant engages in a pattern or practice of accessing, storing, using, or disclosing the Confidential Information in violation of the contractual obligations described herein. Consultant understands that if Authority finds that Consultant is engaged in a pattern or practice of accessing, storing, using, or disclosing Confidential Information in violation of this Agreement Authority shall promptly cease all disclosures of Confidential Information to Consultant. Consultant further understands that if Authority receives a customer complaint about Consultant's misuse of data or other violation of the Disclosure Provisions, Authority shall promptly cease disclosing that customer's information to Consultant and shall notify the California Public Utilities Commission of the complaint.

8. Consultant shall be liable for the actions of, or any disclosure or use by, its employees or representatives contrary to this Agreement; however, such liability shall not limit or prevent any actions by Authority directly against such employees or representatives for improper disclosure and/or use. In no event shall Consultant or its employees or representatives take any actions related to Confidential Information that are inconsistent with holding Confidential Information in strict confidence. Consultant shall immediately notify Authority in writing if it becomes aware of the possibility of any misuse or misappropriation of the Confidential Information by Consultant or any of its employees or representatives. However, nothing in this Agreement shall obligate the Authority to monitor or enforce the Consultant's compliance with the terms of this Agreement.

9. Consultant shall comply with the consumer protections concerning subsequent disclosure and use set forth in Attachment B to California Public Utilities Commission (CPUC) Decision No. 12-08-045.

10. In addition to any other requirements set forth in the Agreement, within ten (10) business days of receipt of Authority's written request, and at Authority's option, Consultant will either return to Authority all tangible Confidential Information, including but not limited to all electronic files, documentation, notes, plans, drawings, and copies thereof, or will provide Authority with written certification that all such tangible Confidential Information of Authority has been destroyed.

11. Consultant acknowledges that disclosure or misappropriation of any Confidential Information could cause irreparable harm to Authority and/or Authority Customers, the amount of which may be difficult to assess. Accordingly, Consultant hereby confirms that the Authority shall be entitled to apply to a court of competent jurisdiction or the California Public Utilities Commission for an injunction, specific performance or such other relief (without posting bond) as may be appropriate in the event of improper disclosure or misuse of its Confidential Information by Consultant or its employees or representatives. Such right shall, however, be construed to be in addition to any other remedies available to the Authority, in law or equity.

12. In addition to all other remedies, Consultant shall indemnify and hold harmless Authority, its officers, employees, or agents from and against and claims, actions, suits, liabilities, damages, losses, expenses and costs (including reasonable attorneys' fees, costs and disbursements) attributable to actions or non-actions of Consultant and/or its employees and/or its representatives in connection with the use or disclosure of Confidential Information.

13. When Consultant fully performs the purposes set forth in the Agreement, or if at any time Consultant ceases performance or Authority requires Consultant cease performance of the purposes set forth in the Agreement, Consultant shall promptly return or destroy (with written notice to Authority itemizing the materials destroyed) all Confidential Information then in its possession at the direction of Authority. Notwithstanding the foregoing, the nondisclosure obligations of this Agreement shall survive any termination of this Agreement.

SILICON VALLEY CLEAN ENERGY

Staff Report – Item 1g

Item 1g:	**Authorize the Chief Executive Officer to Execute an Agreement with Energy and Environmental Economics (E3) for Long-term Clean Energy Pathways Portfolio Analysis**
From:	Girish Balachandran, CEO
Prepared by:	Maren Wenzel, Senior Manager of Energy Policy and Regulatory Analysis Monica Padilla, COO and Director of Power Resources
Date:	12/13/2023

RECOMMENDATION

Staff recommends that the Board authorizes the Chief Executive Officer (CEO) to finalize and execute the attached agreement with Energy and Environmental Economics (E3) with non-substantive changes approved by the CEO and subject to final review. The agreement has a not-to-exceed cost of $255,000.

BACKGROUND

Since its formation in 2016, SVCE's mission has been to provide clean, affordable and reliable electricity and programs to its member communities. During this time policy makers have increased renewable mandates and expedited timelines for achieving them, a trend that may continue into the future. The initial SB100 report, completed by the Joint Agencies (California Public Utilities Commission, California Energy Commission and California Independent System Operator) shows a need for over 180,000 MW of additional capacity to be added to the grid by 2045. To achieve this, California will need to interconnect roughly as much capacity every year between now and 2045 as it has ever achieved. Buying, developing and interconnecting this capacity in an affordable manner will be a major challenge and undertaking in the coming years. As the grid evolves, SVCE remains dedicated to helping ensure the energy transition is successful, and recognizes the need to assess the various pathways to achieving a clean grid.

Along with changes to compliance mandates, stakeholders continue to re-assess and re-define "clean". While historically achieving 100% clean on an annual basis through the use of both new and existing resources put SVCE far in advance of other LSEs, current policy dictates all LSEs achieve that goal by 2045. Thought leadership in the clean energy space is increasingly turning toward the need for incremental resources providing clean, firm energy which can dispatch across all hours of the day. However, there remains debate as to how to best set a clean standard which also maintains a reliable and affordable grid.

Some clean energy proponents see value in LSEs' portfolios matching their demand with clean energy supply each hour of the year ("24/7 clean") and that to truly decarbonize the grid must provide clean energy in all hours. Others note that this loses the benefits of participating in a marketplace such as the California Independent System Operator (CAISO). Blended approaches such as Google's Carbon Free Energy ("CFE") scoring system value both the entity's clean portfolio and the system emissions. Still others suggest that it is better to focus on new incremental build over any particular annual target given the urgent need to build out the electricity system as a whole. Each approach will have unique benefits, risks and policy considerations and, to the best of SVCE staff's knowledge, no study has been conducted comparing the value propositions of each.

In 2024, SVCE will file an updated Integrated Resource Plan to the California Public Utilities Commission (CPUC). This document is intended to provide the CPUC and broader stakeholder group a planning portfolio from SVCE and all other CPUC jurisdictional LSEs which can be used for a variety of planning activities across the state agencies. While this is a planning document and should not be enforced, LSEs should provide a portfolio that represents a "best guess" of its future procurement activities. For that reason, it is important for SVCE to review its clean energy strategy ahead of this filing.

In October 2023, the Board approved the fiscal year 2024 (FY 24) Strategic Plan includes strategic focus area:

> **Expand Clean and Reliable Grid Actions:** Explore 24x7 clean energy delivery at scale and evaluate SVCE's role in enhancing distribution and transmission reliability.

To adequately be able assess SVCE's ability and merits of achieving 24x7 at scale, modeling and analysis beyond existing staff resources and tools are necessary. In Fall 2023 SVCE began discussions with Energy and Environmental Economics ("E3"), a leading energy consulting firm which has provided its expertise to California electricity sector planning activities for many years. To staff's best knowledge no other entity exists with the level of knowledge and analytical capabilities as E3. As such, staff requested a scope of work be developed which would provide analysis to assess portfolio requirements for various clean energy targets.

ANALYSIS & DISCUSSION

Over the past several months, SVCE staff has begun conversations with the board on "clean energy pathways", including a board study session in June 2023. SVCE staff believes assessing these pathways, with consideration to the costs, benefits and risks will help provide insights which will inform either an update to the organization's long-term clean strategy or re-affirm its current strategy. These results will help staff assess the costs, viability and risks associated with each clean energy pathway.

Given E3's unique capabilities and the need to develop timely portfolios and/or pathways to inform both the Board-directed strategic focus area and SVCE's 2024 IRP, staff recommends retaining E3 based on a sole-source justification.

If adopted, the E3 engagement will provide SVCE with the results of several portfolios:

Target	Description	Scenarios Tested
Annual matching scenarios	Annual GHG-free target (no hourly matching)	100%, 98%, 95%, 90%
24/7 hourly matching scenarios	Achieving hourly matching at a set percentage of hours per year	100%, 98%, 95%, 90%
Carbon Free Electricity (CFE) scenarios	Utilize Google's CFE methodology to assess portfolio needs	90%, 95%
Minimum compliance	Portfolio which only meets current state compliance minimums. Primarily for comparison/ baseline.	N/A

Staff will use these results to assess benefits, risks and viability of each portfolio to help determine a least regrets path toward meeting its mission of providing clean, affordable and reliable electricity to its member communities. Results from this work will be presented to the board for discussion, with a target date of June 2024.

STRATEGIC PLAN

The proposal supports SVCE's updated 2023 Strategic Plan Goal 6, "Plan for resources to meet the SVCE mission while balancing multiple stakeholder objectives", measure 1 "Integrated Resource Planning – develop pathway to affordable, reliable and carbon-free power supply by 2035 and beyond (2045)". This work will act as the pathway analysis to determine the best means for SVCE to meet its goals to achieve a clean, reliable and affordable portfolio over the long-term.

Agenda Item: 1g **Agenda Date: 12/13/2023**

ALTERNATIVE

There are two possible alternative options to complete this work. First, SVCE could attempt to complete this analysis in house utilizing internal or publicly available models. Given available personnel, resources and likely quality of output due to available analytical tools, this option is not preferable. Alternatively, SVCE could issue an Request for Proposal (RFP) for similar services. Staff believes a sole source selection of E3 is justified in this case on multiple grounds. First, as noted above, E3 is uniquely qualified as the leading consulting group for California system planning. Secondly, timing constraints for completion of this work, make an RFP process difficult. The next IRP will need to be approved and submitted to the CPUC by November 2024. Inclusion of the portfolio scenarios, will need to happen no later than June 2024 in order to develop an informed and useful IRP for Board consideration. Should the Board direct staff to issue an RFP for the services contemplated, analysis and pathway discussions will be delayed by at least three months.

FISCAL IMPACT

The proposed agreement has a not-to-exceed amount of $255,000. SVCE's 2023-2024 budget included adequate funds for consulting services to cover this contract within its approved operating budget.

ATTACHMENTS

1. Draft agreement contract with Energy and Environmental Economics
2. Scope of Work from Energy and Environmental Economics

AGREEMENT BETWEEN THE SILICON VALLEY CLEAN ENERGY AUTHORITY AND ENERGY AND ENVIRONMENTAL ECONOMICS FOR 24/7 HOURLY MATCHING ANALYSIS

THIS AGREEMENT, is entered into this 15th day of December, 2023, by and between the SILICON VALLEY CLEAN ENERGY AUTHORITY, an independent public agency, ("Authority"), and Energy and Environmental Economics (E3), a California Corporation whose address is 44 Montgomery Street, Suite 1500, San Francisco CA 94104 (hereinafter referred to as "Consultant") (collectively referred to as the "Parties" and individually as a "Party").

RECITALS:

A. Authority is an independent public agency duly organized under the provisions of the Joint Exercise of Powers Act of the State of California (Government Code Section 6500 *et seq*.) ("Act") with the power to conduct its business and enter into agreements.

B. Consultant possesses the skill, experience, ability, background, certification and knowledge to provide the services described in this Agreement pursuant to the terms and conditions described herein.

C. Authority and Consultant desire to enter into an agreement for consulting services related to portfolio forecasting and analysis related to clean portfolio pathways for SVCE described in the attached Appendix A upon the terms and conditions herein.

NOW, THEREFORE, the Parties mutually agree as follows:

1. **TERM**

The term of this Agreement shall commence on December 15, 2023, and shall terminate on May 30th, 2024, unless terminated earlier as set forth herein.

2. **SERVICES TO BE PERFORMED**

Consultant shall perform each and every service set forth in Exhibit "A" pursuant to the schedule of performance set forth in Exhibit "B," both of which are attached hereto and incorporated herein by this reference.

3. **COMPENSATION TO CONSULTANT**

Consultant shall be compensated for services performed pursuant to this Agreement in a total amount not to exceed two hundred and fifty-five thousand dollars ($255,000.00) based on the rates and terms set forth in Exhibit "C," which is attached hereto and incorporated herein by this reference.

4. **TIME IS OF THE ESSENCE**

Consultant and Authority agree that time is of the essence regarding the performance of this Agreement.

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5. **STANDARD OF CARE**

Consultant agrees to perform all services required by this Agreement in a manner commensurate with the prevailing standards of specially trained professionals in the San Francisco Bay Area under similar circumstances and in a manner reasonably satisfactory to Authority and agrees that all services shall be performed by qualified and experienced personnel. Consultant shall be responsible to Authority for any errors or omissions in the performance of work pursuant to this Agreement. Should any errors caused by Consultant be found in such services or products, Consultant shall correct the errors at no additional charge to Authority by redoing the professional work and/or revising the work product(s) called for in the Scope of Services to eliminate the errors. Should Consultant fail to make such correction in a reasonably timely manner, such correction may be made by Authority, and the cost thereof shall be charged to Consultant. In addition to all other available remedies, Authority may deduct the cost of such correction from any retention amount held by Authority or may withhold payment otherwise owed Consultant under this Agreement up to the amount of the cost of correction.

6. **INDEPENDENT PARTIES**

Authority and Consultant intend that the relationship between them created by this Agreement is that of an independent contractor. The manner and means of conducting the work are under the control of Consultant, except to the extent they are limited by statute, rule or regulation and the express terms of this Agreement. No civil service status or other right of employment will be acquired by virtue of Consultant's services. None of the benefits provided by Authority to its employees, including but not limited to, unemployment insurance, workers' compensation plans, vacation and sick leave are available from Authority to Consultant, its employees or agents. Deductions shall not be made for any state or federal taxes, FICA payments, PERS payments, or other purposes normally associated with an employer-employee relationship from any fees due Consultant. Payments of the above items, if required, are the responsibility of Consultant. Consultant shall indemnify and hold harmless Authority and its elected officials, officers, employees, servants, designated volunteers, and agents serving as independent contractors in the role of Authority officials, from any and all liability, damages, claims, costs and expenses of any nature to the extent arising from Consultant's personnel practices. Authority shall have the right to offset against the amount of any fees due to Consultant under this Agreement any amount due to Authority from Consultant as a result of Consultant's failure to promptly pay to Authority any reimbursement or indemnification arising under this section.

7. **NO RECOURSE AGAINST CONSTITUENT MEMBERS OF AUTHORITY**

Authority is organized as a Joint Powers Authority in accordance with the Joint Powers Act of the State of California (Government Code Section 6500 et seq.) pursuant to a Joint Powers Agreement dated March 31, 2016, and is a public entity separate from its constituent members. Authority shall solely be responsible for all debts, obligations and liabilities accruing and arising out of this Agreement. Consultant shall have no rights and shall not make any claims, take any actions or assert any remedies against any of Authority's constituent members in connection with this Agreement.

8. **NON-DISCRIMINATION**

In the performance of this Agreement, Consultant, and any subconsultant under the Consultant, shall not discriminate against any employee, subcontractor or applicant for employment because of race, color, religious creed, sex, gender, gender identity, gender

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expression, marital status, national origin, ancestry, age, physical disability, mental disability, medical condition, genetic information, sexual orientation, military or veteran status, or other basis prohibited by law, except as provided in Government Code section 12940. Consultant shall have responsibility for compliance with this Section.

9. **HOLD HARMLESS AND INDEMNIFICATION**

A. General Indemnification. To the fullest extent permitted by law, Consultant shall, at its sole cost and expense, defend, hold harmless and indemnify Authority and its elected officials, officers, attorneys, agents, employees, designated volunteers, successors, assigns and those Authority agents serving as independent contractors in the role of Authority officials (collectively "Indemnitees"), from and against any and all damages, costs, expenses, liabilities, claims, demands, causes of action, proceedings, expenses, judgments, penalties, liens, and losses of any nature whatsoever, including fees of accountants, attorneys, or other professionals and all costs associated therewith and the payment of all consequential damages (collectively "Liabilities"), in law or equity, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to the acts or omissions of Consultant, its officers, agents, servants, employees, subcontractors, materialmen, consultants or their officers, agents, servants or employees (or any entity or individual that Consultant shall bear the legal liability thereof) in the performance of this Agreement, including the Indemnitees' active or passive negligence, except for Liabilities arising from the sole negligence or willful misconduct of the Indemnitees as determined by court decision or by the agreement of the Parties. Consultant shall defend the Indemnitees in any action or actions filed in connection with any Liabilities with counsel of the Indemnitees' choice, and shall pay all costs and expenses, including all attorneys' fees and experts' costs actually incurred in connection with such defense. Consultant shall reimburse the Indemnitees for any and all legal expenses and costs incurred by Indemnitees in connection therewith.

B. Intellectual Property Indemnification. Consultant hereby certifies that it owns, controls, or licenses and retains all right, title, and interest in and to any intellectual property it uses in relation to this Agreement, including the design, look, feel, features, source code, content, and other technology relating to any part of the services and including all related patents, inventions, trademarks, and copyrights, all applications therefor, and all trade names, service marks, know how, and trade secrets (collectively referred to as "IP Rights"), except as otherwise expressly provided by this Agreement. Consultant warrants that the services to be provided pursuant to this Agreement do not infringe, violate, trespass, or constitute the unauthorized use or misappropriation of any IP Rights of any third party. Consultant shall indemnify, defend, and hold Indemnitees, harmless from and against any Liabilities by a third party that the services to be provided pursuant to this Agreement infringe or violate any third-party's IP Rights, provided any such right is enforceable in the United States. Such costs and expenses shall include reasonable attorneys' fees of counsel of Authority's choice, expert fees and all other costs and fees of litigation.

C. The acceptance of the services by Authority shall not operate as a waiver of these rights of indemnification. The hold harmless and indemnification provisions of this Section shall apply regardless of whether or not any insurance policies are determined to be applicable to the Liability.

D. Consultant's indemnifications and obligations under this section shall survive the expiration or termination of this Agreement.

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10. **INSURANCE**

A. General Requirements. On or before the commencement of the term of this Agreement, Consultant shall furnish Authority with certificates showing the type, amount, class of operations covered, effective dates and dates of expiration of insurance coverage in compliance with the requirements listed in Exhibit "D," which is attached hereto and incorporated herein by this reference. Such insurance and certificates, which do not limit Consultant's indemnification obligations under this Agreement, shall also contain substantially the following statement: "Should any of the above insurance covered by this certificate be canceled or coverage reduced before the expiration date thereof, the insurer affording coverage shall provide thirty (30) days' advance written notice to the Authority by certified mail, Attention: Chief Executive Officer." Consultant shall maintain in force at all times during the performance of this Agreement all appropriate coverage of insurance required by this Agreement with an insurance company that is acceptable to Authority and licensed to do insurance business in the State of California. Endorsements naming the Authority as additional insured shall be submitted with the insurance certificates.

B. Subrogation Waiver. Consultant agrees that in the event of loss due to any of the perils for which he/she has agreed to provide comprehensive general and automotive liability insurance, Consultant shall look solely to his/her/its insurance for recovery. Consultant hereby grants to Authority, on behalf of any insurer providing comprehensive general and automotive liability insurance to either Consultant or Authority with respect to the services of Consultant herein, a waiver of any right to subrogation which any such insurer of Consultant may acquire against Authority by virtue of the payment of any loss under such insurance.

C. Failure to Secure or Maintain Insurance. If Consultant at any time during the term hereof should fail to secure or maintain the foregoing insurance, Authority shall be permitted to obtain such insurance in the Consultant's name or as an agent of the Consultant and shall be compensated by the Consultant for the costs of the insurance premiums at the maximum rate permitted by law and computed from the date written notice is received that the premiums have not been paid.

D. Additional Insured. Authority, its members, officers, employees and volunteers shall be named as additional insureds under all insurance coverages, except any professional liability insurance, required by this Agreement. The naming of an additional insured shall not affect any recovery to which such additional insured would be entitled under this policy if not named as such additional insured. An additional insured named herein shall not be held liable for any premium, deductible portion of any loss, or expense of any nature on this policy or any extension thereof. Any other insurance held by an additional insured shall not be required to contribute anything toward any loss or expense covered by the insurance provided by this policy.

E. Sufficiency of Insurance. The insurance limits required by Authority are not represented as being sufficient to protect Consultant. Consultant is advised to confer with Consultant's insurance broker to determine adequate coverage for Consultant.

F. Maximum Coverage and Limits. It shall be a requirement under this Agreement that any available insurance proceeds broader than or in excess of the specified minimum Insurance coverage requirements and/or limits shall be available to the additional insureds. Furthermore, the requirements for coverage and limits shall be the minimum coverage and limits specified in this Agreement, or the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named insured, whichever is greater.

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11. **CONFLICT OF INTEREST**

Consultant warrants that it, its officers, employees, associates and subcontractors, presently have no interest, and will not acquire any interest, direct or indirect, financial or otherwise, that would conflict in any way with the performance of this Agreement, and that it, its officers, employees, associates and subcontractors, will not employ any person having such an interest. Consultant and its officers, employees, associates and subcontractors, if any, shall comply with all conflict of interest statutes of the State of California applicable to Consultant's services under this Agreement, including the Political Reform Act (Gov. Code § 81000, et seq.) and Government Code Section 1090. During the term of this Agreement, Consultant may perform similar services for other clients, but Consultant and its officers, employees, associates and subcontractors shall not, without the Authority Representative's prior written approval, perform work for another person or entity for whom Consultant is not currently performing work that would require Consultant or one of its officers, employees, associates or subcontractors to abstain from a decision under this Agreement pursuant to a conflict of interest statute. Consultant shall incorporate a clause substantially similar to this section into any subcontract that Consultant executes in connection with the performance of this Agreement. Consultant understands that it may be required to fill out a conflict of interest form if the services provided under this Agreement require Consultant to make certain governmental decisions or serve in a staff Authority, as defined in Title 2, Division 6, Section 18700 of the California Code of Regulations.

12. **PROHIBITION AGAINST TRANSFERS**

Consultant shall not assign, sublease, hypothecate, or transfer this Agreement, or any interest therein, directly or indirectly, by operation of law or otherwise, without prior written consent of Authority. Any attempt to do so without such consent shall be null and void, and any assignee, sublessee, pledgee, or transferee shall acquire no right or interest by reason of such attempted assignment, hypothecation or transfer. However, claims for money by Consultant from Authority under this Agreement may be assigned to a bank, trust company or other financial institution without prior written consent. Written notice of such assignment shall be promptly furnished to Authority by Consultant.

The sale, assignment, transfer or other disposition of any of the issued and outstanding capital stock of Consultant, or of the interest of any general partner or joint venturer or syndicate member or cotenant, if Consultant is a partnership or joint venture or syndicate or cotenancy, which shall result in changing the control of Consultant, shall be construed as an assignment of this Agreement. Control means fifty percent (50%) or more of the voting power of the corporation.

13. **SUBCONTRACTOR APPROVAL**

Unless prior written consent from Authority is obtained, only those persons and subcontractors whose names are attached to this Agreement shall be used in the performance of this Agreement.

In the event that Consultant employs subcontractors, such subcontractors shall be required to furnish proof of workers' compensation insurance and shall also be required to carry general, automobile and professional liability insurance in substantial conformity to the insurance carried by Consultant. In addition, any work or services subcontracted hereunder shall be subject to each provision of this Agreement.

Consultant agrees to include within their subcontract(s) with any and all subcontractors the same requirements and provisions of this Agreement, including the indemnity and insurance requirements, to the extent they apply to the scope of the subcontractor's work. Subcontractors

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hired by Consultant shall agree to be bound to Consultant and Authority in the same manner and to the same extent as Consultant is bound to Authority under this Agreement. Subcontractors shall agree to include these same provisions within any sub-subcontract. Consultant shall provide a copy of the Indemnity and Insurance provisions of this Agreement to any subcontractor. Consultant shall require all subcontractors to provide valid certificates of insurance and the required endorsements prior to commencement of any work and will provide proof of compliance to Authority.

14. **REPORTS**

A. Each and every report, draft, work product, map, record and other document, hereinafter collectively referred to as "Report", reproduced, prepared or caused to be prepared by Consultant pursuant to or in connection with this Agreement, shall be the exclusive property of Authority. Consultant shall not copyright any Report required by this Agreement and shall execute appropriate documents to assign to Authority the copyright to Reports created pursuant to this Agreement. Any Report, information and data acquired or required by this Agreement shall become the property of Authority, and all publication rights are reserved to Authority. Consultant may retain a copy of any Report furnished to the Authority pursuant to this Agreement.

B. All Reports prepared by Consultant may be used by Authority in execution or implementation of: (1) The original project for which Consultant was hired; (2) Completion of the original project by others; (3) Subsequent additions to the original project; and/or (4) Other Authority projects as Authority deems appropriate in its sole discretion.

C. Consultant shall, at such time and in such form as Authority may require, furnish reports concerning the status of services required under this Agreement.

D. All Reports shall also be provided in electronic format, both in the original file format (e.g., Microsoft Word) and in PDF format.

E. No Report, information or other data given to or prepared or assembled by Consultant pursuant to this Agreement that has not been publicly released shall be made available to any individual or organization by Consultant without prior approval by Authority.

F. Authority shall be the owner of and shall be entitled upon request to immediate possession of accurate reproducible copies of Reports or other pertinent data and information gathered or computed by Consultant prior to termination of this Agreement or upon completion of the work pursuant to this Agreement.

15. **RECORDS**

Consultant shall maintain complete and accurate records with respect to costs, expenses, receipts and other such information required by Authority that relate to the performance of services under this Agreement, in sufficient detail to permit an evaluation of the services and costs. All such records shall be clearly identified and readily accessible. Consultant shall provide free access to such books and records to the representatives of Authority or its designees at all proper times, and gives Authority the right to examine and audit same, and to make transcripts therefrom as necessary, and to allow inspection of all work, data, documents, proceedings and activities related to this Agreement. Such records, together with supporting documents, shall be maintained for a minimum period of five (5) years after Consultant receives final payment from Authority for all services required under this agreement

16. **PARTY REPRESENTATIVES**

The Chief Executive Officer ("Authority Representative") shall represent the Authority in

all matters pertaining to the services to be performed under this Agreement. Energy and Environmental Economics (Consultant Representative") shall represent Consultant in all matters pertaining to the services to be performed under this Agreement.

17. **INFORMATION AND DOCUMENTS**

A. Consultant covenants that all data, reports, documents, discussion, or other information (collectively "Data") developed or received by Consultant or provided for performance of this Agreement are deemed confidential and shall not be disclosed or released by Consultant without prior written authorization by Authority. Authority shall grant such authorization if applicable law requires disclosure. Consultant, its officers, employees, agents, or subcontractors shall not without written authorization from the Authority Representative or unless requested in writing by the Authority's General Counsel, voluntarily provide declarations, letters of support, testimony at depositions, response to interrogatories or other information concerning the work performed under this Agreement or relating to any project or property located within the Authority. Response to a subpoena or court order shall not be considered "voluntary," provided Consultant gives Authority notice of such court order or subpoena.

B. Consultant shall promptly notify Authority should Consultant, its officers, employees, agents or subcontractors be served with any summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, request for admissions or other discovery request, court order or subpoena from any party regarding this Agreement and the work performed thereunder or with respect to any project or property located within the Authority. Authority may, but has no obligation to, represent Consultant or be present at any deposition, hearing or similar proceeding. Consultant agrees to cooperate fully with Authority and to provide Authority with the opportunity to review any response to discovery requests provided by Consultant. However, Authority's right to review any such response does not imply or mean the right by Authority to control, direct or rewrite the response.

C. It is understood that Authority is subject to the California Public Records Act (Gov. Code § 7920.000 *et seq*.). If a request under the California Public Records Act is made to view any documents Consultant provided to Authority, Authority shall notify Consultant of the request and the date that such records will be released to the requester unless Consultant obtains a court order enjoining that disclosure. If Consultant fails to obtain a court order enjoining that disclosure, Authority will release the requested information on the date specified.

D. In the event Authority gives Consultant written notice of a "litigation hold" or request under the Public Records Act, then as to all data identified in such notice or request, Consultant shall, at no additional cost to Authority, isolate and preserve all such data pending receipt of further direction from the Authority.

E. Consultant's covenants under this section shall survive the expiration or termination of this Agreement.

18. **NOTICES**

Any notice, consent, request, demand, bill, invoice, report or other communication required or permitted under this Agreement shall be in writing and conclusively deemed effective: (a) on personal delivery, (b) on confirmed delivery by courier service during Consultant's and Authority's regular business hours, or (c) three Business Days after deposit in the United States mail, by first class mail, postage prepaid, and addressed to the Party to be notified as set forth below:

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TO AUTHORITY:

333 W. El Camino Real
Suite 330
Sunnyvale CA 94087
Attention: Chief Executive Officer

TO CONSULTANT:

Arne Olson
Energy and Environmental Economics
44 Montgomery Street, Suite 1500
San Francisco, CA 94104

19. **TERMINATION**

In the event Consultant fails or refuses to perform any of the provisions hereof at the time and in the manner required hereunder, Consultant shall be deemed in default in the performance of this Agreement. If Consultant fails to cure the default within the time specified (which shall be determined by the Authority but shall be not less than 10 days) and according to the requirements set forth in Authority's written notice of default, and in addition to any other remedy available to the Authority by law, the Authority Representative may terminate the Agreement by giving Consultant written notice thereof, which shall be effective immediately. The Authority Representative shall also have the option, at its sole discretion and without cause, of terminating this Agreement by giving seven (7) calendar days' prior written notice to Consultant as provided herein. Upon receipt of any notice of termination, Consultant shall immediately discontinue performance.

In the event of Authority's termination of this Agreement due to no fault or failure of performance by Consultant, Authority shall pay Consultant for services satisfactorily performed up to the effective date of termination. Upon termination, Consultant shall immediately deliver to the Authority any and all copies of studies, sketches, drawings, computations, and other material or products, whether or not completed, prepared by Consultant or given to Consultant, in connection with this Agreement. Such materials shall become the property of Authority. Consultant shall have no other claim against Authority by reason of such termination, including any claim for compensation.

20. **COMPLIANCE WITH LAWS**

Consultant shall keep itself informed of all applicable federal, state and local laws, ordinances, codes, regulations and requirements which may, in any manner, affect those employed by it or in any way affect the performance of its services pursuant to this Agreement. Consultant shall, at all times, observe and comply with all such laws and regulations, including, but not limited to the Americans with Disabilities Act, the Stored Communications Act, 18 U.S.C. Section 2701, et seq., California Civil Code Sections 1798.80 through 1798.84, and the California Consumer Privacy Act, Civil Code Section 1798.100 *et seq*. Authority, and its officers and employees, shall not be liable at law or in equity by reason of the failure of the Consultant to comply with this paragraph.

Consultant represents and agrees that all personnel engaged by Consultant in performing services are and shall be fully qualified and are authorized or permitted under state and local law to perform such services. Consultant represents and warrants to Authority that it has all licenses,

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permits, certificates, qualifications, and approvals required by law to provide the services and work required to perform services under this Agreement, including a business license. Consultant further represents and warrants that it shall keep in effect all such licenses, permits, and other approvals during the term of this Agreement.

21. **CONFLICT OF LAW**

This Agreement shall be interpreted under, and enforced by the laws of the State of California. The Agreement and obligations of the Parties are subject to all valid laws, orders, rules, and regulations of the authorities having jurisdiction over this Agreement (or the successors of those authorities). Any suits brought pursuant to this Agreement shall be filed with the Superior Court of the County of Santa Clara, State of California.

22. **ADVERTISEMENT**

Consultant shall not post, exhibit, display or allow to be posted, exhibited, displayed any signs, advertising, show bills, lithographs, posters or cards of any kind pertaining to the services performed under this Agreement unless prior written approval has been secured from Authority to do otherwise.

23. **WAIVER**

A waiver by Authority of any breach of any term, covenant, or condition contained herein shall not be deemed to be a waiver of any subsequent breach of the same or any other term, covenant, or condition contained herein, whether of the same or a different character.

24. **INTEGRATED CONTRACT**

This Agreement represents the full and complete understanding of every kind or nature whatsoever between the Parties, and all preliminary negotiations and agreements of whatsoever kind or nature are merged herein. No verbal agreement or implied covenant shall be held to vary the provisions hereof. Any modification of this Agreement will be effective only by a written document signed by both Authority and Consultant.

25. **AUTHORITY**

The individual(s) executing this Agreement represent and warrant that they have the legal Authority and authority to do so on behalf of their respective legal entities.

26. **INSERTED PROVISIONS**

Each provision and clause required by law to be inserted into the Agreement shall be deemed to be enacted herein, and the Agreement shall be read and enforced as though each were included herein. If through mistake or otherwise, any such provision is not inserted or is not correctly inserted, the Agreement shall be amended to make such insertion on application by either Party.

27. **CAPTIONS AND TERMS**

The captions in this Agreement are for convenience only, are not a part of the Agreement and in no way affect, limit or amplify the terms or provisions of this Agreement.

28. **AUTHORITY'S RIGHTS TO EMPLOY OTHER CONSULTANTS**

Authority reserves the right to employ other consultants in connection with the subject matter of the Scope of Services.

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29. **EXHIBITS**

The Exhibits referenced in this Agreement are attached hereto and incorporated herein by this reference as though set forth in full in the Agreement. If any inconsistency exists or arises between a provision of this Agreement and a provision of any exhibit, or between a provision of this Agreement and a provision of Consultant's proposal, the provisions of this Agreement shall control.

30. **FORCE MAJEURE**

Consultant shall not be liable for any failure to perform its obligations under this Agreement if Consultant presents acceptable evidence, in Authority's sole judgment, that such failure was due to acts of God, embargoes, inability to obtain labor or materials or reasonable substitutes for labor or materials, governmental restrictions, governmental regulations, governmental controls, judicial orders, enemy or hostile governmental action, civil commotion, fire or other casualty, or other causes beyond Consultant's reasonable control and not due to any act by Consultant.

31. **FINAL PAYMENT ACCEPTANCE CONSTITUTES RELEASE**

The acceptance by Consultant of the final payment made under this Agreement shall operate as and be a release of Authority from all claims and liabilities for compensation to Consultant for anything done, furnished or relating to Consultant's work or services. Acceptance of payment shall be any negotiation of Authority's check or the failure to make a written extra compensation claim within ten calendar days of the receipt of that check. However, approval or payment by Authority shall not constitute, nor be deemed, a release of the responsibility and liability of Consultant, its employees, subcontractors and agents for the accuracy and competency of the information provided and/or work performed; nor shall such approval or payment be deemed to be an assumption of such responsibility or liability by Authority for any defect or error in the work prepared by Consultant, its employees, subcontractors and agents.

32. **ATTORNEY FEES**

In any litigation or other proceeding by which a Party seeks to enforce its rights under this Agreement (whether in contract, tort or both) or seeks a declaration of any rights or obligations under this Agreement, the prevailing Party shall be entitled to recover all attorneys' fees, experts' fees, and other costs actually incurred in connection with such litigation or other proceeding, in addition to all other relief to which that Party may be entitled.

33. **SEVERABILITY**

If any provision in this Agreement is held by a court of competent jurisdiction to be illegal, invalid, void, or unenforceable, the remaining provisions will nevertheless continue in full force without being impaired or invalidated in any way.

34. **SUCCESSORS AND ASSIGNS**

The terms and conditions of this Agreement shall be binding on the successors and assigns of the Parties to this Agreement.

35. **NO THIRD PARTY BENEFICIARIES INTENDED**

This Agreement is made solely for the benefit of the Parties to this Agreement and their respective successors and assigns, and no other person or entity may have or acquire a right by

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virtue of this Agreement.

36. **COUNTERPARTS; FACSIMILE/PDF/ELECTRONIC SIGNATURE**

This Agreement may be executed in multiple counterparts, all of which shall be deemed an original, and all of which will constitute one and the same instrument. The Parties agree that a facsimile, PDF or electronic signature may substitute for and have the same legal effect as the original signature.

37. **DRAFTING PARTY**

This Agreement shall be construed without regard to the Party that drafted it. Any ambiguity shall not be interpreted against either Party and shall, instead, be resolved in accordance with other applicable rules concerning the interpretation of contracts.

IN WITNESS WHEREOF, the Parties have caused the Agreement to be executed as of the date set forth above.

RECOMMENDED FOR APPROVAL

_____
Maren Wenzel, Senior Manager of Policy and Regulatory Analysis

RECOMMENDED FOR APPROVAL

_____
Amrit Singh, Chief Financial Officer/Director of Administrative Services

CONSULTANT NAME
Energy and Environmental Economics

By: _____
Name: _____
Title: _____
Date: _____

SILICON VALLEY CLEAN ENERGY AUTHORITY
A Joint Powers Authority

By: _____
Name: Girish Balachandran
Title: Chief Executive Officer
Date: _____

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APPROVED AS TO FORM:

_____
Counsel for Authority

ATTEST:

_____
Authority Clerk

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Exhibit A
Scope of Services

See Attached Scope of Work.

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Exhibit B
Schedule of Performance

See attached scope of work for description of tasks.

This schedule may be modified with the written approval of the Authority.

Task	Begin	Complete
1. SVCE Load and Renewable Shape Development	December 2023	January 2024
2. SVCE Portfolio Optimization Model	December 2023	January 2024
3. SVCE Portfolio Optimization	January 2024	February 2024
4. Loss of Load Probability Modeling	February 2024	March 2024
5. Powerpoint Report	March 2024	April 2024
6.		
7.		
8.		
9.		
10.		

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Exhibit C
Compensation

Authority shall compensate Consultant for professional services in accordance with the terms and conditions of this Agreement based on the rates and compensation schedule set forth below. Compensation shall be calculated based on the hourly rates set forth below up to the not to exceed budget amount set forth below.

The compensation to be paid to Consultant under this Agreement for all services described in Exhibit "A" and reimbursable expenses shall not exceed a total of two hundred fifty-five thousand dollars ($255,000), as set forth below. Any work performed or expenses incurred for which payment would result in a total exceeding the maximum amount of compensation set forth herein shall be at no cost to Authority unless previously approved in writing by Authority.

Task	**Estimated Budget**
1. SVCE Load and Renewable Shape Development	$ 25,000
2. SVCE Portfolio Optimization Model	$ 60,000
3. SVCE Portfolio Optimization	$95,000
4. Loss of Load Probability Modeling	$50,000
5. Powerpoint Report	$25,000
6.	
7.	
8.	
9.	
10.	
Total	

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Rates

Personnel	**Title**	**Hourly**
Arne Olson	Senior Partner	530
Aaron Burdick	Director	430
Oluwafemi Sawyerr	Senior Managing Consultant	375
Roderick Go	Associate Director	405
Sam Schreiber	Senior Consultant	305
Charles Gulian	Senior Consultant	305
Riti Bhandarkar	Associate	220
Disha Trivedi	Associate	220

Invoices

Monthly Invoicing: In order to request payment, Consultant shall submit monthly invoices to the Authority describing the services performed and the applicable charges (including a summary of the work performed during that period, personnel who performed the services, hours worked, task(s) for which work was performed). Authority shall pay all undisputed invoice amounts within thirty (30) calendar days after receipt up to the maximum compensation set forth herein. Authority does not pay interest on past due amounts.

Reimbursable Expenses

Administrative, overhead, secretarial time or overtime, word processing, photocopying, in house printing, insurance and other ordinary business expenses are included within the scope of payment for services and are not reimbursable expenses. Travel expenses must be authorized in advance in writing by Authority

Additional Services

Consultant shall provide additional services outside of the services identified in Exhibit A only by advance written authorization from Authority Representative prior to commencement of any additional services. Consultant shall submit, at the Authority Representative's request, a detailed written proposal including a description of the scope of additional services, schedule, and proposed maximum compensation. Any changes mutually agreed upon by the Parties, and any increase or decrease in compensation, shall be incorporated by written amendments to this Agreement.

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Exhibit D
Insurance Requirements and Proof of Insurance

Consultant shall maintain the following minimum insurance coverage:

A. **COVERAGE**:

(1) **Workers' Compensation**:
Statutory coverage as required by the State of California.

(2) **Liability**:
Commercial general liability coverage with minimum limits of $1,000,000 per occurrence and $2,000,000 aggregate for bodily injury and property damage. ISO occurrence Form CG 0001 or equivalent is required.

(3) **Automotive**:
Comprehensive automotive liability coverage with minimum limits of $1,000,000 per accident for bodily injury and property damage. ISO Form CA 0001 or equivalent is required.

(4) **Professional Liability**
Professional liability insurance which includes coverage for the professional acts, errors and omissions of Consultant in the amount of at least $1,000,000.

(5) **Privacy and Cybersecurity Liability**
Privacy and cybersecurity liability (including costs arising from data destruction, hacking or intentional breaches, crisis management activity related to data breaches, and legal claims for security breach, privacy violations, and notification costs of at least $5,000,000 US per occurrence.

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Silicon Valley Clean Energy

24/7 Hourly Matching Analysis

November 21, 2023

Arne Olson, Sr. Partner

44 Montgomery Street, Suite 1500
San Francisco, CA 94104

arne@ethree.com

[Author phone and extension]

Energy+Environmental Economics

November 21, 2023

Silicon Valley Clean Energy
333 W El Camino Real #330
Sunnyvale, CA 94087

To: Monica Padilla and Maren Wenzel

Re: Hourly Matching Study Proposal

E3 is pleased to share this proposal to support Silicon Valley Clean Energy (SVCE) in their efforts to study the opportunities and challenges for meeting 24/7 hourly clean energy matching within their portfolio. As aggressive clean energy leaders like SVCE pursue electric decarbonization planning, hourly vs. annual matching has emerged as a key question.

As a leading economic consultancy focused on the energy industry, with an emphasis on electricity, natural gas, and the clean energy transition, for over 30 years E3 has served as an independent, data-driven technical consultant that diverse stakeholders can trust to provide fair and unbiased analysis and strategic guidance. We have provided analytical support to dozens of clients seeking to understand the cost, risk, operational reliability, resiliency, and resource adequacy implications of the evolving electricity system.

E3's Resource Planning practice has grown rapidly in the past decade and E3 now provides support to utilities across North America outlining the energy transition as it applies to each unique system. E3 has provided deep technical modeling adjacent to or directly interacting with IRP support to utilities and groups of utilities that are at the leading edge of clean energy adoption such as Southern California Edison, Pacific Gas and Electric Company, San Diego Gas & Electric Company, Puget Sound Energy, Sacramento Municipal Utility District, Tampa Electric, the California ISO, the Los Angeles Department of Water and Power, and many others.

E3 has recently conducted analysis that examines the role of annual versus hourly matching and is familiar with the existing industry studies, tools and methods, and debates about the proper procurement policy for corporate, utility, or CCA buyers in pursing aggressive clean energy goals. E3 has designed an analytical scope that reflects a comprehensive analysis of annual vs. hourly matching for SVCE's resource portfolio, using unique methods (specifically LOLP modeling) not previously used to explore this topic. We appreciate the opportunity to work on these important issues with your team.

Respectfully Submitted,

Arne Olson, Sr. Partner



Energy and Environmental Economics, Inc. (E3)
44 Montgomery Street, Suite 1500
San Francisco, CA 94104

Phone: 415-391-5100 ext. 30

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1 Approach to Scope of Work

To properly study the planning and operational challenges associated with achieving hourly matching, the following key considerations must be analyzed:

- The carbon benefits of hourly matching
- The additional costs of reaching an hourly matching (or CFE calculated policy) versus an annual matching policy; these include:
  - Over-procurement due to seasonal mismatches of load versus renewable energy
  - Over-procurement to address load and renewable uncertainty
  - Costs of over-procurement relative to their potential market value (e.g., energy market and REC value for excess renewables)

E3 proposes to leverage existing models and datasets developed by E3 and the CPUC for the CPUC IRP process. These models will be leveraged to create a portfolio optimization tool to study annual and hourly matching of SVCE's energy portfolio in average conditions within the RESOLVE model representative days as well as during the full range of load and renewable conditions captured in E3's loss of load probability model RECAP. This scope involves data development, portfolio optimization in RESOLVE, LOLP modeling of those portfolios in RECAP, and a PPT report sharing the methods and analytical findings of E3's analysis. Additional optional tasks are noted below with the option for SVCE to select to expand the scope of various portions of the analysis and results communication.

Task 1. Data Development

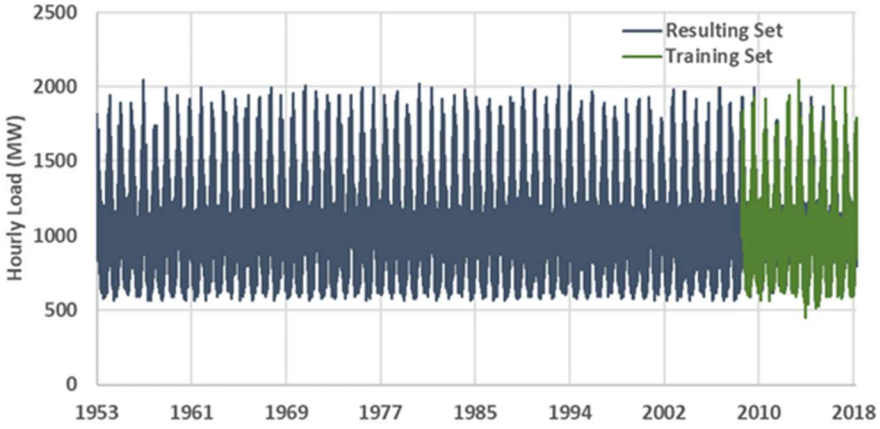
To ensure an efficient analytical process and timeline, E3 proposes to leverage existing models and datasets, including recent model and data development performed by CPUC staff and E3 as part of the development of the CPUC IRP Preferred System Portfolio. E3 will take the publicly published CPUC IRP RESOLVE model and tweak the model to perform portfolio optimization of SVCE's system, basing the market value of SVCE's assets against RESOLVE's energy, A/S, REC, and other prices consistent with the proposed Preferred System Portfolio (PSP). Key data development tasks include:

+ **Task 1.1 Develop a multi weather year SVCE load and renewable shape dataset**: using an artificial neural network machine learning algorithm, E3 will develop a multi-weather year dataset for SVCE's loads. The algorithm will be fed hourly loads for recent years (as many as available) and develop loads over a broad range of weather conditions (with a focus on 1998-2020). This dataset will be used to input SVCE's loads into RESOLVE on the 36 representative days used in the CPUC model. It will also serve as the basis for modeling load variability in the more detailed multi weather year loss of load probability model analysis in RECAP.

  To allow consideration of a broad range of potential weather conditions observed across multiple decades in spite of the lack of useful historical load data during most of that period, RECAP uses a neural network regression algorithm to extend a relatively shorter sample of

actual historical load data across a longer period based on key weather indicators and drivers across that longer period. The neural network algorithm is trained with a set of historical loads and associated underlying weather data and then used to simulate load levels that reflect the composition of end uses and the underlying economic conditions that reflect today's electricity demands while also capturing the underlying weather conditions across a much broader record.

Example of results of RECAP's neural network regression to extend load across a long weather record



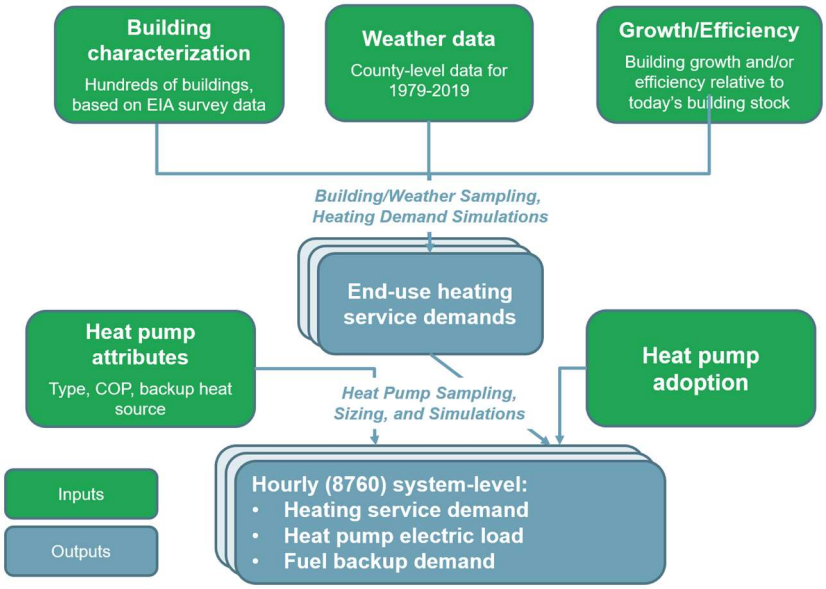
E3 will also develop a multi-year dataset of renewable energy shapes. Key to this will be consideration of the amount of resource diversity from the range of solar and wind sites from which SVCE would contract. Given SVCE's size, using a CAISO level single diverse wind shape would provide an over-estimate of the diversity in output relative to a much smaller portfolio of contracted wind resources by SVCE. This may require development of additional multi-year wind and solar shapes that reflect SVCE's expected geographic diversity, to ensure proper analysis of the hourly matching challenges associated with renewable output variance.

+ **Task 1.2 Develop a SVCE-level portfolio optimization model in RESOLVE**: the CPUC RESOLVE model will be downscaled in scope to focus on the optimization of SVCE's portfolio (instead of the entire CAISO system). SVCE's resources will be input into the model, by default utilizing existing resource inputs (output profiles, etc.) in the tool. CAISO market values (energy, A/S, etc.) will be developed using model outputs from the CPUC's 25mmt "Core" proposed PSP as inputs into the SVCE RESOLVE portfolio optimization model. E3 will use existing candidate resource options from the CPUC model but can allow/disallow resource options as SVCE desires. Additional data development work includes developing hourly grid emissions factors consistent with the proposed PSP for use in the CFE optimization scenarios.

+ **Task 1.3 Develop multi weather year building electrification load shapes (OPTIONAL)**: depending on the level of building electrification forecast in SVCE's territory, capturing "tail risk" for high space heating loads during extreme cold conditions will be one key challenge for hourly matching renewables to load. By default, E3 will use the CEC's hourly building electrification loads shapes (these are for one weather year from the IEPR). In this optional task, E3 will create SVCE territory specific multi weather year building electrification load shapes using its RESHAPE model. RESHAPE simulates building loads for space heating, space cooling, and water heating

using spatially and temporarily granular historical weather. Outputs are a diversified SVCE level hourly load shape over multiple weather years.

RESHAPE Model Overview



E3 will undertake additional data development as needed for the project, as data is available, and as budget allows. For instance, if SVCE has data on long-term load forecast error (e.g., differences between actual and forecasted annual/hourly loads), those would serve as another datapoint on potential challenges to meet 24/7 hourly matching (though that specific challenge is correctable over time).

Task 2. SVCE Portfolio Optimization

+ **Task 2.1 SVCE Portfolio Optimization**: Using RESOLVE, E3 will perform capacity expansion on SVCE's portfolio to meet various clean energy policy definitions. This optimization will ensure that clean energy targets are met on the 36 representative days in RESOLVE, which are intended to represent annual average conditions for load, wind, and solar output over a broader 23-weather year horizon from 1998-2020. E3 will perform optimization of SVCE's portfolio, using existing resource contracts and candidate resource options for the follow scenarios:

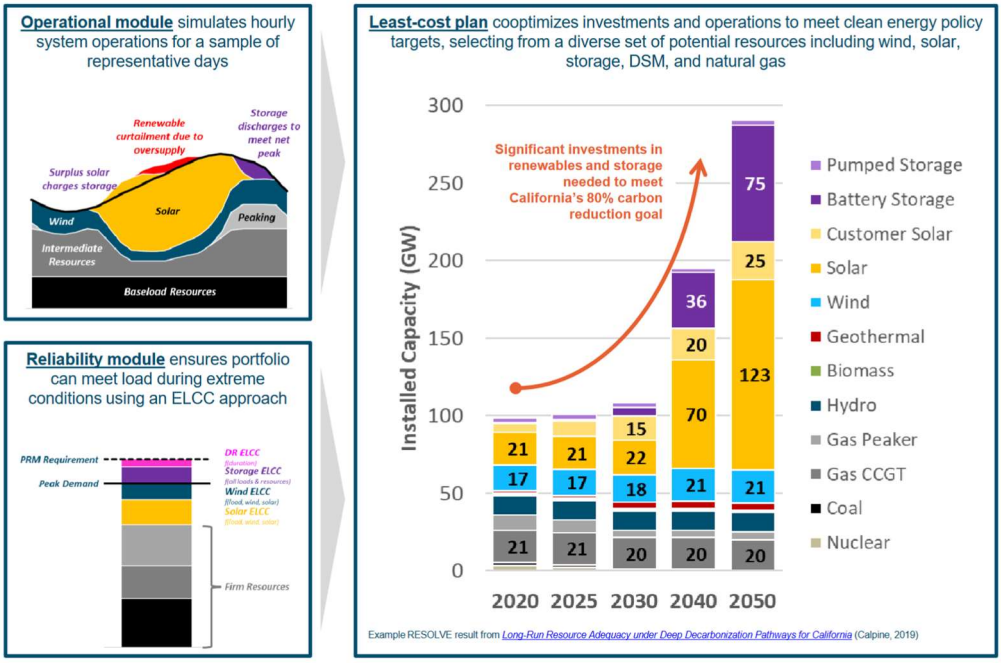
  - Minimum compliance base scenario: 60% RPS by 2030 and 90% RPS + zero carbon by 2035
  - Annual matching scenarios: 100%, 98%, 95%, 90%
  - 24/7 hourly matching scenarios: 100%, 98%, 95%, 90%

- **Carbon free electricity (CFE) scenarios**: 1-2 scenarios of various CFE levels, e.g. 90% and 95%[1]

RESOLVE is often run for BA-level optimization to meet reliable operations and clean energy targets over a set of representative days in addition to a reliability module that uses PRM and ELCC inputs to maintain BA-level reliability. For the clean energy policy analysis proposed for SVCE, E3 would focus on the operational module (i.e., energy needs), whereby SVCE's hourly and annual loads would be optimized against resource needs to meet various clean energy policies. This optimization would allow use of existing SVCE resources, purchase of new candidate resource options, and market energy purchases/sales at prices consistent with the CPUC's proposed preferred system portfolio. Portfolio net present value would be minimized in RESOLVE's objective function.

RESOLVE will be run for 4-6 years, such as 2025, 2030, 2035, 2040, and 2045.

RESOLVE Model Schematic



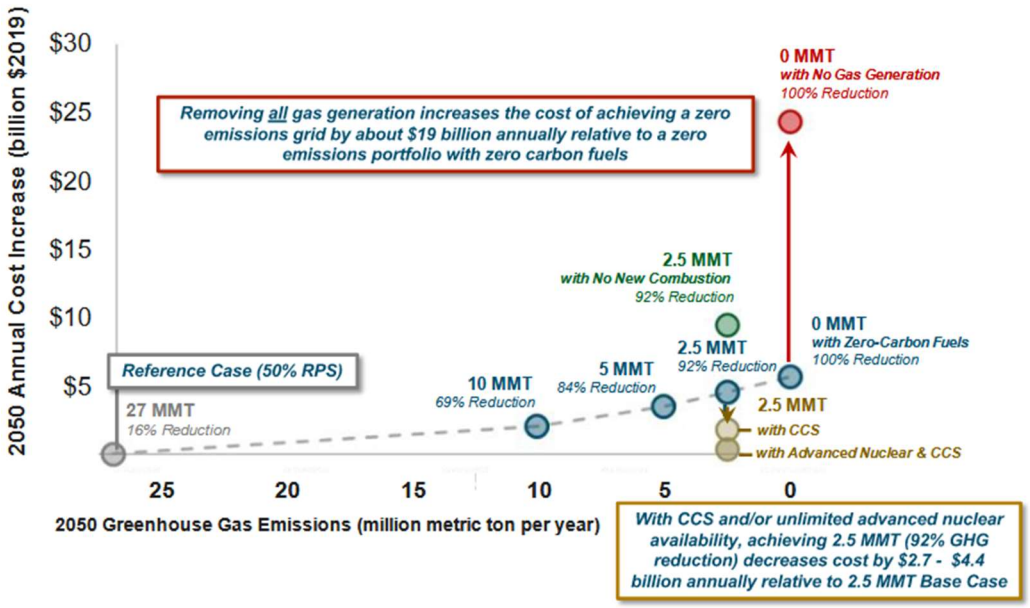
Key output metrics from RESOLVE analysis would include portfolio costs ($M/yr) and estimated SVCE rate impacts (cents/kWh). E3 can also quantify the GHG emissions associated with different portfolios to determine the carbon emissions benefits of the various policy scenarios modeled.

E3 proposes in Task 2.1 to consider a limited number of sensitivities (1-3) to the scenarios listed above that would consider a "drop-in" clean firm fuel, such as biogas or hydrogen combustion that would enable filling in renewable production valleys to support higher levels of hourly matching.

[1] E3 believes there are methodological concerns with the formula used to calculate the CFE score, specifically the ability to claim clean energy procured by other entities in the calculation of the grid CFE %. This concern can be explored further within this project.

+ **Task 2.2 Additional Clean Firm Technology Analysis (OPTIONAL)**: if SVCE desires, E3 will perform additional clean firm technology analysis, such as consider ultra long duration storage, power-to-fuel-to-power (such as hydrogen seasonal storage), and/or natural gas with carbon capture and storage as additional candidate emerging technology options. Though not currently commercialized, these will help to reduce the costs to enable higher levels of hourly matching.

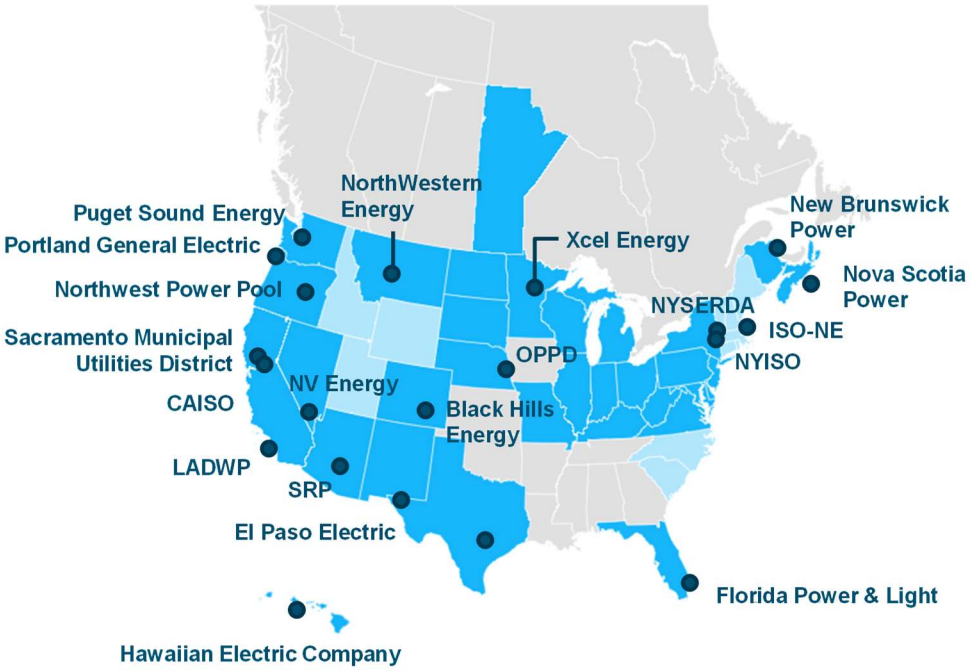
Example ISO-NE E3 modeling results studying clean firm technology resources



Task 3. Loss of Load Probability Modeling

Analyzing the achievement of 100% hourly matching in system operations under load and resource uncertainty is analogous to analyzing a system's resource adequacy. In each case, the system must have enough energy to meet hourly loads across a wide range of uncertainties including very hot and very cold conditions, various resource outage states, variability in wind and solar production, limitations on storage dispatch duration, and others. E3's uses our Renewable Energy Capacity Planning (RECAP) Model to perform loss-of-load probability (LOLP) modeling to analyze resource adequacy for a number of utilities. The map below shows systems for which E3 has developed RECAP models (blue dots) and jurisdictions where E3 has provided resource adequacy advisory services (blue shaded areas).

Map of past E3 work on RECAP and/or Resource Adequacy



E3 will RECAP to perform more detailed analysis of the SVCE's portfolios developed in RESOLVE. RECAP typically considers 30-50 years of historical weather conditions and simulates load, wind, solar, hydro, and firm operations across that time horizon, developing key probabilistic reliability outputs (duration, frequency, and magnitude of events where resources are insufficient to serve load). Using the multi weather year loads developed in Task 1, E3 would run RECAP against SVCE's loads to check the actual hourly matching achieved when considering this broader range of load and renewable conditions. This will provide an important check against the hourly matching achieved under more P50/average type conditions modeled in RESOLVE's representative days.

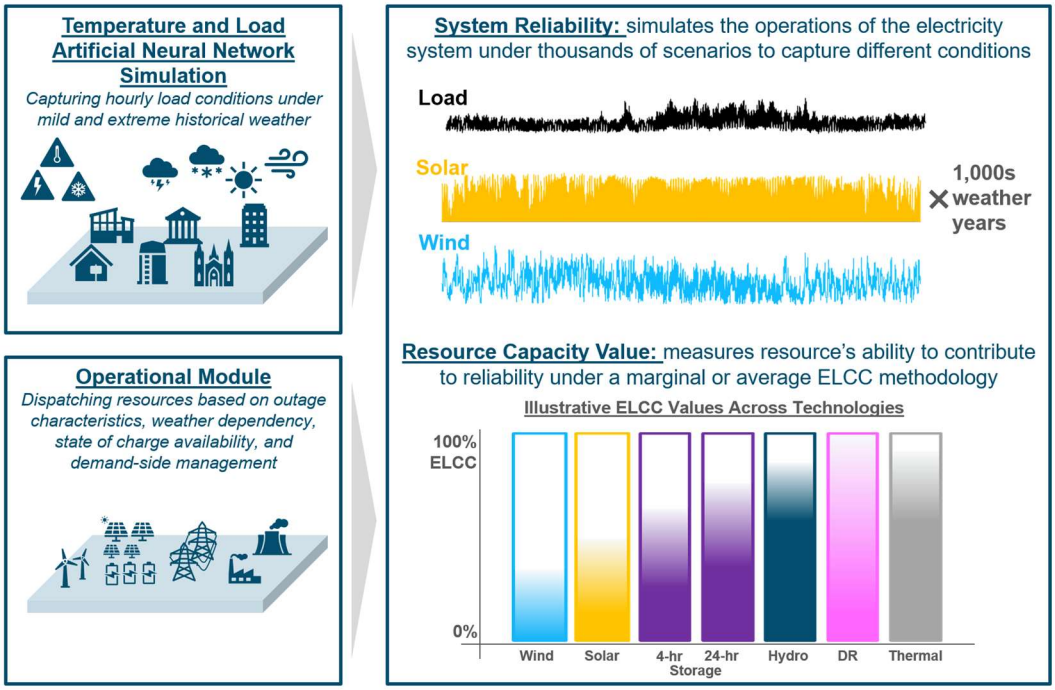
E3 will run SVCE's clean energy portfolios in RECAP both with and without the use of firm thermal resources that may be procured for RA but would be carbon emitting when operated. E3 will then use the loss of load hours (LOLH) metric to determine the actual achieved hourly matching. For instance, if the loss of load hours metric shows that the clean energy portfolio cannot serve SVCE's load for an average of 87 hours/year across the simulated conditions studied, then the hourly matching would be 87 hours/year divided by 8760 hours/year, or 1% (i.e., 99% matching). Inclusion of clean firm resources such as hydrogen will improve SVCE's ability to hourly match its load profile, but even large and diverse power systems plan not to serve load in all hours. For example, a common resource adequacy metric is one day in ten years, or 2.4 hours per year. This standard would imply 99.97% hourly matching.

If RECAP analysis shows that portfolios built to meet a given hourly matching percentage underperform when considered across a broader range of load and renewable conditions, E3 would use its "smart search" feature to bring the portfolios back to compliance with the intended hourly matching standard. Smart search is a RECAP feature whereby a set of resources can be provided to RECAP and an objective target reliability standard can be set. For instance, if a portfolio has an LOLH of 120 hours/year, an LOLH target of 87 hours/year could be set and RECAP would determine via smart search a least-cost pathway to add

combinations of solar, wind, and energy storage resources to bring the LOLH down from 120 hours/year to 87 hours/year. Smart search would use net costs for incremental resources, whereby market values would be deducted from levelized costs (per the market revenue streams used in RESOLVE inputs).

Key outputs from the RECAP modeling will be the additional investment costs to reach hourly matching levels across the broader set of conditions, which would be added to the investment costs from the RESOLVE portfolio optimization and rate impacts for each scenario would be re-calculated.

RECAP Model Schematic[2]



Task 4. Project Report

+ **Task 4.1 PPT Report**: Based on the technical findings from the prior tasks, E3 will provide a draft and final PowerPoint project report including the following content:

  - Executive summary
  - Project background
  - Opportunities and challenges for hourly matching
  - Methodology overview
  - Analytical results
  - Key Conclusions

[2] E3 would not be using the "resource capacity value" or ELCC calculation functionalities of RECAP for this project.

- **Task 4.2 Whitepaper (OPTIONAL)**: if SVCE desires, E3 will draft a word document whitepaper detailing the results of the modeling performed, analytical results, and key conclusions for policymakers.

Task 5. Alternative Uses of Hourly Matching Costs (optional)

E3 will perform a high-level analysis of how alternative uses of the additional costs associated with hourly matching could support decarbonization efforts and other key policy goals within SVCE's footprint. Potential alternative uses include: EV charger and/or vehicle incentives, building electrification measure incentives, energy efficiency programs, carbon offsets, etc.

E3 will include a qualitative assessment of investment options for SVCE to support key CCA policy goals and limited quantitative analysis of the carbon savings from these alternative investments.

2 Timeline and Budget

E3's proposed timeline is shown below. Assuming a mid-December start and quick turnaround on data requests, E3 proposes to complete its analytical work by mid-March, its draft report by end of the March, and its final report by mid-April. E3 proposes to perform this project on a not-to-exceed time and materials basis. The total proposed budget is $255,000 (without optional tasks), estimated by task below.

		Dec '23	Jan '24	Feb '24	Mar '24	Apr '24	Budget
Task 1	1.1 SVCE Load + Renewable Shape Development						$25,000
	1.2 SVCE Portfolio Optimization Model						$60,000
	1.3 SVCE Building Electrification Loads (optional)						$15,000
Task 2	2.2 SVCE Portfolio Optimization						$95,000
	2.3 Additional Clean Firm Technology Analysis (optional)						$30,000
Task 3	Loss of Load Probability Modeling						$50,000
Task 4	4.1 PPT Report						$25,000
	4.2 Whitepaper (optional)						$25,000
Task 5	Alternative Decarbonization Strategies (optional)						$15,000
						Total (without optional tasks)	$255,000

E3's proposed team and rate schedule is shown below. This team includes a broad set of experts and advisors that span the load development, capacity expansion modeling, and loss of load probability modeling aspects of this project. Hourly rates are E3's discounted rates for public utilities.

Person	Title	Project Role	Hourly Rate
Arne Olson	Senior Partner	Expert Advisor	$530
Aaron Burdick	Director	Project Lead	$430
Oluwafemi Sawyerr	Senior Managing Consultant	Project Manager	$375
Roderick Go	Associate Director	Expert Advisor (RESOLVE)	$405
Sam Schreiber	Senior Consultant	Analyst (RESOLVE)	$305
Charles Gulian	Senior Consultant	Analyst (RECAP)	$305
Riti Bhandarkar	Associate	Analyst (RECAP)	$220
Disha Trivedi	Associate	Analyst (Building Electrification Loads)	$220

3 Qualifications

E3's team offers a unique combination of breadth of experience and technical depth in all facets of resource and portfolio planning. As detailed below, E3 has worked with many utilities on integrated resource plans, with a singular focus on advancing best practices for optimized planning of decarbonized power systems. It is for this reason that utilities and regulators across North America have consistently sought our support when confronting difficult questions and complex resource planning and related policy issues. For both individual utilities and regional planning entities, E3 has led some of the most rigorous resource planning analyses focused on clean energy growth to meet 100% or net-zero carbon emissions scenarios. From its own hands-on experience, E3 has found that robustly studying 100% emission-free generation power systems requires careful scenario design, broad consideration of multiple technology pathways, and robust risk and reliability analysis.

A sample of qualifications for relevant projects are included below.

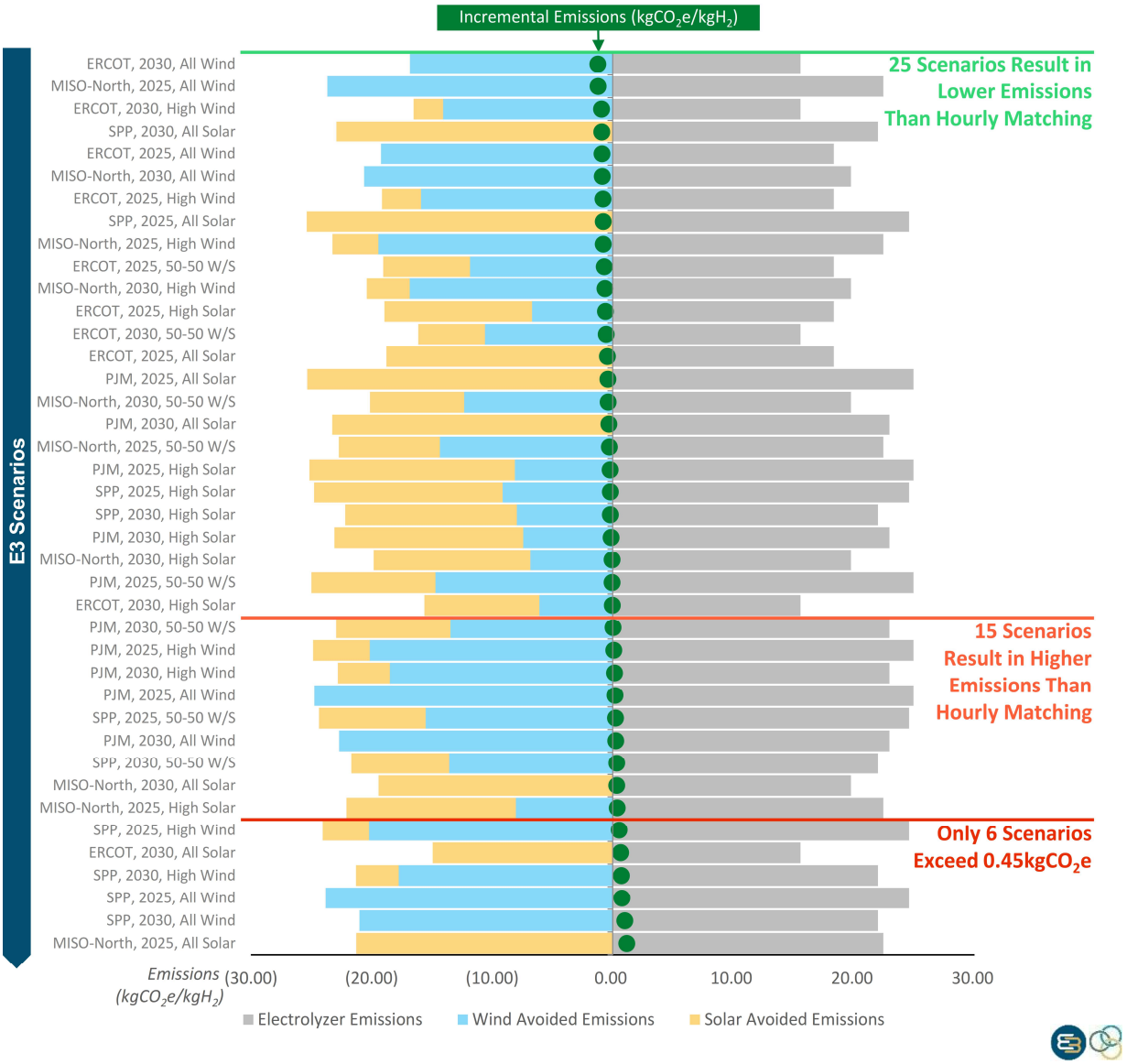
American Council on Renewable Energy (ACORE), H2 GHG Emission Analysis (2023). E3 was hired by ACORE to study implementation scenarios of the 45V H2 tax credit in the IRA, focusing on the question: how should we account for the carbon content of the electricity supply used to produce hydrogen? This study analyzes the incremental GHG emissions impacts of hydrogen when clean energy used for electrolytic hydrogen production is accounted for on an annual versus an hourly basis, and analyzes the potential impacts of each accounting method on the cost of producing hydrogen. E3's analysis assumes clean energy supply is additional and is located within the same market footprint as hydrogen production. The analysis was repeated across clean generation mixes, markets, and time periods to capture a range of current and future grid dynamics. Based on the analysis described above, E3 draws the following key conclusions:

1) An hourly matching requirement does not ensure lower GHG emissions relative to an annual matching requirement, and in many cases is less effective at eliminating carbon emissions than annual matching;

2) With modest changes to the size and composition of the renewable portfolio to meet electrolyzer demand, hydrogen produced under an annual renewable energy matching requirement results in incremental emissions less than the threshold for the maximum PTC under the IRA; and

3) An hourly matching requirement results in significantly higher costs for hydrogen production than an annual matching requirement with the same GHG intensity across a wide range of renewable energy and wholesale electricity market assumptions.

Incremental Emissions by Market and Renewable Mix, Annual Energy Match Scenario

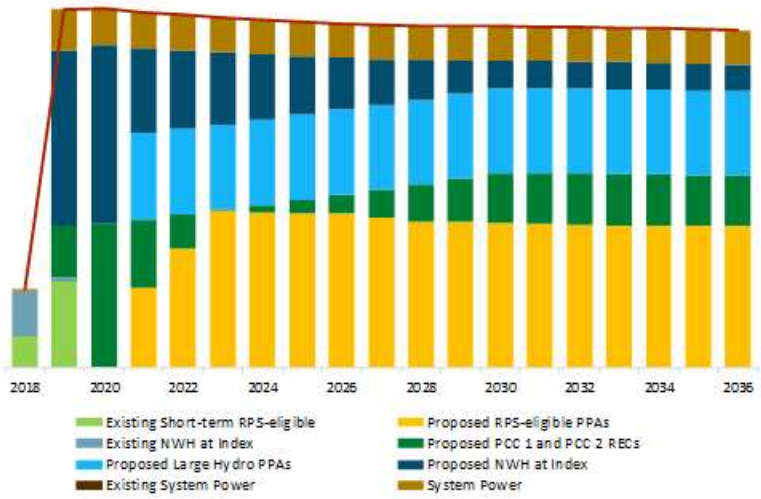


Community Choice Aggregation Support (2016 – Present). E3 has supported several California Community Choice Aggregators (CCAs), including East Bay Community Energy (EBCE), San Jose Clean Energy (SJCE), and Clean Power Alliance (CPA), in a wide range of procurement-related activities. Key work streams for CCA clients include:

- Development of robust integrated resource plans (IRPs) to inform CCAs' resource procurement strategies
- Screening developer bids in renewable energy procurement solicitations
- Constructing long-term projections for load, market prices, and renewable energy PPA costs
- Analyzing curtailment of renewable energy resources

- Supporting local program strategy for distributed and demand-side resources, technologies, and trends (e.g., electrification)
- Comparing CCA costs and emissions versus bundled utility service
- Providing expert testimony in regulatory matters at the California Public Utilities Commission
- Quantifying potential impacts from the Power Charge Indifference Adjustment (PCIA)
- Creating CPUC IRP Conforming Portfolios, GHG CNS emissions estimates, and associated filing templates.

Example Procurement Plan (GWh)



Silicon Valley Power Integrated Resource Planning Support (2023-present). Silicon Valley Power (SVP), the vertically integrated, municipally owned utility of the City of Santa Clara(Santa Clara) faced unique challenges in the latest 2023 integrated resource plan (IRP) cycle. These included stringent greenhouse regulations and aggressive clean energy targets in California increasing pressure for SVP, and other load serving entities, to accelerate the pace of renewable and clean energy additions, while the City of Santa Clara is investigating potentially even more accelerated carbon-free resource procurement targets. Additionally, migration of industrial customers continues to drive load growth within the utilities territory, and potential growth in transportation and building electrification will could further add pressure to the existing system. SVP has traditionally relied on short-term capacity market purchases to meet its reliability need, however, changing market dynamics and regulatory requirements have driven increased uncertainties in this strategy. It is in this context that SVP contracted Energy and Environmental Economics (E3) to support their 2023 IRP development as an important platform to carefully analyze the changing planning environment and develop plans to reach their near- and long-term goals.

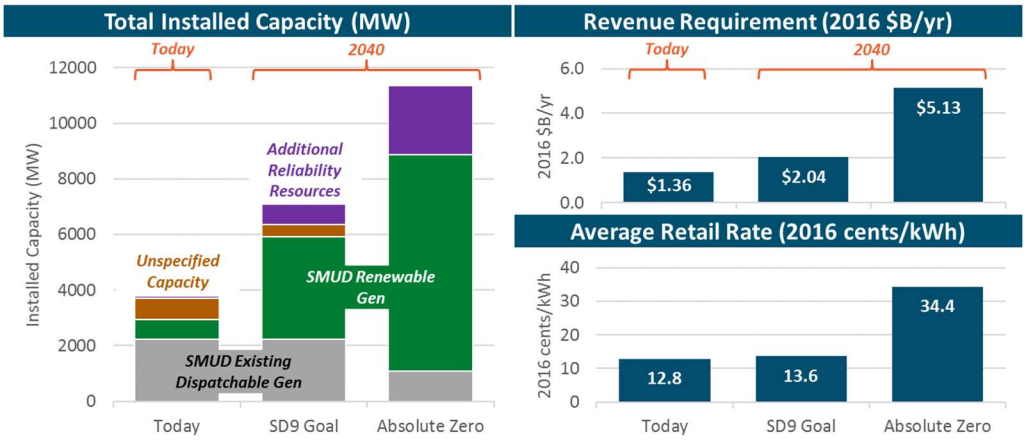
E3 worked closely with SVP to update their load forecast for the 2024 – 2035 planning horizon, craft plausible planning scenarios, and update generation resource options. The IRP details three potential resource portfolios developed using least-cost optimization, all of which meet or exceed the California's emission and reliability requirements. The base portfolio meets the California Air Resources Board's base

targets for Silicon Valley Power and Senate Bill 100 target of 60% renewable energy in 2030, with mature renewable technologies (those commercially available today). A second portfolio accelerates Senate Bill 100 renewable energy and zero-carbon generation targets for 2045 to 2035, requires a minimum of 70% carbon-free energy (60% renewable) in 2030. The third portfolio achieves a zero-carbon emissions portfolio across all hours of the year and explores the use of emerging technologies (such as biogas, hydrogen, and natural gas with carbon capture and storage).

Sacramento Municipal Utilities District Integrated Resource Planning Support (2018-present). E3 assisted the Sacramento Municipal Utilities District (SMUD) in its 2018 IRP, which is evaluating long-term clean energy goals including greenhouse gas emission reductions of 90-100% by 2040 as well as vehicle and building electrification measures. E3 developed a Sacramento-area version of the California PATHWAYS model which evaluates alternative plans for meeting economy-wide GHG goals. The PATHWAYS cases inform the IRP by setting out the context for non-electric measures and providing inputs about electric load from vehicles and buildings.

E3 then worked with SMUD staff to develop optimal portfolios of renewable, conventional and energy storage resources to meet SMUD's electric energy and reliability needs over time using a RESOLVE model version that was customized to SMUD's system. E3's analysis found that SMUD's "SD9" goal of 90% carbon reductions by 2040 can be met or exceeded using existing technology at a relatively modest cost to SMUD's customers. However, achieving "Absolute Zero" carbon emissions and retiring all natural-gas generation would be prohibitively expensive and may not meet customer expectations for reliable electric service. E3 presented preliminary findings to SMUD's Board of Directors in a public meeting in June 2018.

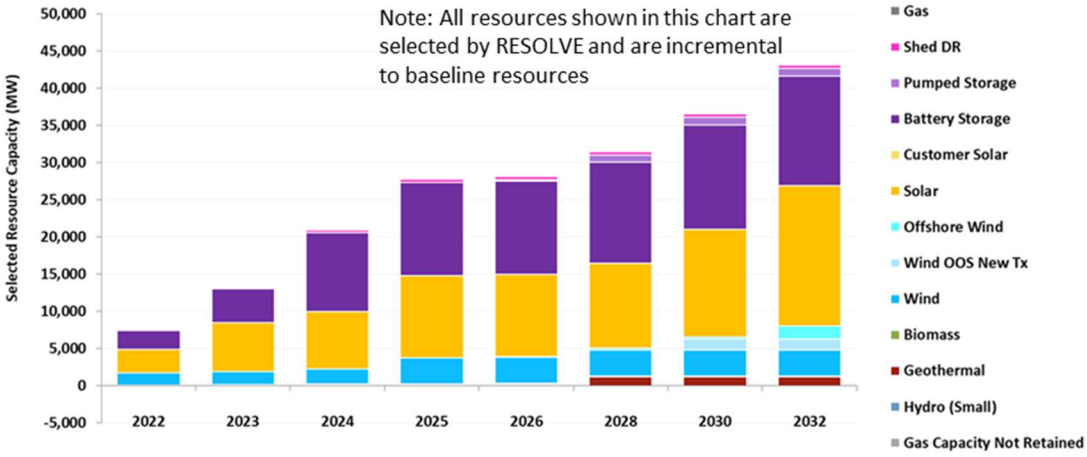
E3 used our RESOLVE model to develop optimal portfolios of renewable and conventional resources to help SMUD achieve carbon emissions reductions of 90-100% by 2040



California Public Utilities Commission Integrated Resource Plan (2016-present). E3 has been assisting the California PUC in its administration of the state's IRP program, mandated by the passage of SB 350 in 2016. E3 worked with CPUC staff to develop the structure of the IRP program including a three-year modeling cycle in which Staff prepares a system-wide plan that informs the California Independent System Operator (CAISO)'s annual Transmission Planning Process (TPP) and informs Load-Serving Entities integrated resource plans in alternate years.

E3 helped the CPUC design an optimal "Preferred System Plan" for the combined utilities that incorporates the resource procurement plans of the LSEs and complies with policy requirements. The policy requirements considered include a 60% RPS by 2030 and SB 100 by 2045, 38 million metric tons (MMT) of greenhouse gas emissions by 2030 statewide emissions target, a reliability order requiring the procurement of up to 11.5 GW of capacity by 2026, while capturing the operational and reliability challenges encountered at high penetrations of variable renewable generation. As part of this process, E3 evaluated dozens of scenarios reflecting alternative assumptions about load forecasts and electrification, resource costs, the availability of offshore wind and out-of-state wind, the ability of end-use loads to operate flexibly, and a variety of other input parameters. The CPUC adopted the Preferred System Plan, which presents a long-term vision for the California electric system under current state policy in February 2022.

The Preferred System Plan for California recommends the addition of about 3,500 MW of in-state wind, 1,700 MW of offshore wind, 19,000 MW of solar PV and 15,700 MW of energy storage resources by 2032 to meet an electric sector greenhouse gas emission target of 38 million metric tons by 2030

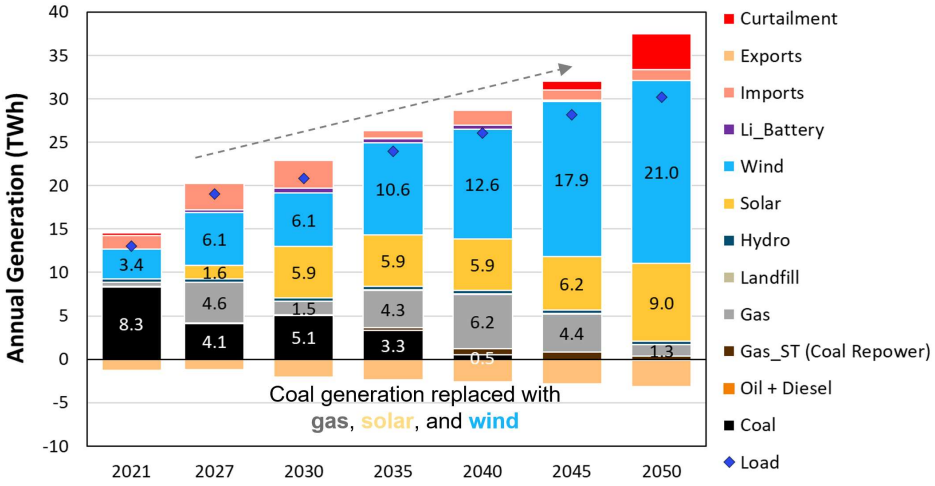


Omaha Public Power District (OPPD) Net Zero Carbon Pathways Study (2021). E3 performed a comprehensive study on various pathways for OPPD to achieve net zero carbon by 2050. The study consisted of three primary phases:

- **Multi-sector modeling:** Using the E3 PATHWAYS model (an economy-wide greenhouse gas scenario tool), E3 developed multiple electricity sector demand forecasts that were consistent with economy-wide decarbonization. The result of this phase determined that the electrification of vehicles and buildings would likely increase OPPD electricity demand by nearly 2x by 2050
- **Reliability and resiliency analysis:** Using the E3 RECAP model (a loss-of-load-probability model), E3 determined the reliability and resiliency value of various renewable and energy storage resources to be used as an input in developing optimal resource portfolios
- **Portfolio Optimization:** Using the electricity demand forecasts and resource reliability values developed in the first two phases, this phase used the E3 RESOLVE model to develop cost-optimal electricity portfolios that achieved both net-zero carbon and target reliability by 2050. The results of the analysis showed that significant quantities of new wind, solar, and battery

storage were necessary to achieve net zero, in conjunction with a large quantity of firm backup resource for reliability

Throughout the year-long study process, E3 facilitated five public stakeholder workshops to present the proposed study approach, assumptions, and results. The workshop structure provided and avenue for stakeholders to provide feedback that E3 incorporated into the study. Final base case net zero results are shown in the figure below.

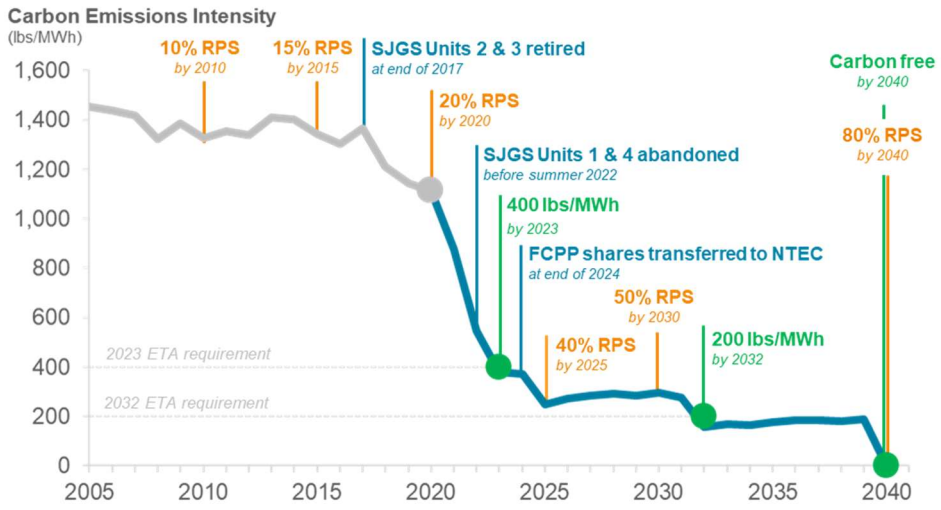


El Paso Electric (EPE) Integrated Resource Plan (2020-2021). E3 provided a broad range of IRP support services for EPE including developing resource options and data inputs, conducting a Planning Reserve Margin and ELCC study using RECAP, optimizing EPE's portfolios over the 2021-2045 period reflecting New Mexico's Renewables Portfolio Standard and Energy Transition Act as well as EPE's own goal of 80% carbon reductions by 2035, studying the operability of EPE's system under high levels of wind and solar generation, and developing regulatory strategies for cost allocation and procurement given EPE's multi-state service area. E3 has also been heavily involved in EPE's stakeholder outreach and communication strategy, leading multiple stakeholder workshops and contributing to a substantial improvement in EPE's stakeholder relations.

Salt River Project, Integrated System Plan Development (2019-Present). E3 was retained by SRP to develop the company's first public facing Integrated System Plan (ISP). The objective of the ISP is to bring currently disparate planning processes across supply-side resource planning, transmission planning, distribution planning and customer programs into a single process with comprehensive stakeholder engagement to develop an optimized pathway to achieve SRP corporate objectives related to reliability, affordability, and sustainability. ISP is largely an uncharted frontier and an aspirational goal for utilities today as they begin to prepare for a decarbonized future with increasing levels of renewable supply, distributed resources and electrification of transportation and buildings. E3 has worked closely with an internal team at SRP to engage SRP's leadership team and planning functions through a series of interviews and workshops to develop an ISP roadmap, analytical framework, and stakeholder engagement approach. E3 is currently working with the SRP team to develop the ISP processes and capabilities, and to solicit initial stakeholder feedback on the ISP approach to ensure SRP is fully ready to undertake its inaugural ISP.

Public Service Company of New Mexico (PNM) 2020 Integrated Resource Plan Support, 2019-present. Prior to developing its 2020 IRP, PNM had established a corporate goal to achieve a carbon-free electricity portfolio by 2040. E3 provided technical and strategic support to PNM's planning team to create a plan that fulfills that commitment. E3's primary role in the IRP process was as lead author of the IRP document – including the writing of the IRP narrative, creation of supporting figures and graphics, and compilation of detailed technical appendices. Throughout the process, E3 also provided guidance to PNM during scenario development, reviewed and validated inputs and outputs from the Encompass and SERVM models, and supported stakeholder outreach efforts. PNM's 2020 IRP, released to the public in January 2021, provides one of the first roadmaps for a utility to achieve a transition to a carbon-free generation portfolio, along with a detailed action plan set against the context of that transition.

PNM's carbon emissions intensity over the 20-year transition to its carbon-free goal.

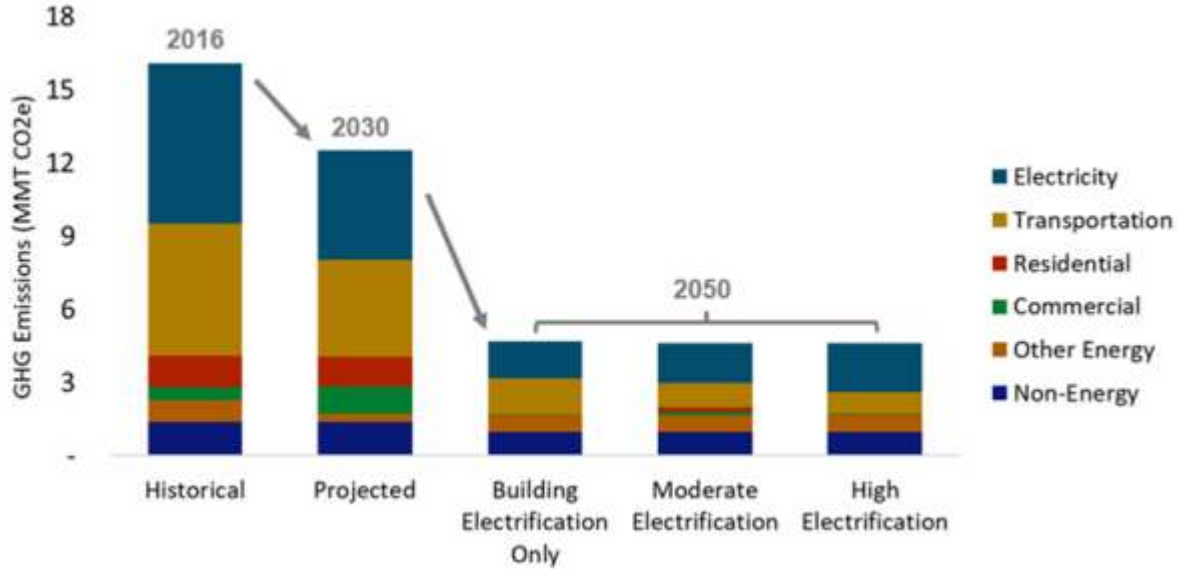


Nova Scotia Power Incorporated (NSPI) Integrated Resource Plan (2018-2021). NSPI retained E3 to assist in developing its Integrated Resource Plan, which considered alternative resource options to meet provincial and federal greenhouse gas goals while maintaining reliable and affordable electricity service. E3's support included: (1) Developing a Resource Options study to characterize the cost, performance and resource potential for a variety of resource options available to Nova Scotia Power including solar, wind, hydro, thermal, and energy storage resources; (2) Preparing a Planning Reserve Margin (PRM) study to identify the capacity needed for NSP to meet long-run electric reliability requirements as well as the Effective Load-Carrying Capability (ELCC) of each candidate resource, using E3's RECAP model; (3) Developing a Portfolio study that identifies optimal portfolios of demand-side and supply-side resources, including remote resources paired with new high-voltage transmission lines, to meet year-by-year GHG targets while meeting the PRM requirement, using E3's RESOLVE model in conjunction with NSP's PLEXOS LT; and (4) stakeholder and regulatory support throughout the process including in-person presentations to stakeholder workshops and expert witness in front of the Nova Scotia Utility and Review Board as needed.

As part of this support, E3 also prepared an economy-wide deep decarbonization study which investigated potential pathways to deep decarbonization of the Nova Scotia economy, and the effects that these pathways would have on electric load. This study was performed using E3's PATHWAYS model. The study

results indicate that electrification of transportation and buildings can play a key role in decarbonizing the Nova Scotia economy, and next steps are to investigate the role of firm low-carbon electric generation resources needed to support this electrification.

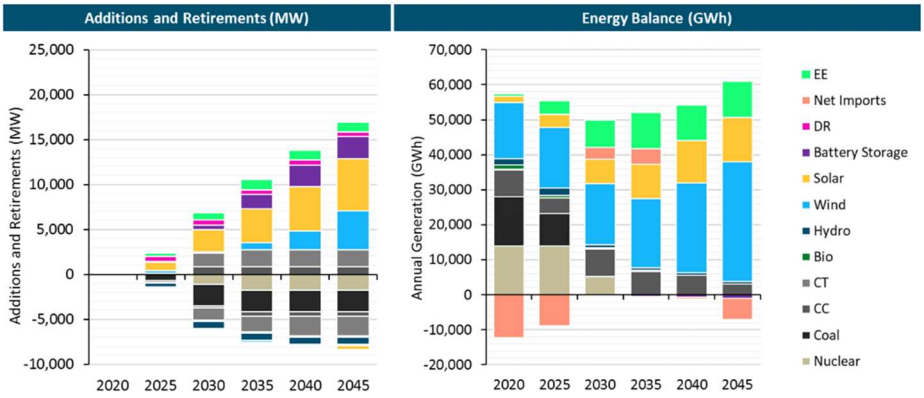
Nova Scotia Historical Emissions and Projected 2030 and 2050 Emissions by Mitigation Scenario



Xcel Energy Upper Midwest Integrated Resource Plan Support (2019). As part of its 2019 Integrated Resource Plan, Xcel Energy retained E3 to conduct two independent analyses to support its IRP: (1) an economy-wide study for the state of Minnesota examining what would be needed to meet deep decarbonization goals throughout the economy (e.g. 80% reductions by 2050); and (2) a portfolio optimization and reliability analysis for Xcel's portfolio to examine the costs of meeting the utility's carbon reduction goals (80% reductions by 2030; 100% carbon-free by 2050). E3's statewide pathways study provided Xcel with a novel perspective on future electricity loads in the context of an economy-wide carbon reduction effort, showing how decarbonization measures such as building and transportation electrification could lead to significant long-term increases in load. These findings were used to inform a sensitivity analysis conducted within Xcel's internal IRP modeling.

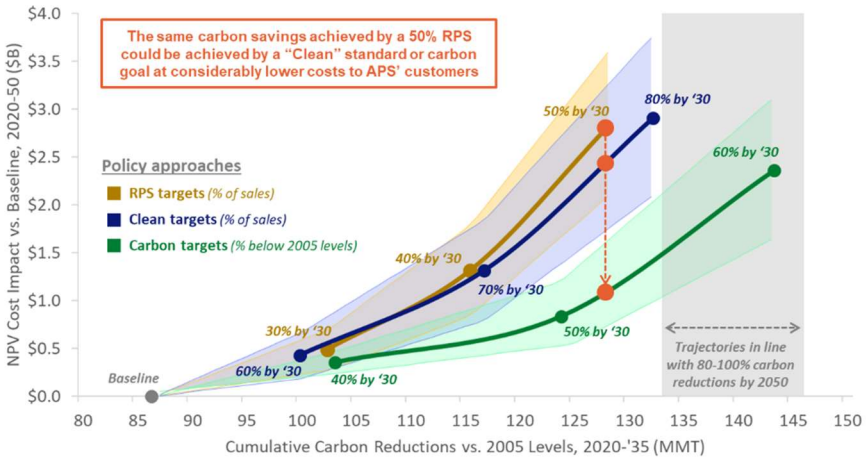
E3's portfolio and reliability analyses were conducted in parallel with Xcel's internal work to develop a forward-looking resource plan, testing the notion that an independent expert using advanced industry-standard methods would come to similar conclusions. E3 used RECAP for sophisticated loss-of-load-probability analysis and RESOLVE for optimal capacity expansion to design reliable, least-cost portfolios to meet carbon reduction goals, ultimately corroborating the findings in Xcel's plan.

E3's analysis concluded that accelerated coal retirements, relicensing of existing nuclear plants, and investments in renewables, efficiency, storage and gas led to least-cost achievement of the company's long-term goals.



Arizona Public Service Integrated Resource Plan Support (2019). In the lead-up to filing its 2019 Preliminary IRP, APS retained E3 to provide strategic support in several functions. E3 worked with APS internally to help align the scope and focus of the IRP with long-term corporate strategic efforts to shift focus towards clean energy and customer preferences and also led a stakeholder process to facilitate dialogue and collaboration. To facilitate APS' engagement with its stakeholders, E3 developed an IRP screening tool that allowed stakeholders to design and test the impacts of a wide range of alternative scenarios on APS' future portfolio. Working collaboratively with APS and stakeholders, E3 led a series of workshops to facilitate discussion between the two groups, providing stakeholders with an active platform to provide feedback to APS. E3 continued to support APS in its internal efforts to align corporate strategy and resource planning as well as external stakeholder engagement process through its final IRP in 2020.

Scenarios comparing the impacts of various long-term clean energy goals on costs and emission for APS, highlighting opportunities for low-cost carbon reductions.



4 Staff Experience

Resumes for the E3 team begin on the following page.

Arne Olson

44 Montgomery Street, Suite 1500, San Francisco, CA 94104
arne@ethree.com

ENERGY AND ENVIRONMENTAL ECONOMICS, INC. San Francisco, CA
Senior Partner

Mr. Olson has 30 years of experience in energy analysis, and he is a frequent speaker at energy conferences on the role renewable energy will play in decarbonizing the grid. He joined E3 in 2002 and became a partner in 2010. Mr. Olson leads E3's Bulk Energy Infrastructure practice area helping clients navigate changes to bulk electric system operations and investment needs brought about by increasing policy and market interest in clean and renewable energy production. He has led a number of landmark studies of the feasibility and cost of achieving deep decarbonization and high renewable penetration goals, including studies of 100% renewable and net zero energy systems in New England, California, the Pacific Northwest and the Midwest. He consults extensively for utilities, asset owners, project developers and electricity consumers in support of resource planning and commercial transactions involving renewable, conventional and energy storage resources. He also provides technical and strategic support to numerous utility regulators, state agencies and environmental organizations. He has provided expert witness testimony in regulatory and legal proceedings in California, Oregon, Montana, Colorado, New Mexico, North Carolina, South Carolina, Georgia, Alberta, Nova Scotia and Ontario. Prior to joining E3 in 2002, he served for six years in the Energy Policy Division of the Washington State Energy Office and its successor agencies.

Mr. Olson has led the development of E3's industry-leading resource planning software including the RESOLVE model that develops optimal portfolios of renewable, conventional and energy storage resources and the RECAP model that calculates Loss-of-Load Probability and related statistics to ensure that power systems can meet load reliably under high renewable penetrations. His clients have included most of the major utilities and market participants in the West including the California Independent System Operator, Pacific Gas and Electric, Southern California Edison, Puget Sound Energy, PacifiCorp, Arizona Public Service, Sacramento Municipal Utilities District, Los Angeles Department of Water and Power, the Bonneville Power Administration, Calpine, NextEra, NRG, TransAlta and many others. Eastern clients have included Xcel Energy – Northern States Power, Florida Power & Light, Tampa Electric Company, Nova Scotia Power, Hydro-Quebec TransEnergie, TransElect, Long Island Power Authority, and the Georgia Large-Scale Solar Association. He also works extensively with government agencies and industry organizations such as the California Public Utilities Commission, California Energy Commission, Oregon Public Utilities Commission, the Western Electric Coordinating Council, the Western Interstate Energy Board, and the New York State Research and Development Authority.

Electricity Resource Adequacy:

Mr. Olson is a prominent expert on resource adequacy issues and has led many projects that evaluate the need for effective capacity to ensure resource adequacy during the clean energy transition. Examples include:

- Leads a team that is advising the California Public Utilities Commission in developing a proposed Reliable Clean Power Procurement Program that would reform the way the state's Load-Serving Entities procure reliability and clean energy attributes.
- Leads a team that is advising the Public Utilities Commission of Texas on proposed reforms to the ERCOT market to address resource adequacy needs.
- Leads a team that is advising Calpine Corporation on on generator accreditation issues for capacity markets in ISO-NE and PJM including address thermal generator limitations associated with lack of fuel availability.
- Leads a team that is developing new resource adequacy standards and models for the Hawaiian Electric Company's five island systems.
- Leads a team that is advising the New York Independent System Operator on application of ELCC concepts to renewable resources within the context of NYISO's Installed Capacity (ICAP) market.
- Led a team that prepared the study *Resource Adequacy in the Desert Southwest*, that concluded urgent action is needed to develop new resources to ensure the region can continue to provide reliable power supplies in response to returning electric load growth, planned and anticipated resource retirements, and a changing supply mix.
- Led a team that was retained by NRG and Exelon to develop a concrete proposal for a Load-Serving Entity Reliability Obligation to provide forward price signals necessary to ensure resource adequacy in the Electric Reliability Council of Texas (ERCOT) market.
- Led a team including former U.S. Energy Secretary Ernest Moniz and the Energy Futures Initiative that published *Net Zero New England*, a study of electricity system reliability under economy-wide target of net zero carbon emissions. The study included significant electric load growth due to electrification of transportation and building sector end uses along with the incorporation of vast quantities of solar and wind generation.
- Led a team that advised PJM Interconnection on application of ELCC concepts to renewable resources within the context of PJM's Reliability Pricing Model (RPM) forward capacity market.
- Leads a multi-company team that supports the California Public Utilities Commission (CPUC) staff for the Integrated Resource Planning (IRP) Proceeding. The IRP proceeding is considering the need for new capacity resources to ensure resource adequacy in California.
- Led a team that prepared a report on regional resource adequacy programs in support of the Northwest Power Pool's effort to stand up such a program in the Pacific Northwest. The study evaluated regional programs operated by each of the major market operators in North America for their potential application to the unique circumstances of the Pacific Northwest.
- Led a team at E3 that developed the Renewable Energy Capacity Planning (RECAP) Model, a loss-of-load probability (LOLP) model designed explicitly to measure the need for capacity on highly renewable electricity systems, as well as the contribution of dispatch-limited resources such as wind, solar, energy storage and demand response toward meeting those needs.
- Has led numerous teams that utilized RECAP to calculate resource needs, Planning Reserve Margins (PRMs), and Effective Load-Carrying Capability (ELCC) values for dispatch-limited resources for clients including the California ISO, California PUC, Western Electric Coordinating Councils, Portland General Electric, Hawaiian Electric Company, Los Angeles Department of Water and Power, Sacramento Municipal Utilities District, NorthWestern Energy, Northwest

Power Pool, Xcel Energy, NV Energy, El Paso Electric, Nova Scotia Power, Calpine Corporation, and others.

- Led a team that evaluated the need for "clean firm" capacity to ensure reliable electric service under 100% carbon reduction scenarios for California, sponsored by the Environmental Defense Fund and the Clean Air Task Force.
- Led a team that used RECAP to calculate ELCC values for solar, wind, storage and hybrid resources to support NorthWestern Energy's evaluation of bids received in its 2020 capacity solicitation, and is providing expert witness testimony to the Montana Public Service Commission.
- Reviewed Duke Energy Carolinas and Duke Energy Progress's IRPs on behalf of Cypress Creek Renewables and Carolinas Clean Energy Business Association and provided expert witness testimony in North Carolina and South Carolina regarding Duke's resource adequacy studies, the capacity value attributed to solar and battery storage resources, and their incorporation in Duke's capacity expansion modeling.
- Led a project team that evaluated alternative methods for calculating the capacity value of solar resources on behalf of the Oregon Public Utilities Commission staff.
- Led a team in 2019-2020 that utilized RECAP to calculate the capacity contribution of demand response and energy storage resources in California using the ELCC method on behalf of the California ISO.
- Currently serving as expert witness in a wholesale market tariffs case for Nova Scotia Power, considering issues related to effective capacity determination for third-party resources.
- Led a team in 2019 that evaluated what types of resources would be needed to maintain resource adequacy in a deeply-decarbonized, 2050 California electricity system, in a study sponsored by the Calpine Corporation.
- For a group of 13 utilities in the Pacific Northwest, led studies in 2017 and 2018 that examined scenarios achieving 50% renewables and up to 100% carbon reductions across the region, focusing on policy mechanisms to achieve the goals at least cost and on the nature and quantity of complementary resources that are needed to maintain reliable electric service.
- For the Los Angeles Department of Water and Power, led a study that evaluated the reliability implications of closing three in-city natural gas-fired generating stations and replacing them with alternative resource portfolios including new gas, demand response, solar energy, energy storage and new transmission.
- Led a project that evaluated flexible capacity needs under high renewable penetration across the Western Interconnection on behalf of the Western Electric Coordinating Council and the Western Interstate Energy Board. The team included technical contributions from E3, NREL and Energy Exemplar.
- Led a team in 2016 that performed analysis on behalf of Calpine and presented to the California Public Utilities Commission (CPUC) to recommend the use of the effective load carrying capability (ELCC) metric in the Resource Adequacy (RA) program for wind and solar resources. The CPUC ultimately adopted this recommendation along with several market design features proposed by E3.

Electricity Resource Planning and Decarbonization:

Mr. Olson has led numerous projects supporting utility system integrated resource planning efforts. Many of these projects have considered the cost, reliability and operational implications of achieving very high levels of renewables. Examples include:

- Leads a team that is advising Manitoba Hydro in conducting their first integrated resource plan.
- Leads a team that is advising the Salt River Project in conducting their first integrated system plan consisting of generation, transmission, distribution and customer resource planning.
- Led a team at E3 that evaluated alternative policy options for achieving a deep decarbonization and high penetrations of clean energy resources across the PJM system. The study considers alternative clean energy policy mechanisms and geographic footprints.
- Led a team consisting of E3 and Energy Futures Initiative that evaluated economy-wide deep decarbonization pathways for New England. The *Net Zero New England* study considers alternative scenarios for building decarbonization including High Fuels and High Electrification scenarios, as well as optimal portfolios of electricity resources to meet electric demand reliably while reducing carbon emissions to 2-3 MMT by 2050. Alternative resources considered include onshore and offshore wind, ground-mounted and rooftop solar, imported hydroelectric power, conventional and advanced nuclear power, fossil generation with carbon capture and sequestration, and hydrogen.
- Leads a team that is providing full modeling support for El Paso Electric Company's 2021 IRP including loss-of-load probability modeling to determine EPE's planning reserve margin, portfolio modeling using RESOLVE and PLEXOS, and evaluation of bids from EPE's subsequent all-source RFP.
- Leads a team that is studying regional transmission and clean energy projects on behalf of four Atlantic Canada provinces, several utilities, and Natural Resources Canada.
- Leads a team that is developing an economy-wide deep decarbonization study for a large, dual-fueled Midwestern utility.
- Led a team that supported Nova Scotia Power's 2020 Integrated Resource Plan, which seeks to reduce carbon emissions by over 90% by replacing coal generation with a combination of in-province clean energy resources as well as potential clean imports.
- Leads a team at E3 that has supported the California Public Utilities Commission staff since 2014 in developing an electricity Reference System Plan for California and designing and implementing integrated resource planning standards for California load-serving entities.
- For the Sacramento Municipal Utilities District, led the development of their 2018 IRP which considered scenarios and resource portfolios for meeting California's and SMUD's own aggressive renewables goals including 100% renewables by 2040 and provides ongoing IRP and strategic planning support.
- For Xcel Energy, led an effort to support development of Northern States Power's 2018-19 IRP examining high renewable scenarios within the context of the company's stated goal of completely decarbonizing their electric resource portfolio by 2050.
- In 2018, led a study of the value of partially- and fully-dispatchable solar and solar+storage power plants on the Tampa Electric Company (TECO) system. The study was funded by First Solar but it involved extensive participation by a wide range of TECO staff and included detailed TECO power system data. The study was recognized by Public Utilities Fortnightly as among its 2018 Top Innovators and nominated as a finalist for the Smart Electric Power Alliance 2019 Power Players Award in the Change Agent of the Year category, and for the 2019 Platts Global Energy Awards in the Grid Edge category.
- For a group comprising the five largest utilities in California (Los Angeles Department of Water and Power, Pacific Gas and Electric Company, Sacramento Municipal Utilities District, San Diego Gas & Electric Company, and Southern California Edison), I led a landmark 2014 study of the feasibility, cost implications and complementary measures for achieving 50% renewables by 2030.

- Participated in several other E3 resource planning studies of achieving very high renewable penetrations for the Hawaiian Electric Company, the New York State Energy Research and Development Authority, and several electric utilities in the Southwest.
- For Portland Generic Electric, led a team that evaluated the need for resource adequacy capacity and flexible generation capacity in 2014-2016.
- For the Western Electric Coordinating Council and Western Interstate Energy Board, led teams that assessed electricity-natural gas infrastructure issues with regards to electric sector reliability under a changing resource mix including reduced reliance on coal generation and increased reliance on variable renewables and natural gas generation.
- For the Sacramento Municipal Utilities District, led a team that investigated the capacity contribution of new wind, solar and demand response (DR) resources.
- For the Colorado Public Utilities Commission, assisted in developing long-term scenarios to use across a range of energy infrastructure planning dockets.
- Provided expert testimony in front of the California Public Utilities Commission on rates and revenue requirements associated with several alternative portfolios of demand-side and supply-side resources, on behalf of Pacific Gas and Electric Company, Southern California Edison, and San Diego Gas & Electric.
- Served as lead investigator in assisting the California Public Utilities Commission (CPUC) in its efforts to reform the long-term procurement planning process in order to allow California to meet its aggressive renewable energy and greenhouse gas reduction policy goals.
- On behalf of the CPUC, investigated a number of strategies for achieving a 33% Renewables Portfolio Standard in California by 2020, and estimated their likely cost and rate impacts using the 33% RPS Calculator, a publicly-available spreadsheet model developed for this project.
- Served as lead investigator in developing integrated resource plans for numerous publicly-owned utilities including PNGC Power, Lower Valley Energy, Umatilla Electric Cooperative and Platte River Power Authority.
- Investigated for Bonneville Power Administration (BPA) the economics and feasibility of investing in new, long-line transmission facilities connecting load centers in the Pacific Northwest with remote areas that contain large concentrations of high-quality renewable energy resources. The study informed BPA about cost-effective strategies for procuring renewable energy supplies in order to meet current and potential future renewable renewables portfolio standards and greenhouse gas reduction targets.

Asset Valuation:

- Provides market evaluation and strategic advisory services for numerous asset owners and developers in California, the Southwest and the Pacific Northwest.
- Leads a team that develops medium- and long-term market price forecasts for energy, capacity, ancillary services and renewable energy credits (RECs) under very high renewable energy penetration at various market pricing points in the Western Interconnection.
- Led the team that developed renewable and conventional resource cost and performance characteristics for use in the WECC's Regional Transmission Expansion Planning process.
- On behalf of the Wyoming Governor's Office, developed a model of the cost of developing wind resources in Wyoming relative to neighboring states to inform policy debate regarding taxation. The model included detailed representations of state-specific taxes and capacity factors.

Transmission Planning and Pricing:

- Leads a team that is providing educational and strategic advisory services to the Natural Resources Defense Council to inform their advocacy around environmentally beneficial transmission in California and the Western Interconnection.
- Provided generation and transmission asset valuation services to a number of utility and independent developer clients.
- Currently advising several transmission developers seeking approval for projects through the CAISO's Transmission Planning Process.
- Served as technical support to the Western Electric Coordinating Council's Scenario Planning Steering Group (SPSG). The SPSG is developing scenarios for long-term transmission planning in the Western Interconnection.
- Led a team that investigated the use of Production Cost Modeling for the purpose of allocating costs of new transmission facilities on behalf of the Northern Tier Transmission Group and contributed to NTTG's Order 1000 compliance filing.
- Served as an expert witness in front of the Alberta Utilities Commission in a case regarding the Alberta Electric System Operator's proposed methodology for allocating Available Transmission Capacity among interties during times of congestion.
- Retained by a consortium of southwestern utilities and state agencies including the Wyoming Infrastructure Authority, Xcel Colorado, Public Service Company of New Mexico, and the Salt River Project to perform an economic feasibility study of the proposed High Plains Express (HPX) transmission project, a roadmap for transmission development in the Desert Southwest and Rocky Mountain regions.
- Conducted numerous screening studies of long-distance transmission lines connecting to remote renewable energy zones for multiple western utilities.
- Assisted in the development of a methodology for evaluating the renewable energy benefits of the Sunrise Powerlink transmission project in support of expert testimony on behalf of the California ISO.
- Assisted British Columbia Transmission Corporation and Hydro-Quebec TransEnergie with open access transmission tariff design.
- Provided assistance to the Seattle City Council to develop guidelines for the evaluation of large electric distribution and transmission projects by Seattle City Light (SCL). Guidelines specified the types of evaluations SCL should perform and the information the utility should present to the City Council when it seeks approval for large distribution or transmission projects.
- Led studies in 2009, 2011 and 2012 to develop generation and transmission capital cost assumptions for use in WECC's Transmission Expansion Planning and Policy Committee (TEPPC) studies.
- Contributed to a study of the benefits of North-South transmission expansion in Alberta on behalf of AltaLink.
- Co-authored *Load-Resource Balance in the Western Interconnection: Towards 2020*, a study of west-wide infrastructure needs for achieving aggressive RPS and greenhouse gas reduction goals in 2020 for the Western Electric Industry Leaders (WEIL) Group, comprised of CEOs and executives from a number of utilities through the West, and presented results indicating that developing new transmission infrastructure to integrate remote renewable resources can result in cost savings for consumers under aggressive policy assumptions.

Market Analysis:

- Leads a team that is conducting an extensive modeling effort for a large group of western utilities to evaluate alternative market options available to them including CAISO's Extended Day-Ahead Market (EDAM), SPP's Markets+, and other configurations.
- Supported an effort by Pacific Northwest utilities to evaluate the benefits and costs of regional capacity planning reserve sharing mechanisms.
- Co-led a study for the California Independent System Operator in 2017 to estimate the benefits of forming an organized regional electricity market across much of the Western Interconnection. The study estimated benefits from more efficient capacity expansion, reduced operating reserves, reduced fuel and O&M costs, reduced renewable curtailment, reduced planning reserve margins, and others.
- Led a study for WECC to estimate the benefits of developing a centralized Energy Imbalance Market (EIM) across the Western Interconnection. The study estimated benefits due to increased generation dispatch efficiency resulting from reduced market barriers and increased load and resource diversity among western Balancing Authorities. Led several follow-up studies of alternative Western EIM footprints for potential EIM participants.
- Led a study to estimate the benefits of EIM participation for Seattle City Light and Chelan County Public Utilities District.
- Participated in studies of the benefits of joining the Western EIM for numerous utilities including PacifiCorp, Portland Generical Electric, Idaho Power, NorthWestern Energy, the Balancing Area of Northern California, Tucson Electric Power, Public Service Company of New Mexico, and the Bonneville Power Administration.
- Represented BC Hydro in RTO West market design process in areas of congestion management, ancillary services, and transmission pricing.

Cost of Service and Rate Design:

- Testified on behalf of Nova Scotia Power on rate designs for the Company's Back-up and Top-up service provided to wholesale customers who procure a portion of their supplies, including the appropriate rates for such service as well as the terms and conditions under which third-party supplies are deemed "firm" and therefore eligible for demand charge reductions.
- For a medium-sized Northwest public utility district, led a team that analyzed financial risks to native ratepayers of fulfilling service requests for significant new quantities of industrial electric loads.
- For a large Northwest rural electric cooperative, developed a new large load policy to provide electricity service at cost-of-service rates while minimizing upward rate pressure on existing customers.
- For a large Northwest rural electric cooperative, developed a cost-of-service model and redesigned retail electric rates to provide customers with incentives to manage growth in electric loads while equitably allocating benefits from low-cost federal hydropower resources.
- For the British Columbia Hydro and Power Authority, assisted with the developed of Stepped Rates for BC Hydro's large industrial customer class.
- For a medium-sized Northwest rural electric cooperative, led a team that evaluated the rate benefits and rate design options of merging its operations with a neighboring utility.
- For a Northwest generation and transmission cooperative, led a team that evaluated alternative options for structuring pooled generation investments, including design of the pool's wholesale rates to its member cooperatives.

- For a Northwest rural electric cooperative, evaluated the benefits of membership in alternative power pool options, including an evaluation of which design's wholesale rate structure was best suited to the utility's load characteristics.

Energy and Climate Policy:

- Developed policy themes and integrated them into the four long-term planning scenarios under consideration by WECC's Scenario Planning Steering Group.
- Led a team that developed a model of deep carbon dioxide emissions reductions scenarios in the western United States and Canada on behalf of the State-Provincial Steering Committee, a body of western state and provincial officials that provides oversight for WECC.
- Led a study of likely changes to power flows and market prices at western electricity trading hubs following California's adoption of a cap-and-trade system for regulating greenhouse gas emissions in 2013.
- For BC Hydro, evaluated the impact of BC's provincial greenhouse gas reduction policies on future electric load as part of BC Hydro's 2011 Integrated Resource Plan.
- Served as advisor, facilitator and drafter to the Interim Committee in developing Idaho's first comprehensive, statewide energy plan in 25 years. The Interim Committee and subcommittees held 18 days of public meetings and received input from dozens of members of the public in developing state-level energy policy recommendations. This process culminated in Mr. Olson drafting the 2007 Idaho Energy Plan, which was approved by the Legislature and adopted as the official state energy plan in March 2007.
- Developed a model that forecasted renewable and conventional generating resources in the WECC region in 2020 as part of an E3 project to advise the California Public Utilities Commission, California Energy Commission and California Air Resources Board about the cost and feasibility of reducing greenhouse gas emissions in the electricity and natural gas sectors.

WASHINGTON OFFICE OF TRADE AND ECONOMIC DEVELOPMENT Olympia, WA
Senior Energy Policy Specialist 1996-2002

- **Electricity Transmission**: Lead responsibility for developing and representing agency policy interests in a variety of regional forums, with a primary focus on pricing and congestion management issues. Lead negotiator on behalf of agency in IndeGO and RTO West negotiations in areas of Congestion Management, Ancillary Services, and Transmission Planning. Participated in numerous subgroups developing issues including congestion zone definition, nature of long-term transmission rights, and RTO role in transmission grid expansion.
- **Western Regional Transmission Association, 1996-2001:** Member, WRTA Board of Directors. Participated in WRTA Tariff, Access and Pricing Committee. Participated in sub-groups examining "seams" issues among multiple independent system operators in the West and developing a proposal for tradable firm transmission rights in the Western interconnection.
- **Wholesale Energy Markets:** Monitored and analyzed trends in electricity, natural gas and petroleum markets. Editor and principal author of Convergence: Natural Gas and Electricity in Washington, a survey of the Northwest's natural gas industry in the wake of the extreme price events of winter 2000-2001, and on the eve of a significant increase in demand due to gas-fired power plants. Authored legislative testimony on the ability of the Northwest's natural gas industry to meet the demand from new, gas-fired power plants.
- **Electricity Restructuring:** Co-authored Washington Electricity System Study, legislatively-mandated study of Washington's electricity system in the context of ongoing trends and

potential methods of electric industry restructuring. Authored legislative testimony on the impact of restructuring on retail electricity prices in Washington, electric industry restructuring and Washington's tax system, and the interactions between restructured electricity and natural gas markets.

- **Energy Data:** Managed three-person energy data team that collected and maintained a repository of state energy data. Developed Washington's Energy Indicators, a series of policy benchmarks and key trends for Washington's energy system; second edition published in January 2001.

DECISION ANALYSIS CORPORATION OF VIRGINIA Vienna, VA
Associate 1993-1996

- **Energy Modeling and Analysis:** Developed energy demand forecasting models for Energy Information Administration's National Energy Modeling System. Results are published each year in EIA's Annual Energy Outlook.

Education

University of Pennsylvania Philadelphia, PA
Institut de Francais du Petrole Rueil-Malmaison, France
M.S., International Energy Management & Policy

University of Washington Seattle, WA
B.S., Mathematical Sciences, B.S. Statistics

Expert Witness Testimony

1. *Colorado Public Utilities Commission, 2023, testified on behalf of Black Hills Energy regarding resource adequacy and resource portfolio modeling in support of its Energy Resource Plan.*

2. *Georgia Public Service Commission, 2022, testified on behalf of the Georgia Large-Scale Solar Association regarding capacity credits and integration costs attributable to solar and hybrid solar-storage resources in Georgia Power's 2022 Integrated Resource Plan.*

3. *Colorado Public Utilities Commission, 2021, testified on behalf of the Colorado Independent Energy Association regarding the benefits of Xcel Energy's proposed Colorado Pathways Project, and new transmission investment in general, for Colorado electric ratepayers in achieving Colorado's clean energy goals. The Commission approved Xcel's application to construct the project.*

4. *Nova Scotia Utility and Review Board, 2021, testified on behalf of Nova Scotia Power regarding rate designs for the Company's Back-up and Top-up service provided to wholesale customers who procure a portion of their supplies, including the appropriate rates for such service as well as the terms and conditions under which third-party supplies are deemed "firm" and therefore*

eligible for demand charge reductions. The Board adopted Nova Scotia Power's position in each of the areas in which I testified.

5. *South Carolina Public Service Commissions, 2021, testified on behalf of the Carolinas Clean Energy Business Association regarding Duke Energy Carolinas and Duke Energy Progress's resource adequacy studies, the capacity value attributed to solar and battery storage resources, and their incorporation in Duke's capacity expansion modeling in their 2020 IRP processes.*

6. *Ontario Superior Court of Justice, 2021, testified on behalf of the Province of Ontario regarding Ontario's Feed-in Tariff policies and the resulting renewable energy contracts. The Court found on behalf of the Province in each area.*

7. *Georgia Public Service Commission, 2020, testified on behalf of the Georgia Large-Scale Solar Association, Georgia Power's Capacity and Energy Payments to Cogenerators Under PURPA and Georgia Power Company's Green Energy Program.*

8. *New Mexico Public Regulation Commission, 2020, testified on behalf of El Paso Electric Company regarding independent analysis that E3 performed of the Company's selection of solar, energy storage and new gas resources stemming from its 2018 all-source capacity solicitation.*

9. *Georgia Public Service Commission, 2019, testified on behalf of the Georgia Large-Scale Solar Association in Georgia Power's Integrated Resource Plan (IRP) proceeding regarding the quantity of large-scale solar energy that Georgia Power could procure in order to maximize customer benefits.*

10. *Oregon Public Utilities Commission, 2017, testified on behalf of Commission staff regarding methodologies for assessing the value of customer-owned solar resources.*

11. *Oregon Public Utilities Commission, 2016, testified on behalf of Portland General Electric Company regarding methodologies for assessing the capacity contribution of variable renewable energy resources.*

12. *Province of Ontario, Commercial Arbitration, 2015, testified regarding policies related to renewable energy procurement and determination of available transmission capacity. The Arbitrator found on behalf of the Province in each of the areas in which I testified.*

13. *California Energy Commission, 2014, testified on behalf of Abengoa and BrightSource Energy regarding the cost and feasibility of distributed generation and energy storage alternatives to a large, concentrating solar power plant project in the context of a power plant siting case.*

14. *California Energy Commission, 2013, testified on behalf of BrightSource Energy regarding the cost and feasibility of distributed generation alternatives to a large, concentrating solar power plant project in the context of a power plant siting case.*

15. *Alberta Electric Utilities Commission, 2012, testified on behalf of Powerex Corporation reviewing industry practices regarding treatment of existing transmission capacity, in the case when new transmission lines are interconnected.*

16. *California Public Utilities Commission, 2011, provided testimony on behalf of Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company regarding cost, revenue requirement, average retail rates, and cost of carbon reductions from alternative resource portfolios in the Long-Term Procurement Planning Proceeding.*

17. *California Public Utilities Commission, 2010, testified on behalf of BrightSource Energy and First Solar regarding the need for the he Eldorado-Ivanpah Transmission Project (EITP) proposed by Southern California Edison (SCE) to help integrate over 1000 MW of utility-scale solar generation.*

18. *California Energy Commission, 2010, testified on behalf of BrightSource Energy regarding the cost and feasibility of distributed generation alternatives to a large, concentrating solar power plant project in the context of a power plant siting case. The case successfully resulted in a site license for the Ivanpah Solar Generating Station.*

Publications

1. *Sun, Yuchi, James H. Nelson, John C. Stevens, Adrian H. Au, Vignesh Venugopal, Charles Gulian, Saamrat Kasina, Patrick O'Neill, Mengyao Yuan, and Arne Olson, "Machine learning derived dynamic operating reserve requirements in high-renewable power systems," Journal of Renewable and Sustainable Energy; Volume 14, Issue 3; June 24, 2022; https://doi.org/10.1063/5.0087144*

2. *Burdick, Aaron, Nick Schlag, Adrian Au, Roderick Go, Zachary Ming, and Arne Olson, "Lighting a Reliable Path to 100% Clean Electricity: Evolving Resource Adequacy Practices for a Decarbonizing Grid", IEEE Power and Energy Magazine; Volume: 20; Issue: 4; June 22, 2022, https://ieeexplore.ieee.org/document/9804183*

3. *Baik, Ejeong, Kiran P. Chawla, Jesse D. Jenkins, Clea Kolster, Neha S. Patankar, Arne Olson, Sally M. Benson, Jane C.S. Long, "What is different about different net-zero carbon electricity systems", Energy and Climate Change, Volume 2, December 2021, https://www.sciencedirect.com/science/article/pii/S2666278721000234*

4. *Arne Olson and Adam Simpson, "Greening the Microgrid: Moving beyond backup with cleaner sources of firm energy", Power Engineering, June 21, 2021, https://www.power-eng.com/on-site-power/greening-the-microgrid-moving-beyond-backup-with-cleaner-sources-of-firm-energy/#gref*

5. *Long, Jane C.S., Ejeong Baik, Jesse D. Jenkins, Clea Kolster, Kiran Chawla, Arne Olson, Armond Cohen, Michael Colvin, Sally M. Benson, Robert B. Jackson, David G. Victor, and Steven P. Hamburg. "Clean Firm Power is the Key to California's Carbon-Free Energy Future." Issues in Science and Technology, March 24, 2021, https://issues.org/california-decarbonizing-power-wind-solar-nuclear-gas/*

6. *Scott Burger, Marco Ferrara, Roderick Go, and Arne Olson, "To build a zero-carbon grid, we first need to model it accurately", Utility Dive, December 23, 2020,*

https://www.utilitydive.com/news/to-build-a-zero-carbon-grid-we-first-need-to-model-it-accurately/592704/

7. *Nick Schlag, Zachary Ming and Arne Olson, "Adding it all up: Counting the capacity contribution of variable and duration-limited resources", Utility Dive, September 10. 2020, https://www.utilitydive.com/news/adding-it-all-up-counting-the-capacity-contribution-of-variable-and-durati/584843/*

8. *Wu, Grace; Leslie, Emily; Sawyerr, Oluwafemi; Cameron, D. Richard; Brand, Erica; Cohen, Brian; Allen, Douglas; Ochoa, Marcela; Olson, Arne, "Low-impact land use pathways to deep decarbonization of electricity", Environmental Research Letters, Volume 15, Number 7, 10 July 2020*

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47. *"A Forecast Of Cost Effectiveness: Avoided Costs and Externality Adders", prepared for the California Public Utilities Commission, February 2004, contributing author.*

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Selected Public Presentations

1. *"State of the California Market", Independent Energy Producers Association Annual Meeting, invited speaker, Fallen Leaf Lake, California, September 27, 2022*

2. *"Capacity Markets in the Western Context", Northwest and Independent Power Producer Coalition Annual Meeting, invited panelist, Alderbrook Resort, Washington, September 13, 2022*

3. *Federal Energy Regulatory Commission Technical Conference on Increasing Real-time and Day-ahead Market and Planning Efficiency Through Improved Software, "Using E3's RESERVE Machine Learning Model to Advance the Calculation of Subhourly Ancillary Services Needs in Deeply Renewable Grids", June 23, 2022*

4. *"Dynamic Reserve Calculation with E3's RESERVE Model," Energy Systems Integration Group: Meteorology and Market Design for Grid Services Workshop, Denver, Colorado, June 8, 2022*

5. *"Transmission Planning Overview", Washington Transmission Corridors Working Group, June 8, 2022*

6. *"Scalable Markets for the Energy Transition: A Blueprint for Wholesale Electricity Market Reform", NewsData and CJB Energy Economics, Western Electric System Transformation: Connecting The WEST, February 25, 2022*

7. *Federal Energy Regulatory Commission, Technical Conference Regarding Energy and Ancillary Services Markets, invited panelist on "Revising RTO/ISO market models, optimization, and other software elements to address operational flexibility needs", October 12, 2021*

8. *"All Hands on Deck: State of the Market in California", Independent Energy Producers Association Annual Meeting, invited speaker, Fallen Leaf Lake, California, September 21, 2021*

9. *"Scalable Markets for the Energy Transition: A Blueprint for Wholesale Electricity Market Reform", Northwest and Intermountain Power Producer Coalition Annual Meeting, Union, Washington, September 13, 2021*

10. *"Climate Change and the Energy Transition: Our Energy Infrastructure at a Crossroads", Pacific Northwest Economic Region Annual Summit Plenary Session: Overview of our Regional Infrastructure and Policy Landscape, invited speaker, August 17, 2021*

11. *"Benefits of Nuclear Energy in Achieving Zero Emissions in the Pacific Northwest", National Association of Regulatory Utility Commissioners Nuclear Energy Partnership August Webinar, invited speaker, August 6, 2021*

12. *Northwest Power Pool Resource Adequacy Symposium, "Report From the Region", invited panelist, August 3, 2021*

13. *"Scalable Markets for the Energy Transition: A Blueprint for Wholesale Electricity Market Reform", IEEE Power and Energy Society General Meeting Super Session, Impact of Climate Change on the Power Grid, invited panelist, July 29, 2021*

14. *OurEnergyPolicy Energy Leaders Webinar Series: Proposed Federal Clean Energy Standards, invited panelist, July 28, 2021, https://www.ourenergypolicy.org/the-proposed-federal-clean-energy-standard/*

15. *"Opportunities and Challenges in Achieving Pacific Northwest Climate Goals", Oregon Rural Electric Cooperative Association, invited speaker, July 13, 2021*

16. *"Rethinking Resource Adequacy in a Decarbonized World", GridForward Building the Decarbonized Grid Summit, invited panelist, June 9, 2021*

17. *"Green Hydrogen: How Production, Infrastructure and End Uses Will Power an Economic Revolution", Infocast webinar, invited panelist, June 3, 2021*

18. *"Resource Adequacy Challenges in 2021 and Beyond", Energy Systems Integration Group Spring Meeting Plenary Session, invited panelist, April 8, 2001*

19. *"Opportunities and Challenges in Achieving Pacific Northwest Climate Goals", Pacific Northwest Economic Region Forum, invited panelist, March 24, 2021*

20. *"Wholesale Electricity Market Reforms for the Clean Energy Transition: an E3 Perspective", PJM Interconnection Capacity Market Workshop, March 12, 2021*

21. *"Electric Resource Adequacy: California and the West", NewsData and CJB Energy Economics Webinar, invited speaker, January 28, 2021*

22. *"Keeping the Lights on in California", Power Markets Today Webinar, invited panelist, December 2, 2020*

23. *"Resource Adequacy: Now and in the Future", Western Electric Coordinating Council Resource Adequacy Forum, invited speaker, November 18, 2020*

24. *"Accreditation of Dispatch-Limited Resources in Organized Capacity Markets", Organization of PJM States, invited panelist, October 20, 2020*

25. *"The Role of Electricity in Meeting Economy-wide Carbon Goals", Centre for Energy Advancement through Technological Innovation (CEATI), invited panelist, October 15, 2020*

26. *Federal Energy Regulatory Commission, Technical Conference regarding Carbon Pricing in Organized Wholesale Electricity Markets, invited panelist, September 30, 2020*

27. *"California and the Western Market: Trends and Opportunities", opening speaker, Independent Energy Producers Association Annual Meeting, September 23, 2020*

28. *"Decarbonizing the Power System: Summary of Lessons Learned", opening speaker, Columbia University – Johns Hopkins University Future Power Markets Forum, Session 1, June 2, 2020*

29. *"Decarbonizing Electric Power Systems", invited speaker, Minnesota Rural Electric Association Annual Meeting, April 8, 2020*

30. *"Resource Adequacy under High Renewable Penetration", Austin Electricity Conference, invited speaker, Austin, Texas, March 5, 2020*

31. *"Long-Run Resource Adequacy under Deep Decarbonization Pathways for California", invited speaker, California Energy Commission, California Public Utilities Commission and California Air Resources Board SB100 Technologies & Scenarios Workshop, San Francisco, California, November 18, 2019*

32. *"Resource Adequacy in the Pacific Northwest: Summary of existing studies and benefits of a regional program", invited speaker, Northwest Power Pool Resource Adequacy Symposium, Portland, Oregon, October 2, 2019*

33. *"California Energy Outlook: Where Are We?", invited speaker, California Independent Energy Producers Association Annual Meeting, Fallen Leaf Lake, California, September 23, 2019*

34. *"Resource Adequacy in the Pacific Northwest", invited speaker, Northwest and Intermountain Power Producer Coalition Annual Meeting, Union, Washington, September 10, 2019*

35. *"Northwest Resource Adequacy Outlook", invited speaker, Oregon Public Utilities Commission, NW Resource Adequacy Outlook Workshop, Salem, Oregon, May 28, 2019*

36. *"Achieving New York's "Green New Deal" And Deep Decarbonization Of the Electric Sector", invited speaker, Independent Power Producers of New York 33rd Annual Spring Conference, May 8, 2019, Albany, New York*

37. *"Grid Flexible Solar: Leveraging Utility-Scale Solar for Flexible Dispatch & Operations" invited speaker, Committee on Regional Electric Cooperation and Western Interconnection Regional Advisory Board, Salt Lake City, Utah, April 18, 2019*

38. *"Resource Adequacy in a Postmodern World", invited speaker, Committee on Regional Electric Cooperation and Western Interconnection Regional Advisory Board, Salt Lake City, Utah, April 18, 2019*

39. *"The Economic & Business Implications of Energy Storage", invited panelist, Austin Electricity Conference, Austin, Texas, April 4, 2019*

40. *"Resource Adequacy and Planning Reserve Sharing in Bilateral and Organized Markets", invited speaker, Northwest Power Markets Design Informational Seminar, Portland, Oregon, October 24, 2018*

41. *"Future Energy Systems: The Role for Natural Gas in a High-Renewables, Decarbonizing World", invited speaker, Stanford Natural Gas Initiative Symposium, Palo Alto, California, October 16, 2018*

42. *"Charged, Smart and Ready: Getting the most out of new consumer technologies", invited speaker, Northwest and Intermountain Power Producers Coalition Annual Meeting, Alderbrook Resort, Union, Washington, October 9, 2018*

43. *"Getting to 100% 'Clean Energy'", invited speaker, Independent Energy Producers Association's 37th Annual Meeting, Fallen Leaf Lake, South Lake Tahoe, California, October 3, 2018*

44. *"Pacific Northwest Low Carbon Scenario Analyses: Achieving Least-Cost Carbon Emissions Reductions in the Electricity Sector", invited appearance before the Washington State Legislature Energy Supply & Energy Conservation Joint Committee, September 24, 2018*

45. *"Achieving High Renewable Penetration with Grid-Friendly Operations", invited panelist, Austin Electricity Conference, Austin, Texas, April 12, 2018*

46. *"Electric industry trends and their impacts on hydropower", invited speaker, Bonneville Power Administration Strategic Plan Implementation Public Workshop, Portland, Oregon, March 2, 2018*

47. *"Customer Engagement: An Adaptive Survival Strategy for Electric Utilities", invited speaker, Energy NewsData Utility Customer Engagement Conference, Portland, Oregon, November 17, 2017*

48. *"Grid of the Future, Industry of the Future", Platinum Seminar at the Northwest and Intermountain Power Producer Coalition Annual Meeting, Union, Washington, September 11, 2017*

49. *"California's Solar Buildout: Implications for Electricity Markets in the West", invited speaker, EPIS Electric Market Forecasting Conference, Las Vegas, Nevada, September 7, 2017*

50. *"Value of Hydro in a GHG-Constrained World", invited panelist, HydroVision International, Session 1A: How Does Hydro 'Play' in the Energy Playground? Welcome to the New Wild West, Denver, Colorado, June 28, 2017*

51. *"Resource Adequacy and Planning Reserve Margins", invited speaker, Technical Conference on Capacity Planning and Resource Adequacy, Montana Public Service Commission, Helena, Montana, June 8, 2017*

52. *"That Faint Whooshing Sound: California Solar and Changing Western Power Markets", invited speaker, Northwest Power Markets: Mapping the Road Ahead, presented by Energy NewsData and CJB Energy, Portland, Oregon, May 24, 2017*

53. *"Observations on Current Resource Adequacy Practices", invited speaker, Committee for Regional Electric Power Cooperation/Western Interconnection Regional Advisory Body, Boise, Idaho, April 13, 2017*

54. *"Assessing Flexibility Needs in Highly Renewable Systems," invited speaker, Wärtsilä Symposium, Portland, Oregon, September 27, 2016*

55. *"Review: Natural Gas Infrastructure Adequacy in the Western Interconnection," invited speaker, Committee for Regional Electric Power Cooperation/Western Interconnection Regional Advisory Body, San Diego, California, October 31, 2016*

56. *"PATHWAYS to Deep Decarbonization: California", Western Electric Coordinating Council, Transmission Expansion Planning and Policy Committee, Salt Lake City, Utah, August 17, 2016*

57. *"Renewable Euphoria and the 'Big Long': How Renewable Energy Will Impact Western Markets", invited speaker, Mid-C Seminar, Wenatchee, Washington, July 27, 2016*

58. *"The Role of Renewables in Meeting California's Greenhouse Gas Goals", invited speaker, Renewable Energy Integration Summit, San Diego Regional Chamber of Commerce, July 18, 2016*

59. *"Essential Reliability Services", invited panelist, Western Electric Coordinating Council, Western Reliability Summit, Salt Lake City, Utah, May 18, 2016*

60. *"Meeting a 50% RPS for California", invited panelist, Infocast California Energy Summit, Santa Monica, California, May 11, 2016*

61. *"The Future of Resource Planning", invited keynote speaker, Great Plains Institute's e21 Initiative, St. Paul, Minnesota, April 5, 2016*

62. *"Market Driven Distributed Generation in the Western Interconnection", invited panelist, Committee on Regional Electric Power Cooperation biennial meeting, Salt Lake City, Utah, March 22, 2016*

63. *"Is Solar the New Hydro?", invited panelist, Northwest Hydroelectric Association 2016 Annual Conference, Portland, Oregon, February 17, 2016*

64. *"The Role of Energy Storage as a Renewable Integration Solution under a 50% RPS", invited panelist, Joint California Energy Commission and California Public Utilities Commission Long-Term Procurement Plan Workshop on Bulk Energy Storage, Sacramento, California, November 20, 2015*

65. *"Planning for Variable Generation Integration Needs", invited panelist, Utility Variable-generation Integration Group, Operating Impact And Integration Studies Users Group Meeting, San Diego, California, October 13, 2015*

66. *"The Role of Renewables in a Post-Coal World", invited panelist, Energy Foundation, Beyond Coal to Clean Energy Conference, San Francisco, California, October 9, 2015,*

67. *"Implications of a 50% RPS for California", invited panelist, Argus Carbon Summit, Napa, California, October 6, 2015*

68. *"Western EIM: Status Report and Implications for Public Power", Keynote speaker, Large Public Power Council meeting, Seattle, Washington, September 16, 2015*

69. *"California's 50% RPS Goal: Opportunities for Western Wind Developers", Keynote speaker at a meeting of the Wyoming Infrastructure Authority, Berkeley, California, July 28, 2015*

70. *"Western Interconnection Flexibility Assessment", Western Electric Coordinating Council Board of Directors, Salt Lake City, Utah, June 24, 2015*

71. *"California's New GHG Goals: Implications for the Western Electricity Grid", invited panelist, National Association of State Energy Officials, Western Regional State and Territory Energy Office Meeting, Portland, Oregon, May 14, 2015*

72. *"Replacing Aging Fossil Generation," invited panelist, Northwest Energy Coalition NW Clean & Affordable Energy Conference, Portland, Oregon, November 7, 2014*

73. *"Investing in Power System Flexibility," invited panelist, State/Provincial Steering Committee & Committee on Regional Electric Power Cooperation System Flexibility Forum, San Diego, California, October 20, 2014*

74. *"Opportunities and Challenges for Higher Renewable Penetration in California", invited panelist, Beyond 33%: University of California at Davis Policy Forum Series, Sacramento, California, October 17, 2014*

75. *"Renewable Curtailment as a Power System Flexibility Resource," Boise State University Energy Policy Research Conference, San Francisco, California, September 4, 2014*

76. *"Natural Gas Infrastructure Adequacy: An Electric System Perspective", Pacific Northwest Utilities Conference Committee Board of Directors, Portland, Oregon, August 8, 2014*

77. *"The Future of Renewables in the American West," invited panelist, Geothermal Energy Association Annual Meeting, Reno, Nevada, August 6, 2014*

78. *"Long-Term Natural Gas Infrastructure Needs", invited panelist, U.S. Department of Energy Quadrennial Energy Review, Public Meeting #7, Denver, Colorado, July 28, 2014*

79. *"Meeting the Demands of Renewables Integration—New Needs, New Technologies, Emerging Opportunities", invited panelist, InfoCast 2nd Annual California Energy Summit, San Francisco, California, May 28, 2014*

80. *"Power System Flexibility Needs under High Renewables", EUCI Utility Resource Planning Conference, Chicago, Illinois, May 14, 2014*

81. *"Natural Gas Infrastructure Adequacy: An Electric System Perspective", Western Interstate Energy Board Annual Meeting, Denver, Colorado, April 24, 2014*

82. *"Power System Flexibility Needs under High RPS", invited panelist, joint meeting of the Committee on Regional Electric Power Cooperation, State-Provincial Steering Committee and Western Interconnection Regional Advisory Body, Tempe, Arizona, March 26, 2014*

83. *"Natural Gas Infrastructure Adequacy: An Electric System Perspective", joint meeting of the Committee on Regional Electric Power Cooperation, State-Provincial Steering Committee and Western Interconnection Regional Advisory Body, Tempe, Arizona, March 25, 2014*

84. *"Investigating a Higher Renewables Portfolio Standard for California", 19th Annual Power Conference on Energy Research and Policy, University of California Energy Institute, Berkeley, California, March 17, 2014*

85. *"Investigating a 50 Percent Renewables Portfolio Standard in California", invited panelist, Northwest Power and Conservation Council, Portland, Oregon, March 12, 2014*

86. *"Investigating a 50 Percent Renewables Portfolio Standard in California", invited panelist, Western Systems Power Pool, Spring Operating Committee Meeting, Whistler, B.C., March 5, 2014*

87. *"Investigating a Higher Renewables Portfolio Standard for California", invited speaker, Western Electric Coordinating Council, Transmission Expansion Planning and Policy Committee, Salt Lake City, Utah, February 25, 2014*

88. *"Investigating a 50 Percent Renewables Portfolio Standard in California", invited speaker, Committee on Regional Electric Power Cooperation, State-Provincial Steering Committee and Western Interconnection Regional Advisory Body, Webinar, February 12, 2014*

89. *"Flexibility Planning: Lessons From E3's REFLEX Model", EUCI Conference on Fast Ramp and Intra-Hour Market Incentives, San Francisco, California, January 29-30, 2014*

90. *"The Effect of High Renewable Penetration on California Markets and Carbon Balance", EUCI Conference on California Carbon Policy Impacts on Western Power Markets, January 27-28, San Francisco, California, 2014*

91. *"Reliance on Renewables: A California Perspective", invited panelist at Harvard Electricity Policy Group, Seventy-Third Plenary Session, Tucson, Arizona, December 13, 2013*

92. *"The Role of Renewables in Meeting Long-Term Greenhouse Gas Reduction Goals", State Bar Of California, Energy And Climate Change Conference, Berkeley, California, November 14, 2013*

93. *"Benefits, Costs and Cost Shifts from Net Energy Metering", invited expert panelist at Washington Utilities and Transportation Commission Workshop on Distributed Generation, Olympia, Washington, November 13, 2013*

94. *Pacific Northwest Utilities Conference Committee (PNUCC) California Power Industry Roundtable, invited panelist, Portland, Oregon, September 6, 2013*

95. *"After 2020: Prospects for Higher RPS Levels in California", invited speaker at Northwest Power and Conservation Council's California Power Markets Symposium, Portland, Oregon, September 5, 2013*

96. *"Determining Flexible Capacity Needs for the CAISO Area", invited speaker at Northwest Power and Conservation Council's California Power Markets Symposium, Portland, Oregon, September 5, 2013*

97. *"California Climate Policy and the Western Energy System", invited speaker at the Western Interstate Energy Board annual meeting, Reno, Nevada, June 13, 2013*

98. *"Determining Power System Flexibility Need", EUCI Conference on Resource Planning and Asset Valuation, Westminster, Colorado, May 21, 2013*

99. *"California Policy Landscape and Impact on Electricity Markets", EUCI Conference on Resource Planning and Asset Valuation, Westminster, Colorado, May 21, 2013*

100. *"Determining Power System Flexibility Need", EUCI Conference on Fast and Flexi-ramp Resources, Chicago, Illinois, April 23, 2013*

101. *"State-Provincial Steering Committee WECC Low Carbon Scenarios Tool", 3 Interconnections Meeting, Washington, DC, February 6, 2013*

102. *"Distributed Generation Benefits and Planning Challenges", Committee on Regional Electric Power Cooperation/State-Provincial Steering Committee, Resource Planners' Forum, San Diego, California, October 3, 2012*

103. *"Thoughts on the Flexibility Procurement Modeling Challenge", invited speaker at the California Public Utilities Commission, Long-Term Procurement Planning Workshop, San Francisco, California, September 19, 2012*

104. *"Generation Capital Cost Recommendations for WECC 10- and 20-Year Studies", Western Electric Coordinating Council, Transmission Expansion Planning and Policy Committee, Technical Advisory Subcommittee, Webinar, August 15, 2012*

105. *"Renewable Energy Benefits", California Energy Commission, Integrated Energy Policy Report Workshop, Sacramento, California, April 12, 2012*

106. *"The Role of Policy in WECC Scenario Planning", Western Electric Coordinating Council, Scenario Planning Steering Group, San Diego, CA, November 1, 2011*

107. *"WECC Energy Imbalance Market Benefit Study", Western Electric Coordinating Council, Board of Directors, Scottsdale, Arizona, June 22, 2011*

108. *"Renewable Portfolio Standard Model Methodology and Draft Results", California Public Utilities Commission Workshop, San Francisco, California, June 17, 2010*

109. "Draft Results from 33% Renewable Energy Standard Economic Modeling", California Air Resources Board Workshop, Sacramento, California, May 20, 2010

110. "Market Opportunities for IPPs in the WECC", invited speaker at the Independent Power Producers of British Columbia Annual Meeting, Vancouver, British Columbia, November 2, 2009

111. "A Low-Transmission Alternative for Meeting California's 33% RPS Target", EUCI Webinar, July 31, 2009

112. "Remote Renewable and Low-Carbon Resource Options for the Pacific Northwest", Center for Research on Regulated Industries Conference, Monterey, California, June 19, 2009

113. "Engineers are from Mars, Policy-Makers are from Venus: The Effect of Policy on Long-Term Transmission Planning", invited speaker at the Western Electric Coordinating Council Long Term Transmission Planning Seminar, Phoenix, Arizona, February 2, 2009

114. "The Long-Term Path to a Stable Climate, and its Implications for BPA", invited speaker at the Bonneville Power Administration Managers' Retreat, Portland, Oregon, April 29, 2008

115. "Load-Resource Balance in the Western Interconnection: Towards 2020", Western Electric Industry Leaders Group, Las Vegas, Nevada, January 18, 2008

116. "Integrated Resource Planning for BPA Customers", invited speaker at the Bonneville Power Administration Allocation Conference, Portland, Oregon, September 19, 2006

117. "Idaho's Current Energy Picture", Energy, Environment and Technology Interim Committee, Boise, Idaho, July 11, 2006

118. "Locational Marginal Pricing – The Very Basics", Committee on Regional Electric Power Cooperation, San Diego, California, April 30, 2002

119. "Effect of 2000-2001 Energy Crisis on Washington's Economy", Conference on Business Economics, Seattle, Washington, July 19, 2001

Aaron Burdick

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aaron.burdick@ethree.com

ENERGY AND ENVIRONMENTAL ECONOMICS, INC. San Francisco, CA
Director

Mr. Burdick joined E3's Integrated Systems Planning group in 2019, where he helps utilities, system operators, and state agencies prepare for a high renewables future. He leads projects forming long term planning and reliability analyses for the electric system. His work includes working on electric planning in California, the Pacific Northwest, Hawaii, and the Midwest with expertise in utility procurement, commercial strategy, and electricity market design. He joined E3 from utility Pacific Gas & Electric, where he led the development of PG&E's 2018 Integrated Resource Plan and provided leadership on decarbonization efforts and renewable energy strategy. Before attending graduate school, Mr. Burdick spent four years at energy consultancy ICF International. He has also conducted energy analysis and provided strategic advice to non-profit environmental organizations. Mr. Burdick holds an M.S. in Civil and Environmental Engineering (Atmosphere/Energy) from Stanford University and a B.S. in Environmental Studies from the University of California, Santa Barbara. Select E3 projects include:

California Public Utilities Commission, Integrated Resource Plan, 2019-current. First as Project Manager and now as Project Lead, oversees E3's comprehensive support for CPUC electricity planning for clean energy and reliability.

Bonneville Power Authority, Lower Snake River Dams Study, 2022. Project Manager for an independent E3 study that analyzed the value of the Lower Snake River dams to the Northwest power system. E3's report examined the resource needs and costs associated with replacing the power services that the dams provide. The E3 report concluded that replacing the energy services from the dams would come at substantial financial cost to the region.

Omaha Public Power District (OPPD) Net Zero Carbon Pathways Study, 2021 - 2023. Project Manager for E3's comprehensive study on various pathways for OPPD to achieve net zero carbon by 2050. The study included multi-sector modeling of scenarios consistent with OPPD decarbonization, reliability and resiliency analysis using E3's RECAP model, and the development of optimal electricity portfolios using E3's RESOLVE model. Also Project Lead for a second project with OPPD including near-term procurement evaluation support.

Hawaiian Electric Company (HECO), Integrated Grid Planning Support, 2022-current. Project Lead and Project Manager for multiple E3 projects for HECO related to integrated planning of HECO power systems. Includes reliability modeling, capacity expansion and optimization, and technology evaluation.

PACIFIC GAS & ELECTRIC COMPANY San Francisco, CA
Principal, Policy Analysis December 2017 – May 2019
Expert Analyst, Clean Energy Analysis January 2016 – November 2017
Senior Analyst, Renewable Energy Strategy October 2014 – December 2015

- Technical, policy, and strategy leadership on electric decarbonization efforts
- Led the development of PG&E's 2018 Integrated Resource Plan
- Project management of key renewable energy compliance deliverables and technical consulting studies
- Key contributor to additional topics including cost-effectiveness, valuation, DER planning, transmission planning, vehicle-to-grid integration, and decarbonization pathways modeling

SIERRA CLUB San Francisco, CA
Campaign Analyst July 2013 – October 2014

- Developed policy analysis models to inform policy positions and regulatory comments on the EPA's Clean Power Plan
- Provided technical and market expertise on power plant economics and national electric sector trends to directors and executive leadership to inform organizational strategy

CLEAN COALITION Palo Alto, CA
Intelligent Grid Program Associate June 2012 – January 2013

- Led the technical development of the Community Microgrid Initiative to integrate high penetrations of distributed solar using storage and smart inverters; developed and ran distribution power flow models

STANFORD UNIVERSITY Palo Alto, CA
Teaching Assistant January 2013 – June 2013
Research Assistant July 2011 – December 2011

- Teaching Assistant for graduate-level courses "Air Pollution & Global Warming" and "Electric Power: Renewables & Efficiency"
- Research Assistant to Dr. Mark Jacobson on climate impacts of aviation

ICF INTERNATIONAL Sherman Oaks, CA
Analyst June 2009 – December 2011
Research Assistant December 2007 – June 2009

- Clean energy, energy efficiency, and climate change consulting projects, including technical assistance for state government clean energy efforts for DOE, IOU energy efficiency program implementation, and GHG reduction planning for the public sector and Fortune 500 firms

Education

Stanford University Stanford, CA
M.S., Civil and Environmental Engineering (Atmosphere/Energy) 2013

University of California, Santa Barbara Santa Barbara, CA
B.S., Environmental Studies (with Highest Honors) 2007

Oluwafemi (Femi) Sawyerr

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femi@ethree.com

ENERGY AND ENVIRONMENTAL ECONOMICS, INC. San Francisco, CA
Senior Managing Consultant

Mr. Sawyerr joined E3 in 2016 and works in E3's Integrated System Planning practice area, where he helps utilities, state agencies, grid operators, and project developers prepare for and implement a modern electricity grid that utilizes large amounts of renewable resources. His recent work includes managing E3's support of the California Public Utility Commission's (CPUC) Integrated Resource Plan's (IRP), including leading the Busbar Mapping analysis that supports the California Independent System Operator's (CAISO) Transmission Planning Process (TPP). He also led E3's Oregon Renewable Energy Market and Industry Assessment on behalf of the Oregon Department of Energy (ODOE); which sought to estimate the quantity and location of renewable resource development in the state of Oregon in different geographic and policy scenarios. He works extensively with E3's proprietary RESOLVE model to optimize long-term investments in generation and transmission resources subject to reliability, technical, and policy constraints. Mr. Sawyerr received an M.S. in Natural Resources and Environment from the University of Michigan and a B.S. in Applied Physics from the University of Lagos in Nigeria.

Select E3 projects include:

- Managed the analysis for the Oregon Department of Energy on the future of the renewable development industry in the state of Oregon through 2035
- Managed E3's busbar mapping analysis for the California Public Utilities Commission's Integrated Resource Plan work for the California Independent System Operator's 2021-2022 Transmission Planning Process
- Served as the technical lead in identifying optimal resource portfolios for two utilities in MISO and PJM in the context of state and corporate long-term greenhouse gas reduction targets
- Served as the technical lead on a project for the California Energy Commission analyzing California's statewide electric system portfolio composition, emissions, and cost as a result of the SB100 policy.
- Served as the technical lead on a project for The Nature Conservancy analyzing the land use implications of California's renewable energy mandates aimed at achieving steep economy-wide GHG emissions reductions by 2050
- Analyzed the impact of deep decarbonization scenarios on a Midwest utility's system over the 2020-2034 planning period to support the utility's IRP filing before its state regulatory commission. Using E3's RESOLVE model, identified optimal resource investment portfolios in the context of state and corporate long-term greenhouse gas reduction targets.
- Helped identify electricity rate structures to promote the widespread electrification of transit on behalf of a large statewide transit association

UNIVERSITY OF MICHIGAN
MECHANICAL ENGINEERING DEPARTMENT Ann Arbor, MI
Graduate Student Research Assistant May 2014 – August 2014

Volunteer Research Assistant October 2015 – May 2016

- Assisted with selection process for faculty and student membership on the research team
- Conducted literature reviews on sustainability, policy, economic and business perspectives in the development of manufacturing in less developed countries globally, and how methods could be translated to an African case study
- Drafted proposal to support sustainable manufacturing in less developed countries; final proposal submitted to the University of Michigan's Global Challenges for the Third Century Initiative

LITTLE TRAVERSE BAY BANDS OF ODAWA INDIANS (LTBB) Harbor Springs, MI
Student Consultant April 2014 – May 2015

- Collaborated with a 7-member interdisciplinary multinational team to help LTBB meet energy goals of 25% renewable energy usage by 2020
- Revised client's energy goals to 25% reduction in fossil energy consumption, revised tribal energy plan, and provided recommendations for meeting new goals at least cost
- Created the reservation area's first renewable energy generation potential suitability map using GIS mapping software
- Coordinated map creation and renewable energy project development sub-teams
- Assessed tribal policy tools to ensure long-term impacts of project recommendations; Tribal Council subsequently adopted solar PV development recommendations

GRANGE EDUCATION LIMITED Lagos, Nigeria
Teaching and Laboratory Assistant September 2010 – August 2013

- Taught sixth and seventh grade Physics and conducted laboratory classes for tenth grade Physics in an inclusive classroom system (i.e., a standard school with Special Education Needs students). Helped 100% of tenth grade students achieve passing grades for the highly competitive Cambridge IGCSE exam.
- Youngest-ever Assistant Head of Year (administrative position) and Leadership Training Team Leader

Education

University of Michigan Ann Arbor, MI
M.S., Natural Resources and Environment 2015
Sustainable Systems

University of Lagos Lagos, Nigeria
B.S., Applied Physics (Geophysics) 2008
Academic Honors: 2nd Class Upper Division

Roderick Go

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roderick@ethree.com

ENERGY AND ENVIRONMENTAL ECONOMICS, INC. San Francisco, CA
Technical Manager & Associate Director

Mr. Go's work at E3 spans the resource planning, market analysis, and distributed energy resources (DERs) practice areas. As Technical Manager, he facilitates implementation of E3's corporate strategy to develop cutting-edge analysis & subject matter expertise. This includes overseeing the development and integration of E3's model ecosystem & practice areas to deliver tools and analyses that address emerging questions around the energy transition. Prior to his role at Technical Manager, Mr. Go played a critical role in the development & use of E3's RESOLVE, RECAP, RESTORE, IDSM, and EVGrid tools to help clients answer a range of bulk and distribution system planning questions.

Mr. Go joined E3 in 2016 upon receiving an M.S.E. in Environmental Management & Economics from the Johns Hopkins University. Prior to E3, Mr. Go's research experience focused on developing novel power system optimization models & solution algorithms to investigate the operational and planning questions related to transmission-constrained systems with high renewables. Select projects at E3 include:

- **California Energy Commission EPIC Grant EPC-21-041, Climate-Informed Load Forecasting & Electric Grid Modeling to Support a Climate Resilient Transition to Zero-Carbon, 2021-Present.** Served as technical lead for EPIC-funded research study to incorporate climate impacts into California's electric sector planning models, which includes (a) incorporating new climate model-informed load & generation profiles, (b) leading development of a risk-averse planning framework, and (c) extending electric planning models to study the resilience of California's future electricity system to extreme events.
- **California Energy Commission EPIC Grant EPC-19-056, Assessing the Value of Long Duration Storage, 2020-Present.** Managing EPIC-funded research study on the value of long duration energy storage to help California meet its economywide decarbonization goals. Additionally, leading development of a new modeling toolkit and dataset to ensure system planners have the tools necessary to value resources appropriately and investigate emerging planning challenges such as reliability, last-regrets investments, and cross-sectoral coupling.
- **California Public Utilities Commission Integrated Resource Plan. 2019-Present.** Supporting the CPUC's integrated resource plan by developing E3's RESOLVE model and updating key assumptions that underpin California's statewide electricity plan.
- **Hawaiian Electric Companies Integrated Grid Planning, 2019-Present.** Managed project to support HECO's Integrated Grid Planning process to develop updated system needs assumptions and evaluate bids on each of HECO's operating islands in the context of Hawaii's long-term energy policies.
- **California Energy Commission SB 100 Joint Agency Report, 2019-2020.** Supported analysis of California's SB 100 policy. The team scaled-up an existing E3 model to reflect a statewide representation and three different interpretations of California's policy future. Additionally, over thirty sensitivities were performed to study various aspects of the potential portfolio including varying costs and resource eligibility

- **California Independent System Operator Demand Response ELCC Analysis, 2019-2020.** Managed project to examine the effective load carrying capability of demand response programs using E3's RECAP model, in collaboration with CAISO and stakeholders in its ESDER 4 initiative.
- **Western Energy Imbalance Market Benefits Studies, 2016-2019.** Analyzed potential operational benefits of subhourly wholesale market transactions via Western EIM integration for NorthWestern Energy, Portland General Electric, and el Centro Nacional de Energía (Baja California). Managed studies for the Public Service Company of New Mexico and Bonneville Power Administration.
- **Orange & Rockland Utilities Non-Wires Analysis Toolkit & Bid Evaluation, 2017-2019.** Enhanced E3's spreadsheet-based integrated demand-side model to calculate the net benefits of portfolios of distributed energy resources to meet utility needs for transmission and distribution project deferral. Linked ORU's toolkit with E3's New York Storage Tool (developed for the New York State Energy Research & Development Agency) to enable detailed storage bid evaluations.
- **California Energy Commission Solar + Storage Tool, 2017-2019.** Expanded E3's RESTORE model to evaluate the system-wide and locational net benefits of a customer-sited portfolio of solar, storage, and other distributed energy resources.
- **Puget Sound Energy Flexibility Study, 2017.** Assisted in development of PSE's PLEXOS production cost model and assessed intra-hour flexibility challenges at high wind penetrations to support 2017 Integration Resource Plan.
- **Sacramento Municipal Utilities District, 2017.** Updated PLEXOS simulation of SMUD's system to understand the impact of increasing renewable generation and broader regional changes on the utility's energy supply costs.
- **Hawaiian Electric Companies Power Supply Improvement Plan, 2016.** Updated E3's RESOLVE model for HECO's December 2016 PSIP update. E3 worked with HECO and its stakeholders to develop a set of least cost investment pathways to reach 100% renewables by 2045, helping guide policy and investment decision-making. Additionally, developed a training course for HECO staff to run RESOLVE, RECAP, and hosting capacity analyses in-house to aid in future decision-making.
- **CPUC Locational Net Benefits Analysis Demonstration, 2016.** Developed a spreadsheet-based demonstration tool to determine the location-specific avoided costs associated with the installation of distributed energy resources.

SANDIA NATIONAL LABORATORIES Albuquerque, NM
Technical Intern & Consultant June 2015 - October 2018

- Created a mixed-integer model in Python (Pyomo) to co-optimize transmission, generation, and energy storage investments on a large-scale power network, leveraging PySP and high-performance computing to implement L-shaped method decomposition for large problems.
- Studied the economic value and interaction of energy storage investments with generation and transmission expansion planning decisions to support implementation of high renewables portfolio standards and other policy constraints.

JOHNS HOPKINS UNIVERSITY Baltimore, MD
Research Assistant June 2014 - May 2016

- Studied the accuracy of different *k*-means clustering and unit commitment approximations for high-renewables systems in Matlab and GAMS as a visiting researcher at el Instituto de Investigación Tecnológica (Madrid, Spain).
- Developed a bilevel optimization model in GAMS to compare siting and sizing decisions of energy storage merchant recovering costs via energy arbitrage to those of a welfare-maximizing central planner.

Education

Johns Hopkins University — Baltimore, MD
M.S.E., Environmental Management and Economics — 2016

Johns Hopkins University — Baltimore, MD
B.S., Environmental Engineering — 2015
Minor in Engineering for Sustainable Development – Urban Development

Presentations

1. "Optimal Portfolio Investment of an Energy Storage Merchant in the Energy Imbalance Market." INFORMS Annual Meeting, Philadelphia, PA. November 2015.
2. "Combining the L-Shaped Method and Lagrangian Relaxation for Expansion Planning with Storage Devices and RPS Constraints." INFORMS Annual Meeting, Houston, TX. November 2017.

Peer-Reviewed Publications

1. Go, R., Kahrl, F., Kolster, C. (2020). Planning for Low-Cost Renewable Energy. The Electricity Journal; 33(2).
2. Go, R.S., Munoz, F.D., Watson, J.-P. (2016). Assessing the Economic Value of Co-Optimized Grid-Scale Energy Storage Investments in Supporting High Renewable Portfolio Standards. Applied Energy; 183, 902-913.

Sam Schreiber

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ENERGY AND ENVIRONMENTAL ECONOMICS, INC. San Francisco, CA
Senior Consultant

Sam Schreiber supports utilities and state regulatory agencies with long-term capacity expansion, resource cost, and emissions modeling as part of their integrated system plans. His recent work includes supporting the California Public Utilities Commission (CPUC) Integrated Resource Plan (IRP) on cost impacts due to the Inflation Reduction Act (IRA), including hydrogen fuels and other emerging technologies. He also performs geospatial analysis of resource potential throughout the western US for the CPUC. Other projects include the Salt River Project (SRP) Integrated System Plan (ISP), where he supports capacity expansion modeling in PLEXOS LT and quantifies emission reductions over the modeling horizon.

Prior to joining E3, Mr. Schreiber was a Research Assistant with the McGehee Group at the University of Colorado Boulder, where he developed enhanced process controls to improve the efficiencies and reproducibility of perovskite-tandem solar cells. He previously worked for two years as an analyst at ForeFront Power, a mid-scale (100 kW – 10 MW) solar project developer, where he conducted market and policy research for Eastern markets, including NY VDER, MA SMART, and IL ABP.

UNIVERSITY OF COLORADO BOULDER, MCGEHEE GROUP Boulder, CO
Graduate Research Assistant 2020 - 2022

- Fabrication and characterization of efficient, reproducible, and stable perovskite solar cells
- Implemented enhanced pneumatic and electronic process controls and standardized fabrication procedures to improve device reproducibility and baseline efficiencies
- Optoelectronic and thin-film characterization to understand limitations to device performance
- Collaboration with NREL staff scientists on experimental design and device characterization

FOREFRONT POWER San Francisco, CA
Senior Analyst, Sales 2018 – 2020

- Developed economic, financial, and energy system models to determine the viability of solar PV and energy storage systems for commercial behind-the-meter and community solar applications
- Subject-matter expert for state policy, legislation, rates, and incentive programs
- Led sales, marketing, development, and engineering teams to respond to RFP opportunities
- Streamlined analysis methodology to improve throughput of entire analyst team
- Analyzed and presented financial metrics internally and savings analyses to customers

TSINGHUA SOLAR SYSTEMS Beijing, CHINA
International Business Development Intern 2016

- Prepared prospectus for potential joint-venture partners on residential solar-thermal systems in the U.S. and India

Education

Stanford University — Stanford, CA
M.S., Civil Engineering — 2018

Stanford University — Stanford, CA
B.S., Engineering Physics — 2017

Publications

Strand, E. J., et. al., "Printed Organic Electrochemical Transistors for Detecting Nutrients in Whole Plant Sap." *Adv. Electron. Mater.* 2021, 2100853. https://doi.org/10.1002/aelm.202100853

Charles Gulian

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ENERGY AND ENVIRONMENTAL ECONOMICS, INC. New York, NY
Senior Consultant

Working primarily with the bulk grid group at E3, Mr. Gulian applies his expertise in mathematics and statistics to develop and maintain E3's in-house loss-of-load-probability model, RECAP. Mr. Gulian has used RECAP to study resource adequacy for utilities in the desert Southwest and Pacific Northwest U.S., and also to study the value of long duration storage in New York and California. He has developed machine learning-based tools to forecast demand for operating reserves in power markets. Prior to joining E3, Mr. Gulian completed a combined bachelor's master's program at Johns Hopkins University, where he conducted independent research in scenario-based optimization with applications for transmission/generation expansion planning under uncertainty. He interned at Con Edison Clean Energy Businesses in 2019, where he worked with their wholesale power trading team to develop price forecasting models and trading strategies based on ISO load forecasting errors.

Selected project work at E3 includes:

- **Salt River Project ELCC Study + Coolidge Expansion Replacement Study.** Evaluated potential for solar + storage resources to replace proposed 800 MW expansion of natural gas-fired power plant.
- **Puget Sound Energy Resource Adequacy Study.** Evaluated ELCCs of all-source RFP bids for 2023 IRP. Implemented custom features in RECAP to suit client's modeling needs.
- **New York Storage Roadmap 2.0.** Assessed and compared ability of various long duration storage technologies to provide reliability in New York's 2040 power system for NYSERDA.
- **New York Climate Leadership and Community Protection Act (CLCPA).** Assessed potential for long duration storage technologies to replace clean, firm (dispatchable) generation in a decarbonized 2050 New York power system. Developed methods to incorporate climate change projections into resource planning tools, with a particular focus on resource adequacy and reliability assessments.
- **California Public Utilities Commission 2022 ELCC Study.** Designed ELCC study to support the CPUC's resource adequacy program.
- **RECAP 3.0 Model Development.** Led internal model development effort to update RECAP, E3's in-house loss-of-load-probability model. Designed and implemented Python code to directly optimize resource dispatch to maximize power system reliability

CON EDISON CLEAN ENERGY BUSINESSES New York, NY
Energy Analyst Intern Summer 2019

-
  - Worked with trading desk to implement physical and financial inter-ISO power trading strategies

- Built random forest regression-based price forecasting algorithms for daily use on trading floor
- Analyzed price arbitrage opportunities in power markets due to ISO load forecasting errors

JOHN HOPKINS UNIVERSITY OFFICE OF SUSTAINABILITY Baltimore, MD
Graduate Student Instructor Fall Semester 2018

- Organized three successful events to promote sustainability on Johns Hopkins University's campus, including a "sustainable cider + trivia" event and a campus-wide networking event for sustainability-related student groups

Teaching Assistant for Discrete Mathematics Fall Semester 2018

- Designed and delivered a weekly lesson plan to a class section of 25 students
- Proctored exams and graded weekly homework assignments

Extracurricular Work Experience

INSTITUTE FOR RESEARCH TECHNOLOGY (IIT) Madrid, Spain
Research Associate Summer 2018-Present

- Wrote transmission/generation expansion planning models in Python to test a suite of optimization techniques for power grid planning under uncertainty in future wind power availability
- Studied representative day selection via k-means clustering of historical demand/production data

INSTITUTE FOR DATA INTENSIVE ENGINEERING AND SCIENCE Baltimore, MD
Research Assistant Summer 2016-Spring 2018

- Published in Astronomy and Computing: "Robust Statistics for Image Deconvolution"
- Implemented a deconvolution algorithm to iteratively deblur astronomical images
- Created "update cooling" technique to ensure convergence of the image processing algorithm

Education

The Johns Hopkins University Baltimore, MD
Combined Bachelor/Master of Science, Applied Mathematics & Statistics December 2019

Riti Bhandarkar

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ENERGY AND ENVIRONMENTAL ECONOMICS, INC. New York, NY
Associate

Ms. Bhandarkar supports E3's Integrated System Planning group. Prior to joining E3, Ms. Bhandarkar was a student researcher at the ZERO lab at Princeton University, where she modeled the emissions impact of electric vehicles. She also interned at the Environmental Defense Fund (EDF) as a Clean Energy Transition Analyst where she analyzed end-use cases for hydrogen. She holds a B.S.E. in Civil and Environmental Engineering from Princeton University.

ZERO LAB AT THE ANDLINGER CENTER FOR ENERGY AND THE ENVIRONMENT Princeton, NJ
Student Researcher June 2021 – June 2023

- Researched the impact of electrification of transportation on power system planning and system emissions, advised by Dr. Jesse Jenkins
- Developed code for decomposition of electricity load profiles using Python and R for the data processing tool PowerGenome
- Modeled impact of EV adoption rates on 2030 CO2 emissions under different policy, cost, and demand flexibility scenarios using electricity capacity expansion modeling tool GenX

ENVIRONMENTAL DEFENSE FUND New York, NY
Clean Energy Transition Analyst June 2022 – August 2022

- Compiled projections of global hydrogen investment dollars and capacity
- Analyzed clean hydrogen end-use case potential and risk for investors
- Presented findings to EDF teams; helped develop sections of the EDF Hydrogen Report

ROWLAND INSTITUTE AT HARVARD UNIVERSITY Cambridge, MA
Student Researcher June 2020 – January 2021

- Studied the development of a mechanistic ecosystem model to analyze the impact of climate-mitigation and clean energy technologies at Harvard University
- Derived mathematical framework to describe biological responses to environmental change caused by mitigation and energy technologies
- Wrote an extensive review of existing models and suggested a framework for improved trophic modeling, presented findings at the Project MEER:ReflEction symposium

Education

Princeton University — Princeton, NJ
B.S.E., Civil and Environmental Engineering — 2023

Disha Trivedi

One Broadway, 9th Floor, Cambridge, MA 02142
disha.trivedi@ethree.com

ENERGY AND ENVIRONMENTAL ECONOMICS, INC. Boston, MA
Associate

Disha Trivedi joined E3 in 2022 to support E3's climate pathways and electrification practice. She came to E3 after earning a Master of Science in Technology and Policy from MIT, where her research assessed the environmental health effects of fossil fuel emissions and wildfire smoke. While at MIT, she supported the Massachusetts Legislature's special task force on per- and polyfluoroalkyl substances (PFAS) pollution policy. Prior to her time at MIT, she applied her background as a biologist to support conservation efforts in New Zealand.

SELIN GROUP | MIT SUPERFUND RESEARCH PROGRAM Cambridge, MA
Graduate Research Assistant September 2020 – September 2022

- Programmed environmental models to analyze the contribution of fossil fuel energy emissions to global human cancer risk.
- Presented findings to multinational stakeholders including the Arctic Council and the UN Economic Commission for Europe.

MASSACHUSETTS STATE LEGISLATURE Boston, MA
PFAS Interagency Task Force Fellow June 2021 – April 2022

- Co-drafted an 80-page Task Force Report containing a comprehensive set of environmental legislation recommendations for the Commonwealth of Massachusetts to address toxic PFAS contamination in consumer products and drinking water.
- Organized public hearings and conducted 20 stakeholder interviews with industry representatives, academic scientists, community advocates, and federal, state, and international environmental agencies.

MICHAEL C. ROCKEFELLER MEMORIAL FELLOWSHIP Auckland, NEW ZEALAND
Postgraduate Fellow September 2019 – March 2020

- Collaborated with local conservation organizations to remediate North Island waterways.

UNIVERSITY OF EDINBURGH ENGINEERING LIFE GROUP Edinburgh, UK
Research Assistant, International Biology Policy May – Jul 2018, Jun – Aug 2019, Apr – Aug 2020

- Assessed stakeholder engagement plans to solicit input to synthetic biological governance.

SILVER LABORATORY AT HARVARD MEDICAL SCHOOL Boston, MA
Researcher, Living Diagnostics & Sustainable Materials June 2017 – May 2019

- Synthesized bacteria that convert CO2 into biodegradable plastic.
- Engineered FDA-approved probiotic bacteria to detect inflammatory bowel disease in humans.

Education

Massachusetts Institute of Technology — Cambridge, MA
M.S., Technology and Policy — September 2022

Harvard University — Cambridge, MA
A.B., Molecular and Cellular Biology — May 2019

SILICON VALLEY CLEAN ENERGY

Staff Report – Item 1h

Item 1h:	**Approve Amendments to SVCE Financial Policy 7 – Purchasing Card Policy**
From:	Girish Balachandran, CEO
Prepared by:	Karen Chang, Manager of Finance and Risk Controls Amrit Singh, CFO and Director of Administrative Services
Date:	12/13/2023

RECOMMENDATION

Staff recommends that the Board of Directors approve the First Amendment to FP7 – Purchasing Card Policy and ratify the past exceedance of the monthly $3,000 purchasing limit per card.

FINANCE AND ADMINISTRATION COMMITTEE RECOMMENDATION

At its November 30th, 2023 meeting, the Finance and Administration Committee reviewed staff's proposed changes. The Committee asked clarifying questions about the proposed changes and the exceedance of the $3,000 monthly card limit. Staff explained that many of the agency's policies need updating, given the growth of the organization, changes in our business, and to ensure continued learning of best business practices. Staff has been prioritizing these policy changes and will be updating additional policies that have not yet been updated. Staff further explained that the card's monthly limits were exceeded given the growth of the organization's business activities particularly with the growth in the number of employees. Staff is adding monthly checks to ensure the policy limits are monitored going forward. Staff also clarified for the Committee that all transactions executed using the P-Cards were for authorized agency's business and were within the Board-approved budget. The Committee voted unanimously to recommend that the Board of Directors approve the amended Purchasing Card Policy.

BACKGROUND

On March 8, 2017, the Board approved SVCE's Financial Policy 7 - Purchasing Card policy, and since then, the policy has not been revised. This policy introduced Purchase Cards ("P-Cards") as corporate credit cards designated for the CEO, Board Clerk, and Directors. These cards facilitate the management of operational expenses that are not practical to settle through invoicing, check payments, or bank transfers. The policy outlined specific authorized and unauthorized expenditures, and each P-Card was allocated a monthly spending limit of $3,000.

Since its implementation in 2017, SVCE has undergone considerable growth in both its workforce and vendor interactions. Consequently, there has been a surge in the demand for P-Card usage, leading to a consistent escalation in monthly charges. This has resulted in periodic exceedance of the originally established monthly threshold of $3,000 per card. All transactions executed with the P-Card were for authorized agency expenses and within the Board of Director's approved budget. However, in aggregate, these authorized transactions at times exceeded the monthly spending limit per card of $3000.

Moreover, the 2017 Purchase Card Policy was relatively high-level and staff is adding additional details to enhance controls. The revisions of the existing policy address control gaps and ensure its efficacy with demands of the current organization.

ANALYSIS & DISCUSSION

SVCE has evolved significantly as an organization since the inception of our P-Card Policy in 2017. The demand for P-Card utilization has risen steadily in recent years.

Staff's analysis indicates that SVCE staffing has nearly doubled over the past three years. Additionally, in 2023, SVCE experienced a notable upswing in the number of conferences and events compared to previous years, resulting in a heightened demand for event bookings and conference registrations. Furthermore, SVCE has made increased investments in training courses for employees, contributing to the rising expenses incurred through credit card transactions.

It is important to note that the increase in P-Card expenditures correlates directly with the growth in the number of employees and the increased frequency of conferences, events, and staff trainings. In essence, the overall increase in P-card purchases aligns with the expansion of our organization's workforce and the heightened engagement in conferences, events, and staff trainings. Importantly, these expenditures remain within the approved annual budget, and are in compliance with all record-keeping, approvals, and card issuance processes as defined in the 2017 policy.

SVCE staff believes that due to the expanded scope of the P-Card, it is important to enhance the original policy for greater robustness and comprehensiveness. This involves incorporating a more detailed description of compliance measures.

Staff recommends raising the limit for each P-card, with a revision to the policy language to say that each card has "a maximum limit of $20,000 per card per month, subject to the CEO's discretion". This will ensure that cards limits are set a level necessary to conduct the agency's business efficiently and effectively. Second, Staff recommends introducing additional language to add controls to ensure continued compliance through:

1) Clearly defining a list of authorized and unauthorized charges.
2) Implementing specific requirements for record-keeping by cardholders.
3) Incorporating a system to measure compliance and outlining the consequences for non-compliance.
4) Establishing a policy specifically addressing P-Card administration for terminated employees.

Lastly, in addressing prior transactions that exceeded monthly card dollar limits, Staff recommends that the Board of Directors ratify the past exceedances. Going forward, the amendment will address the limit increases, and the Finance and Administration Department will have dedicated finance staff to enhance compliance and policy adherence.

Proactive monitoring measures will be implemented, including monthly card limit monitoring, spending analysis reviews, credit card alert setups, and annual policy reviews with revisions as necessary. These procedures will ensure a robust system for overseeing P-card usage and maintaining fiscal responsibility.

As stated earlier, staff has been updating the agency's policies because many of them have not been updated since they were first adopted around the time the organization was initially formed. In doing so, staff has prioritized those policies with more significant business impact, such as the Energy Risk Management Policy, which has consistently been updated biennially, Budget Adoption, Control and Reporting Policy, Investments Policy, and Financial Reserves Policy. With the continued growth and maturity of the organization, staff is also in the process of strengthening the agency's governance by better delineating policies, procedures, and guidelines, as well as defining the appropriate cadence for reviewing and updating these documents. Staff plans to discuss the overall review at the February 23, 2024 Executive Committee meeting, and also discuss relevant updates at the next Finance and Administration Committee meeting, expected to occur in February 2024.

Agenda Item: 1h **Agenda Date: 12/13/2023**

STRATEGIC PLAN

The recommendation supports the Board adopted strategic plan. Specifically, the recommendations support Goal 19 – "Commit to maintaining a strong financial position", and Goal 20 – "Avoid failures in management of market risk, credit risk, liquidity risk, operational risks, and enterprise risks". Specifically, the recommendation supports the compliance to the budget as well as having the appropriate tool to empower staff to avoid and mitigate risks to SVCE.

ALTERNATIVE

Staff is open to suggestions from the Board regarding the recommendation.

FISCAL IMPACT

There is no fiscal impact to the agency for adoption of the recommendation. However, this amendment will strengthen the controls over the use of the P-Card, overall improving the efficiency, accuracy, accountability, and auditability.

ATTACHMENTS

1. FP7 – Purchasing Card Policy (Clean)
2. FP7 – Purchasing Card Policy (Redline)

SILICON VALLEY CLEAN ENERGY

FP7

Category: FINANCE

PURCHASING CARD POLICY

I. PURPOSE

The proper use of Purchasing Cards ("P-Card") provides our Agency, Silicon Valley Clean Energy ("SVCE"), with a cost-effective, convenient, and streamlined method of purchasing items, allowing staff to operate more efficiently and reduce costs.

II. CONTROLS

1. P-Cards may be issued to the Chief Executive Officer, Executive Assistant/Board Clerk, and Director-level Employees.
2. The use of P-Card shall be in accordance with Section III. Policy.
3. Each P-Card will have a credit card limit that does not exceed $20,000 monthly, subject to the CEO's discretion.

III. POLICY

1. P-Card Administration
    a) The Finance and Administration Department is responsible for:
        - Issuance of P-Cards (approved by Director of Finance and Administration)
        - Distribution of monthly statements for cardholder reconciliation
        - Monitor and review of cardholder activity
        - Timely payments of P-Card statements
        - Corrective action regarding unauthorized use or fraudulent activity

    b) Cardholders may delegate the use of the P-Card to additional SVCE employee(s) with the approval of CEO; only the cardholder and the delegate(s) may use P-Cards.

2. Authorized P-Card Use:
    a) All purchases must be lawful and comply with all SVCE policies and procedures

Adopted: 3/8/2017
Amendment 1: 12/13/2023

SILICON VALLEY CLEAN ENERGY

FP7

Category: FINANCE

b) All P-Card transaction requests must be authorized by cardholder or his/her delegate prior to the transaction. Allowable purchases include:
   - SVCE authorized business travel and registration expenses, in accordance with SVCE's Travel Policy (ex: Airfare, hotel lodging, vehicle rental, parking, tolls, public transportation fare, conference registrations)
   - Online/offsite training
   - Certain marketing and social media expenses
   - Office supplies
   - Books, periodical publications, and subscriptions necessary for business
   - Vendors who do not accept payment by ACH/wire/check; including vendors who may accept checks but for whom payment by card is necessary for the timely and efficient delivery of goods and services.

3. Unauthorized P-Card Use:
   a) Delegation of P-Card to any unauthorized individual
   b) Transactions not authorized by the cardholder
   c) Prohibited purchases include:
      - Personal purchases and non-business expenditures of any kind, including alcohol, firearms, tobacco, room service such as movies.
      - Purchase of temporary or contract labor which requires 1099 reporting
      - Cash advances of any type
      - Political contributions
      - Rental or lease of land or buildings
      - Lease or purchase of fixed asset equipment
      - Purchases that require other departmental approvals (ex: IT Hardware/software)
      - Meals, entertainment, gifts, or other expenditures which are otherwise prohibited by:
        - SVCE's budget and/or policies
        - Federal, state, or local laws or regulations
        - Grant conditions or policies of the entities from which we receive funds

SILICON VALLEY CLEAN ENERGY

FP7
Category: FINANCE

4. Cardholder and Delegated User Responsibilities
    a) Maintain physical and digital security of the Purchasing Card at all times
    b) Ensure all P-Card transactions are for authorized uses as defined in this policy, and are in accordance with all other policies and internal procedures
    c) Retain all documentation for proof of purchase, such as invoices, itemized receipts, and order confirmations.
    d) Report lost and/or stolen cards and/or fraudulent activity immediately to the Finance and Administration Department

5. Monthly Statement Review
    a) All cardholders must check each transaction against monthly statement and keep documentation
        - For travels: include travel dates
        - For meals or conferences: include information on who was in attendance and what topics were discussed
    b) Any transaction with missing documentation requires a written explanation and signed affidavit for the missing documentation
        - Include the vendor name, date, description of purchase, and reason for the missing documentation
    c) Any disputed charges are the responsibility of the cardholder to correct with the vendor and must be noted on the statement reconciliation
    d) Cardholders must submit the reconciled statement, purchasing documentation, and all associated receipts to the Finance and Administration Department timely for monthly accounting reconciliation

6. Termination of Employment of Cardholders or Delegated User
    a) Cardholder:
        - Prior to departure or termination of duties with SVCE, the cardholder must reconcile all expenditures on his/her card account since the last statement submitted.
        - It is the responsibility of the cardholder to ensure that his/her account is settled prior to departure.

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Category: FINANCE

- The P-Card must be surrendered to the Director or Manager of Finance and Administration upon termination of employment.

b) Delegated User:
- Prior to departure or termination of duties with SVCE, the delegated user is required to reconcile with the cardholder for his/her expenses incurred since the last submitted statement.
- It is the responsibility of the cardholder to ensure that the delegated user's expenses are settled prior to departure.

IV. POLICY COMPLIANCE AND REINFORCEMENT

1. Compliance Measurement
   a) The Finance and Administration Department will verify compliance to this policy through various methods, including, but not limited to, monthly statement reviews, internal audits, and feedback to the cardholder.
2. Non-Compliance
   a) Violation of this policy by any employee may lead to disciplinary measures, including possible termination of employment.
   b) The use of the card for personal business expenses by employees is strictly prohibited. Failure to comply with this directive may result in disciplinary measures, including potential termination of employment.
   c) Deliberate disregard of the policy will lead to the revocation of the card and may result in disciplinary measures, up to and including termination of employment.

V. ATTACHMENTS

1. Missing Documentation P-Card Affidavit

SILICON VALLEY CLEAN ENERGY

Missing Supporting Documentation Affidavit

X X X X - X X X X - X X X X -_____

Purchasing Card Number *(last four digits only)*

MISSING SUPPORTING DOCUMENTATION INFORMATION

Date of Transaction	Vendor Name	Description of Item(s) Purchased	Total Cost

EXPLANATION OF MISSING SUPPORTING DOCUMENTATION

CARDHOLDER CERTIFICATION

The Cardholder hereby states that the above facts are true and correct to the best of their knowledge. Cardholder further understands that repeated incidents of missing supporting documentation for Purchasing Card transactions may be grounds for suspension and/or revocation of Purchasing Card privileges.

Cardholder Signature | **Cardholder Printed Name** | **Date**

SUPERVISOR ACKNOWLEDGEMENT

Supervisor Signature | **Supervisor Printed Name** | **Date**

SILICON VALLEY CLEAN ENERGY

FP7

Category: FINANCE

PURCHASING CARD POLICY

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        - Monitor and review of cardholder activity
        - Timely payments of P-Card statements
        - Corrective action regarding unauthorized use or fraudulent activity

    b) Cardholders may delegate the use of the P-Card to additional SVCE employee(s) with the approval of CEO; only the cardholder and the delegate(s) may use P-Cards.

2. Authorized P-Card Use:
    a) All purchases must be lawful and comply with all SVCE policies and procedures

Adopted: 3/08/2017
Proposed Amendment 1: ~~11/30~~12/13/2023

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Category: FINANCE

b) All P-Card transaction requests must be authorized by cardholder or his/her delegate prior to the transaction. Allowable purchases include:
   - SVCE authorized business travel and registration expenses, in accordance with SVCE's Travel Policy (ex: Airfare, hotel lodging, vehicle rental, parking, tolls, public transportation fare, conference registrations)
   - Online/offsite training
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   - Office supplies
   - Books, periodical publications, and subscriptions necessary for business
   - Vendors who do not accept payment by ACH/wire/check; including vendors who may accept checks but for whom payment by card is necessary for the timely and efficient delivery of goods and services.

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   a) Delegation of P-Card to any unauthorized individual
   b) Transactions not authorized by the cardholder
   c) Prohibited purchases include:
      - Personal purchases and non-business expenditures of any kind, including alcohol, firearms, tobacco, room service such as movies.
      - Purchase of temporary or contract labor which requires 1099 reporting
      - Cash advances of any type
      - Political contributions
      - Rental or lease of land or buildings
      - Lease or purchase of fixed asset equipment
      - Purchases that require other departmental approvals (ex: IT Hardware/software)
      - Meals, entertainment, gifts, or other expenditures which are otherwise prohibited by:
        - SVCE's budget and/or policies
        - Federal, state, or local laws or regulations

Adopted: 3/08/2017
Proposed Amendment 1: ~~11/30~~12/13/2023

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Category: FINANCE

- Grant conditions or policies of the entities from which we receive funds

4. Cardholder and Delegated User Responsibilities
   a) Maintain physical and digital security of the Purchasing Card at all times
   b) Ensure all P-Card transactions are for authorized uses as defined in this policy, and are in accordance with all other policies and internal procedures
   c) Retain all documentation for proof of purchase, such as invoices, itemized receipts, and order confirmations.
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   a) All cardholders must check each transaction against monthly statement and keep documentation
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   b) Any transaction with missing documentation requires a written explanation and signed affidavit for the missing documentation
      - Include the vendor name, date, description of purchase, and reason for the missing documentation
   c) Any disputed charges are the responsibility of the cardholder to correct with the vendor and must be noted on the statement reconciliation
   d) Cardholders must submit the reconciled statement, purchasing documentation, and all associated receipts to the Finance and Administration Department timely for monthly accounting reconciliation

6. Termination of Employment of Cardholders or Delegated User
   a) Cardholder:

Adopted: 3/08/2017
Proposed Amendment 1: ~~11/30~~12/13/2023

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- Prior to departure or termination of duties with SVCE, the cardholder must reconcile all expenditures on his/her card account since the last statement submitted.
- It is the responsibility of the cardholder to ensure that his/her account is settled prior to departure.
- The P-Card must be surrendered to the Director or Manager of Finance and Administration upon termination of employment.

b) Delegated User:

- Prior to departure or termination of duties with SVCE, the delegated user is required to reconcile with the cardholder for his/her expenses incurred since the last submitted statement.
- It is the responsibility of the cardholder to ensure that the delegated user's expenses are settled prior to departure.

IV. POLICY COMPLIANCE AND REINFORCEMENT

1. Compliance Measurement
   a) The Finance and Administration Department will verify compliance to this policy through various methods, including, but not limited to, monthly statement reviews, internal audits, and feedback to the cardholder.
2. Non-Compliance
   a) Violation of this policy by any employee may lead to disciplinary measures, including possible termination of employment.
   b) The use of the card for personal business expenses by employees is strictly prohibited. Failure to comply with this directive may result in disciplinary measures, including potential termination of employment.
   c) Deliberate disregard of the policy will lead to the revocation of the card and may result in disciplinary measures, up to and including termination of employment.

V. ATTACHMENTS

~~1.~~ Missing Documentation P-Card Affidavit~~Purchasing Cards or P-Cards,~~

Adopted: 3/08/2017
Proposed Amendment 1: ~~11/30~~12/13/2023

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FP7

Category: FINANCE

~~are credit cards issued to authorized employees to make purchases for the Authority. The proper use of P- Cards helps our business operate more efficiently and reduce costs.~~

~~Purchasing Cards will have a monthly cardholder limit of $3,000.~~

~~Purchasing Cards will be issued to the Chief Executive Officer, Board Clerk, and Director Level employees.~~

~~Purchasing Cards may not be used to purchase temporary or contract labor which requires 1099 reporting.~~

~~In every case of credit card usage, the individual charging an account will be held personally responsible in the event that the charge is deemed personal or unauthorized.~~

~~Authorized Card Use:~~
~~Only Cardholders are authorized to use P-Cards.~~
~~P-Card authority cannot be delegated.~~
~~Cardholders are responsible for all use of their P-Card.~~
~~All purchases must comply with the purchasing, purchase order, travel, and accounts payable procedures.~~
~~Authorized purchases include:~~
~~The P-Card may be used for small purchases of supplies or services acquired through a purchase order or regular order or an individual order where the contract specifically allows such payment method.~~
~~Designated representatives who travel on Authority business may use the P-Card for authorized travel expenses.~~

~~Unauthorized P-Card Uses~~

~~Cash advances of any type are prohibited.~~
~~P-Cards shall not be used for personal purchase.~~
~~Personal or non-business expenditures of any kind are prohibited.~~
~~Meals, entertainment, gifts or other expenditures which are prohibited by:~~
~~Authority budget and/or policies~~
~~Federal, state, or local laws or regulations.~~
~~Grant conditions or policies of the entities from which we receive funds.~~

~~Cardholder Recordkeeping~~
~~Every instance of credit card or other purchase must be documented with~~

SILICON VALLEY CLEAN ENERGY

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Category: FINANCE

travel authorizations, receipts, nature of business, etc., before the expense will be considered authorized and will be approved for reimbursement.

Cardholders are responsible for retaining the documentation necessary for proof of purchase. This includes the invoice, shipping documents, and "Customer Copy" of the charge receipts.

Monthly Statement Review

All Cardholders much check each transaction against the purchasing log and supporting documentation. The original documents shall be attached to the monthly statement.

Any transaction with missing documentation requires a written explanation for the missing documentation. Include the vendor name, date, description of purchase, and reason for the missing documentation.

The Finance Department will review purchasing logs for completeness and process payment upon signature from the Chief Executive Officer. The Chief Executive Officer's purchasing log shall be reviewed and signed by the Director of Administration and Finance.

Returns are the responsibility of the Cardholder. Returns must be noted on the P-Card log and shipping documentation attached to the monthly statement review.

Disputes much be noted on the P-Card log.

If the Card is lost or stolen, it is important for the Cardholder to immediately notify the designated individual in the Authority.

Adopted: 3/08/2017
Proposed Amendment 1: ~~11/30~~12/13/2023

SILICON VALLEY CLEAN ENERGY

Staff Report – Item 1i

Item 1i:	**Approve Plan to Delay Implementation of Net Billing Tariff (Solar Billing Plan, NEM3) in Alignment with PG&E Implementation Delays**
From:	Girish Balachandran, CEO
Prepared by:	Peyton Parks, Energy Services Principal
Date:	12/13/2023

RECOMMENDATION

Staff requests the Board of Directors (Board) approve delaying implementation of the Net Billing Tariff (NBT, also known as Solar Billing Plan, or NEM3), approved by the Board at the November 8, 2023 meeting, until such a time that PG&E is prepared to begin billing under the tariff.

BACKGROUND

At the November 8, 2023 meeting of the Board, the BOD approved staff's proposal to implement the Net Billing Tariff for implementation on customer bills beginning December 15, 2023, coinciding with the planned roll-out date of PG&E's billing implementation of the new Tariff. Strategically, matching the SVCE implementation of NBT to the date of PG&E implementation would alleviate customer confusion and provide a seamless billing experience for customers migrating to the new plan.

However, on November 16, 2023, during a joint meeting between PG&E and CCA groups in its service territory, PG&E informed CCAs that they would not be able to adhere to the December 15 deadline due to unforeseen IT implementation delays. At this time, no additional guidance has been provided to SVCE and other CCAs regarding an updated timeline for implementation. The collective CCAs have requested a minimum of 90 days' notice prior to a new planned implementation date to successfully coordinate customer communications and billing operations.

Considering this, staff now proposes that the NBT implementation be delayed until such a time that PG&E is prepared to begin billing under the tariff. The small group of customers (<500) that were slated to have their NEM service transition to NBT billing on December 15th will continue to have their meter read and their accounts billed as if they were NEM 2.0 customers. PG&E has stated that they will communicate with customers in this group to inform them of the delay. PG&E has also informed the Energy Division and CPUC of their failure to meet the predetermined timelines. At this time, it is unknown if additional guidance has been handed down from the regulatory bodies to PG&E regarding this matter. SVCE staff will continue to monitor this issue and inform the Board of major developments as they unfold.

ANALYSIS & DISCUSSION

It is infeasible to implement NBT charges until there is a PG&E billing system in place that supports it. Without the IT infrastructure to implement the Avoided Cost Calculator (ACC), PG&E would not be able to provide SVCE with the billing data required to roll out the program. Another primary concern is the back-end billing provider, Calpine, has been unable to perform the necessary testing of the billing engine due to missing or incomplete information from PG&E.

Further, CCA NBT billing without the corresponding IOU charges would create a major disruption to the customer experience. We would expect confusion from customers around differing start dates between the two utilities for the same program.

STRATEGIC PLAN

This recommendation to support updated solar NEM programming is consistent with the strategic plan, Goal 8, Measure 2: 'Enact and maintain competitive service offerings for SVCE customers that deliver measurable economic and environmental benefits' and 'Establish new rate program(s) to promote electrification, and matching of clean energy supply and demand.'

ALTERNATIVE

None; implementation is not feasible until the PG&E roll-out.

FISCAL IMPACT

Implementation of the Net Billing Tariff will likely have negligible financial impacts in its first year due to low anticipated customer enrollment and comparatively lower export rates for energy than previous versions of the NEM program. Staff intends to study the financial performance of customers under the tariff in order to inform future NEM-integrated program design in the future.

SILICON VALLEY CLEAN ENERGY

Staff Report – Item 1j

Item 1j:	**Executive Committee Report**
To:	Silicon Valley Clean Energy Board of Directors
Prepared by:	Tina Walia, Executive Committee Chair
Date:	12/13/2023

The Executive Committee met November 27, 2023 and discussed the recommendation to form an Ad Hoc Transition Committee, received a budget update, discussed 2024 customer rate setting and additional expenditures, received information on SVCE board elections, and received information on the Go Electric Advisor program.

Board Chair George Tyson and CEO Girish Balachandran requested the Executive Committee support a recommendation to the Board of Directors to form a Transition Ad Hoc committee to ensure a smooth transition from current CEO to future CEO, Monica Padilla. The committee unanimously supported the formation of an ad hoc committee consisting of members Board Chair Tyson, Director Rennie, and myself, with a proposed end date of December 11, 2024. Discussion at the meeting included Brown Act implications and whether this ad hoc committee would be dealing with issues that other Board Committees would normally handle. It was clarified that this ad hoc committee would not be discussing any policy issues and the main role is to be available to the outgoing and incoming CEOs for process and communication needs. This item will be presented to the board for consideration at the December board meeting.

Amrit Singh, CFO and Director of Finance and Administration, provided a budget update that included multiple rate discount scenarios along with additional budget funding proposals based upon the updated Fiscal Year 2023-2024 analysis. The committee discussed in great depth the six funding scenarios presented by staff, with consensus to support staff's recommendation to:

1. Maintain the general customer discount at 4% when PG&E implements its new rates for 2024
2. Increase the bill credit for low-income customers to true-up to with the dollar equivalent of a 1% overall discount;
3. Transfer money to the Building Fund for the potential purchase of an office building;
4. Set aside reserves to fund a 4% discount over the next two additional years; and
5. Transfer additional $20 million to the Programs Fund

The committee also considered providing additional customer discounts such that customers' generation rates remain at current levels. Since staff was to discuss this topic with the Finance and Administration committee prior to bringing the item to the Board of Directors, there was no action taken to make a formal recommendation.

Board Clerk Andrea Pizano presented the process and timeline for upcoming SVCE Board Elections, which is similar to what has been done in the past. A presentation will be provided at the Board of Directors meeting for informational purposes.

Jessamyn Allen, Programs Lead, presented an overview of the Go Electric Advisor, an electrification concierge service to help residential customers better leverage electrification rebates and complementary SVCE offerings.

Materials from this meeting can be found on SVCE's website: SVCE Executive Committee Meeting, November 27, 2023

The next meeting of the Executive Committee will occur in January following committee appointments at the January 10, 2024 Board of Directors meeting.

SILICON VALLEY CLEAN ENERGY

Staff Report – Item 1k

Item 1k:	**Finance and Administration Committee Report**
To:	Silicon Valley Clean Energy Board of Directors
Prepared by:	Hung Wei, Finance and Administration Committee Chair
Date:	12/13/2023

The Finance and Administration Committee met on November 30, 2023, and received a presentation from staff requesting the committee recommend that the SVCE Board of Directors approve proposed amendments to SVCE's Purchasing Card Policy and receive an updated fiscal year 2023-24 budget analysis with multiple rate discount and additional budget expenditure scenarios.

Karen Chang, Manager of Finance and Risk Controls, presented proposed amendments to SVCE's financial policy 7, Purchasing Card Policy (utilized for business travel [airfare, lodging, parking/tolls], conference registrations, on-site and off-site training and development, social media marketing, office supplies, IT software subscriptions, event bookings), noting the changes were intended to tighten controls and meet the current purchasing needs of the larger SVCE organization. Staff informed the Committee that there had been no misuse of the company cards. In addition to the proposed changes to the policy, staff requested the committee support the recommendation for the Board of Directors to ratify previous exceedance of the originally established monthly $3,000 limit per card. Changing the monthly card limit would recognize the growth of SVCE over the last five years and is proportionate to current agency needs. Corrective actions in the future to ensure that the limit is set at the right level and that use of the cards are compliant with current limits include dedicated finance staff for monthly card limit monitoring, monthly spending analysis review, implementing alert systems for proactive monitoring and finally conducting annual broad policy reviews. The committee voted to support the staff's recommendation, which will be included on the Consent Calendar for the December Board of Directors meeting.

Amrit Singh, CFO and Director of Administrative Services, presented an updated fiscal year 2023-24 budget analysis. Based on the new analysis, which improves SVCE's financial projections by about $120 million from the adopted budget, staff outlined six funding scenarios ranging from a 1% general customer rate discount level to a 7.2% general customer rate discount level. Other varying additional expenditures included a true-up of the 1% bill credit for low-income customers to reflect higher rates, a building fund to invest in the purchase of a building, money to set aside to fund at least a 4% discount for two additional years, and additional program expenditures including grants to cities. The committee discussed the various funding scenarios in detail and ultimately supported the staff's recommendation of the following:

- Maintain the general customer discount level at 4% when PG&E implements its new rates for 2024
- Increase the bill credit for low-income customers to true-up to the dollar equivalent of a 1% overall discount
- Set aside $20 million for an SVCE office building
- Set aside reserves to fund a 4% discount over the next two additional years
- Transfer an additional $20 million to the Programs Fund

The committee strongly supported increasing the funding for decarb programs and setting aside funds to potentially purchase a new office building. This item will be presented to the Board of Directors for consideration at the December board meeting.

Materials from this meeting can be found at the following link: SVCE Finance and Administration Committee Meeting, 11/30/23.

Agenda Item: 1k **Agenda Date: 12/13/2023**

The next Finance and Administration Committee meeting will be scheduled based on committee member availability and is expected in February 2024.

Staff Report – Item 1l

Item 1l:	**California Community Power Report**
To:	Silicon Valley Clean Energy Board of Directors
From:	Girish Balachandran, CEO
Date:	12/13/2023

Per direction from the SVCE Board on December 9, 2020 for the CEO to provide a report of the ongoing activities of California Community Power (CC Power) after each of its meetings, this is to report CC Power held a regular board meeting on Wednesday, November 15, 2023.

Attached is a summary report from General Manager Alex Morris; materials from the November board meeting can be found here on the CC Power website: CC Power Meeting, 11/15/23

The next meeting of the board will be December 13, 2023 at 1:00 p.m.; meeting materials can be found on the CC Power website: https://cacommunitypower.org/meetings/

ATTACHMENTS:
1. CA Community Power Board Meeting Summary from General Manager Alex Morris, November 15, 2023

California Community Power

901 H St, Ste 120 PMB 157, Sacramento, CA 95814 | cacommunitypower.org

TO: CC Power Board of Directors and Alternates **DATE:** 12/06/2023
FROM: Alex Morris – General Manager
SUBJECT: **Report on CC Power Regular Board of Directors Meeting – November 15, 2023**

The CC Power Board of Directors held its regularly scheduled meeting on November 15, 2023, via Zoom. Details on the Board packet, presentation materials, and public comment letters can be found under the Meetings tab at the CC Power website: Meetings and Agendas – ca community power

Highlights of the meeting included the following:

- **Matters subsequent to posting the Agenda.** None.
- **Public Comment.** None.
- **Consent Agenda** - The Board approved the following items:
  - Minutes of the Regular Board Meeting held on August 16, 2023.
  - Resolution 23-11-02 *Approval of Execution of Joint Defense and Common Interest Agreement with California Community Choice Association*.
  - Resolution 23-11-03 *Appointment of the General Manager as Personnel Manager.*
- **Regular Agenda Voting Items**:
  - The Board adopted Resolution 23-11-01 *Delegation of Authority to the General Manager to Execute Agreements on Behalf of CC Power.* The Board discussed a preference for further definition on policies related to limitations on this authority, *e.g.* limits on General Manager authority to sign contracts that exceed a certain spending threshold, and for the General Manager to bring such policies to the Board for consideration. While such policies are in development, and perhaps in ongoing fashion, CC Power will disclose at Board Meetings any relevant contracts that have been signed pursuant to Resolution 23-11-01. This item was moved off the consent agenda to allow for discussion by the Board, prior to adoption.
  - The Board adopted Resolution 23-11-04 *Approval of Acquisition of Shared Services Resource Adequacy Report*. The Board approved the purchase of a report on Resource Adequacy to be shared amongst participating members. This Report, deemed valuable and of interest to members, provided an opportunity to use 'bulk-buy' capabilities of CC Power, yielding cost-savings for participating members.
- **General Manager Report –** the Board reviewed updates regarding multiple areas of CC Power's operations, including: i) CC Power's financial updates ii) Getting It Built Right event debrief and discussion iii) Inflation Reduction Act project updates and possible next steps iv) draft membership policies by which the Board could consider and respond to parties interested in membership in CC Power.

- **Upcoming General Manager Performance Review –** the Board will undertake a performance review of the General Manager and will take steps to adopt a go-forward performance review process for the General Manager.

- **Discussion of Any Individual Member Items –** none

SILICON VALLEY CLEAN ENERGY

Staff Report – Item 1m

Item 1m:	**Audit Committee Report**
To:	Silicon Valley Clean Energy Board of Directors
Prepared by:	Andrea Pizano, Sr. Executive Assistant and Board Clerk
Date:	12/13/2023

There is no report for the Audit Committee as the group has not met since the last report.

The next meeting of the Audit Committee will be scheduled in February to receive the financial audit results.

SILICON VALLEY CLEAN ENERGY

Staff Report – Item 2

Item 2:	**CEO Report**
To:	Silicon Valley Clean Energy Board of Directors
Prepared by:	Girish Balachandran, CEO
Date:	12/13/2023

REPORT

Staff Updates

Mia Yancich joined SVCE as an Electrification Fellow through Climate Corps on the (DPP) Programs Team December 4th. She recently graduated from the University of Michigan with a bachelor's degree in Information Science and a minor in Art and Design. Mia's primary role will be helping SVCE develop and implement EV education programming and supporting other decarbonization initiatives.

Sunny Zhang joined SVCE December 11th as a Marketing Specialist. Prior to SVCE, Sunny worked for 4 years in marketing and sales at an edtech startup, where she helped build many of the company's foundational marketing programs. As a lifelong climate advocate, Sunny also volunteers with various environmental advocacy groups around the Bay Area. Sunny earned her B.A. in Environmental Science & Policy from Duke University.

Kathy Chai joined SVCE December 11th and is the newest addition to the Finance and Administration Department as a Senior Financial Analyst. Kathy comes to us with extensive experience in both Finance and Accounting as well as real estate development and energy industries. In her recent position at an energy company, she played a pivotal role in securing financier funding for various PPA projects. Kathy holds a B.S. from UC Riverside in Business, with a concentration in Accounting and Finance.

Shawn Orgel-Olson, SVCE's newest Program Marketing Manager, joined the team December 11th. Shawn is a seasoned marketing and sustainability professional who served as the Director of Marketing and Performance Standards at the California Green Business Network for the last six years. While studying at UC Berkeley, he worked for the Alliance to Save Energy. After graduating, Shawn joined Disney Consumer Products where he worked in the Sustainable Business Practices and International Labor Standards groups, working to shift the practices of both employees and licensees. Shawn has also worked for the City of Santa Cruz, where he led the City's Green Business Program.

Personnel Officer Update

Hiring

SVCE recently climbed over the threshold of 50 employees, leaving the small employer category. Just this month, we have added three new employees, and a fellow. Over the past quarter, we have added a total of 7 full time employees, as well as a fellow to our team. At this time, we are recruiting for 2 additional roles (in Communications and Data Engineering), and have another posting on the horizon, as well as additional intern and fellow opportunities coming soon. Open positions can be found on SVCE's website: Current Job Openings

Learning and Development

We continue our dedication to developing great leaders and our commitment to continuous learning. Last week, our management team came together in training to gain skills around leadership styles, situational leadership and

effectiveness, conscious leadership, and leading through change. As the year ends, we collectively have added thousands of hours of learning and focus time, based on each individual's 100 hours of continuous learning commitment for 2023. We'll close out the year, extending that commitment to 2024 as we all read Clear Thinking by Shane Parish, and join his community of learning, The Farnam Group, to gain further access to training, his podcast the Knowledge Project, and the group's population of like-minded learners.

Culture

Our end of the year retreat is upon us. Earlier in the day on 12/13, we will dedicate time to *Reflect and Recharge,* hosting industry leaders to discuss statewide decarbonization and clean energy, and facilitating discussions with staff leadership to reflect on local impacts to date and the vision for the future. During our retreat, which runs through the evening of 12/14, departments are taking time together and cross-functionally for team building, project focus, and learning experiences.

2024 Look Ahead

As we move into 2024, we'll be focused on change management and a successful leadership transition for the whole workforce. We'll also continue our commitment to setting SVCE apart as an employer of choice, ensuring our benefits and work environment are best in class, exploring new ways to support workforce engagement and efficiency through both programmatic and technical capabilities and our unwavering emphasis on our core competencies: stakeholder service, effectiveness, continuous learning, and collaboration.

Hanford Emission Mitigation Update

In April 2023, the board approved a PPA with Middle River Power for the Hanford Power Plant, a hybrid natural gas facility with a battery energy storage system. As part of the decision, staff was directed to "develop a policy and/or guidelines to set aside funds to be used for programs and/or projects to mitigate emissions associated with energy produced by the Hanford project resulting from the Hanford PPA". After several internal discussions staff is developing a set of proposed emission mitigation projects in the Hanford area. Once developed, these options, along with a budget, will be discussed with community leaders prior to being brought to the SVCE board for adoption. Staff expects this to be completed in Q1 of 2024.

Go Electric Advisor Electrification Concierge Service Launch

SVCE is excited to announce our new offering the Go Electric Advisor, a customer support service dedicated to helping customers access the various programs and resources offered by Silicon Valley Clean Energy and other organizations to go electric. Customers can contact the Advisor through phone, email, and webchat to have their questions answered and receive a spectrum of support from assistance with layering rebates to whole-home electrification planning. The Advisor service will help make the journey to go electric as simple as possible for the customer so that they come away feeling empowered, encouraged, and supported to take on the next step, no matter where they are in their journey.

Policy Review

As discussed with the Finance and Administration Committee on November 30, 2023 we are recommending a change to the Purchasing Card policy. Continuous Learning is one of SVCE's four core competencies (the others being Collaboration, Effectiveness and Stakeholder Service). Over the next two months, we are going to review all our policies comprehensively and update all of them, as needed. Steps include inventorying policies, determining update schedules, determining responsible staff for each policy, creating staff-level procedures and guidelines to optimize implementation of Board-approved policies. We are targeting the February Executive Committee meeting to provide a status update and also a timeline of when updated policies will be brought to the Board.

CEO Agreements Executed

The following agreements have been executed by the CEO, consistent with the authority delegated by the Board:

1) City of Monte Sereno, Agreement: Community Resilience Program – Capital Projects Agreement, not to exceed amount $18,475, 11/1/23 – 12/31/24
2) ADM, Task Order: Evaluation, Measurement & Verification, not to exceed $36,372, end date 12/31/24

3) PFM Asset Management, Agreement: Financial Advisory and Swap Advisory Services – allowing CCCFA to use the PFM and SVCE agreement
4) Morgan Stanley, MOU: Procure a 30-year supply of energy, through the issuance of Clean Energy Project Revenue Bonds issued by CCCFA
5) Itron, Agreement: Developing SVCE's 15-year hourly load forecast and software platform, not to exceed $158,749.96, 11/1/23 – 11/14/26, approved by the SVCE Board of Directors at the November 8, 2023 Board of Directors Meeting
6) PFM Asset Management, Agreement: Issue bonds as part of a prepayment transaction for the purchase of electricity, not to exceed $150,000, 8/15/23 – the third anniversary date of agreement or date of issuance of the Bonds unless terminated earlier
7) NewGen Strategies & Solutions, Amendment: Advice and expert testimony, not to exceed $177,796, extends date to 12/31/24
8) NewGen Strategies & Solutions, Task Order: Advice and expert testimony – Rate Update Support, not to exceed $23,000
9) Patricia LaFleur, Agreement: Office Mural Painting, not to exceed $12,300, 11/22/23 – 6/30/24
10) Carroll Street Associates, Agreement: Clean and Healthy Affordable Multifamily Properties Program Grant Agreement, not to exceed $440,000, expires 12/31/2028
11) Abbot, Stringham & Lynch, Amendment: AMI Data Consulting, extends date to 12/31/24
12) Municipal Resource Group, Amendment: Human Resources Services, unchanged, extends date to 12/31/25
13) Keyes & Fox, Amendment: Legislative Support and Legal Representation, unchanged, extends date to 9/30/24
14) City of Gilroy, Agreement: Community Resilience Program – Capital Projects Agreement, not to exceed $269,247

SILICON VALLEY CLEAN ENERGY

CEO Power Supply Agreements Executed

Counterparty Name	Execution/Effective Date	Transaction Type	Product	Start Date	End Date	Notional Value
High Desert Power	10/16/2023	Sale	Resource Adequacy	4/1/2024	4/30/2024	$93,750
Shell Energy North America	11/14/2023	Sale	Resource Adequacy	1/1/2024	1/31/2024	$50,000
Shell Energy North America	11/14/2023	Purchase	Import Allocation Rights	6/1/2024	9/30/2024	$29,000
Central Coast Community Energy	11/14/2023	Sale	Resource Adequacy	1/1/2024	2/29/2024	$41,250

These agreements are included in the Board packet as Appendix A.

SILICON VALLEY CLEAN ENERGY

Presentations & Relevant Meetings Attended by CEO

- Participated in CalCCA Monthly board, executive, and legislative meetings

ATTACHMENTS

1. Clean Power Update, December 2023
2. FY23 Q4 Decarbonization Strategy and Programs Quarterly Report
3. Energy Services & Community Relations Update, December 2023
4. Regulatory and Legislative Update, December 2023
5. Agenda Look Ahead, December 2023 – April 2024

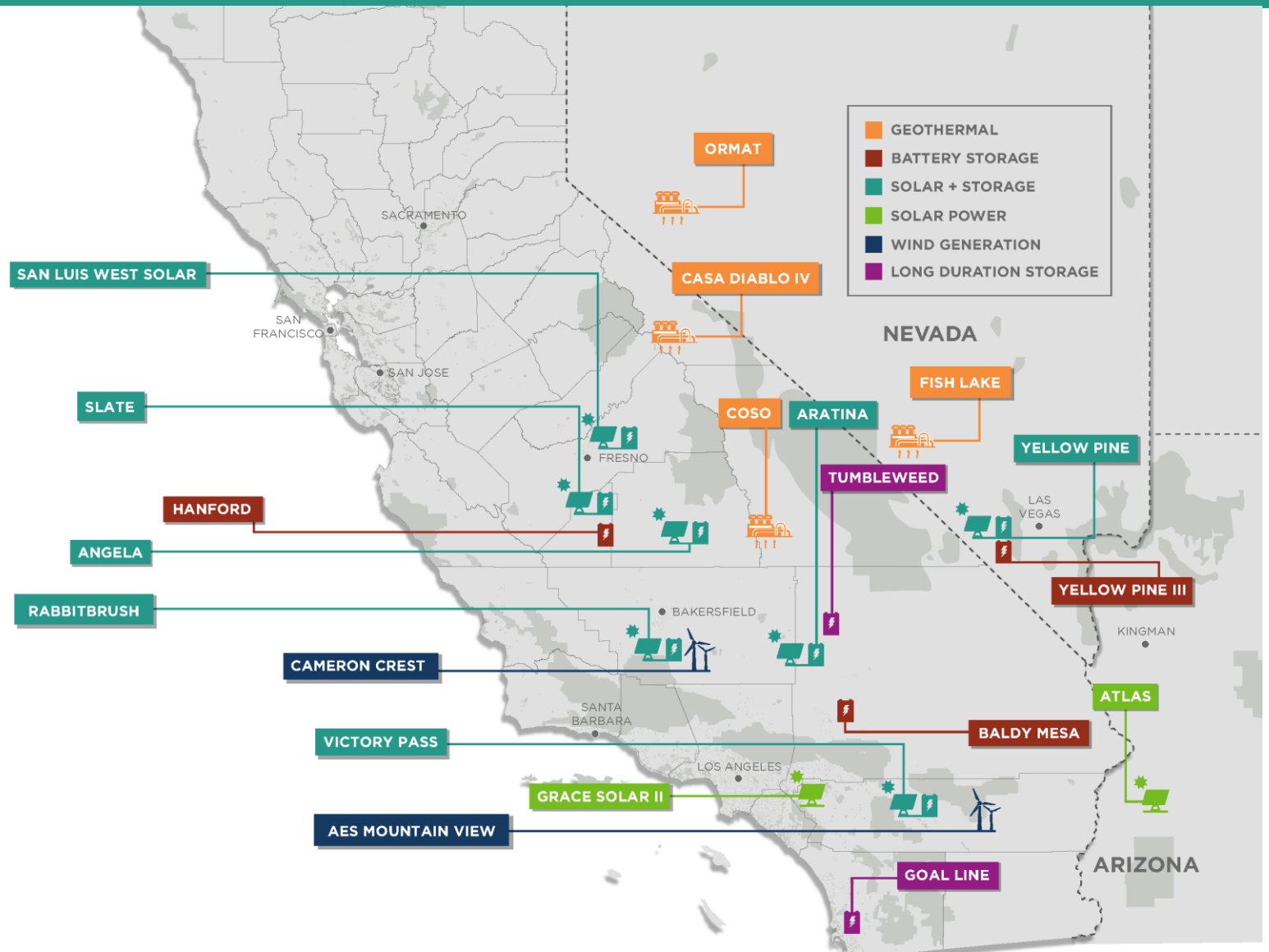


CEO Report
Clean Power Update

SVCE Board Meeting
December 13, 2023

SILICON VALLEY CLEAN ENERGY

Clean Long-term Power Agreements



- $3.7B+ in commitments
- 21 PPAs signed
  - 18 new build projects
- 896 MW of Renewable Power
- 1,845 MWh of Battery Storage

7 Projects now delivering to SVCE meeting ~33% of energy needs:

- COSO geothermal - January 2022
- Slate Solar + Storage – January 2022
- Casa Diablo geothermal – September 2022
- Mountain View wind – July 2022
- Rabbitbrush Solar + Storage – October 2022
- Terra-Gen Wind – January 2023
- Yellow Pine Solar + Storage – July 2023

SVCE Long-Term Clean Energy Contracts

	Seller	Project Name	Technology	Generation MW	Storage MW	Storage MWh	Approximate % of Annual load in 2030	Term (years)	Lifetime Not to Exceed Authority (MM$)	SVCE Board Approval	Status
1	MN8	Slate	Solar + Storage	93	46.5	186	6.2%	17	$198	Oct-18	Online
2	Ormat	Casa Diablo	Geothermal	7			1.4%	10	$43	Feb-20	Online
3	Atlantica	Coso	Geothermal	43.8			6.1%	15	$331	Mar-20	Online
4	Leeward	Rabbitbrush	Solar + Storage	40	8	20	2.9%	15	$64	Apr-20	Online
5	NextEra	Yellow Pine	Solar + Storage	50	26	104	3.8%	20	$128	May-20	Online
6	Avantus	Aratina	Solar + Storage	80	50	200	6.3%	20	$368	Jun-20	Pre-construction
7	174 Power Global	Atlas	Solar	50			3.6%	10	$32	Jan-21	Pre-construction
8	SB Energy	Angela	Solar + Storage	20	10	40	1.4%	15	$35	Mar-21	Pre-construction
9	AES	Mountain View	Wind	33.3			3.1%	20	$128	Apr-21	Online
10	Origis	San Luis West	Solar + Storage	62.5	15.625	62.5	3.9%	15	$132	Apr-21	Pre-construction
11	Clearway	Victory Pass	Solar + Storage	100	25	100	7.6%	15	$173	May-21	Construction
12	Terra-Gen	Cameron Crest	Wind	77.7			4.6%	15	$150	May-21	Online
13	Rev Renewables	Tumbleweed	Long Duration Storage		15.9375	127.5		15	$100	Feb-22	Pre-construction
14	Onward	Goal Line	Long Duration Storage		14.2	113.6		15	$100	Mar-22	Pre-construction
15	Ormat	Geothermal Portfolio	Geothermal	16.75			4.2%	20	$256	Jun-22	Pre-construction
16	OME	Fish Lake	Geothermal	1.82			0.4%	20	$30	Jun-22	Pre-construction
17	AES	Baldy Mesa (RA-only)	Storage	0	75	300		10	$81	Sep-22	Construction
18	MRP	Hanford	Thermal + BESS	99.4	131.4	131.4		12	$280	Apr-23	Pre-construction
19	NextEra	Grace	Solar	120	0		8.3%	15	$286	Aug-23	Pre-construction
20	NextEra	Yellow Pine III	Storage	0	115	460		15	$420	Aug-23	Pre-construction
21	Pattern	SunZia	Wind	100	0	0	7.6%	15	$361	Nov-23	Pre-construction

Clean Energy Resources Online Progress
as of 12/1/2023

2024 – Q1

- Victory Pass Solar + Storage: *Construction mode – delayed*
- Angela Solar + Storage: *Pre-construction – delayed*

2024 – Q2

- Baldy Mesa (RA-Only Storage): *Construction mode*

2024 – Q4

- Hanford BESS on Peaker: *Pre-construction*

2025 – Q2

- Goal Line Long Duration Storage: *Pre-construction*
- Aratina Solar + Storage: *Pre-construction – delayed*
- San Luis West Solar + Storage: *Pre-construction - delayed*

2025 – Q3+

- Fish Lake Geothermal: *Pre-construction*
- Ormat Geothermal Portfolio: *Pre-construction*
- Tumbleweed Long Duration Storage: *Construction mode*
- Atlas Solar: *Pre-construction – delayed*
- Yellow Pine III Storage: *Pre-construction*
- Grace Solar: *Pre-construction*

Victory Pass Solar + Storage

COD in Q1 2024

Developer: Clearway

Riverside County, CA

PV: 100 MW

BESS: 25 MW

Will meet approx. 8% of SVCE's load







THANK YOU!



DECARBONIZATION PROGRAMS

SILICON VALLEY CLEAN ENERGY

Quarterly Report

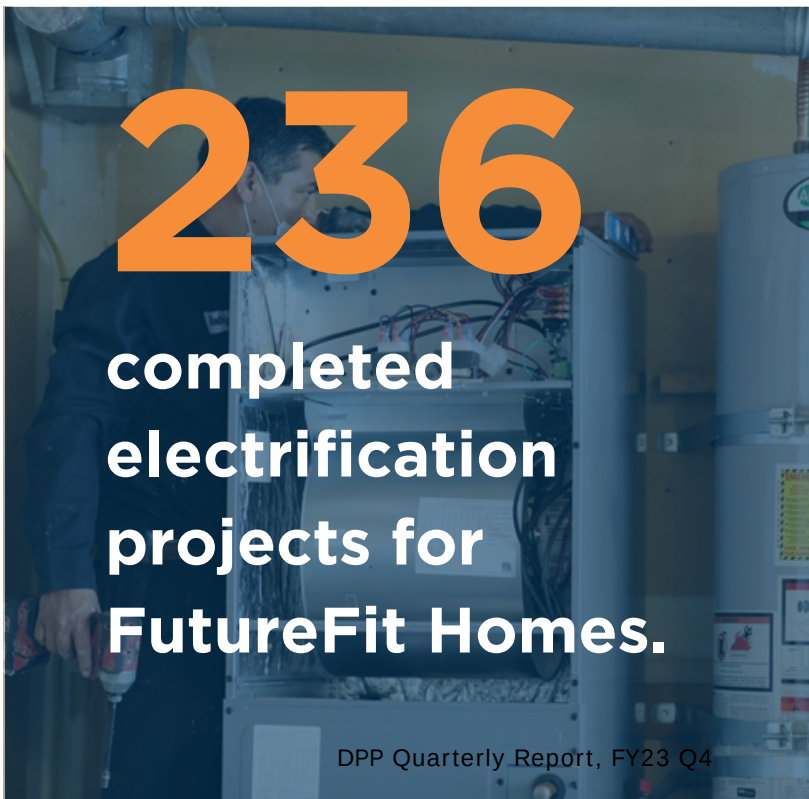
FY23 Q4 Milestones



150 applicants for All-Electric Showcase Awards.



267 L2 connector installations and 10 DCFC installations for CALeVIP.



236 completed electrification projects for FutureFit Homes.

PROGRAMS PORTFOLIO

FY23 Q4

Quarterly Report

Active Programs

See Glossary for program descriptions. Title links to program homepage (if available).

Name	Budget	Potential Impact	Cumulative Impact To-Date	Last Quarter (Update)	Next Quarter (Target)
Electrification Rate Discount	$9.5M	5,000 customers enrolled	850 enrolled	Created tracking for enrolled customer and setup processes including welcome emails and surveys	Review Phase 1 learnings and decide on revisions. Host focus group to learn about customer behavior
CHIIP, including Affordable Housing EVI Incentives	$8.9M	• 25 MUDs with EVI • 4,000 L1/L2 chargers at affordable housing	• 22 reservations • 1 completed	See cumulative impact	Expand enrollment
CALeVIP 1.0	$6M	• 85 DCFC installed • 1,100 L2 installed	• 10 DCFC installed • 267 L2 installed	Closed application window	DCFC and L2 project payments as they complete
Community Energy Resilience	$5.15M	13 agencies complete projects	13 agencies selected a project	See cumulative impact	Execute last 4 grant agreements before 12/31/23 deadline
FutureFit Homes - Residential Incentives	$4.05M	750 homes fully/partially electrified	236 homes fully/partially electrified	See cumulative impact. New marketing videos also released.	Expecting increase in rebates paid as summer projects finalize
Decarbonization Demonstration Grants	$3.2M	8 local public facing electric projects	1 project complete	See cumulative impact. All grant agreements executed.	Continue project work, demonstrate value of completed project and share lessons
FutureFit Fundamentals Contractor Training	$1.7M	• 300 contractors trained • 500 graduate incentives	104 contractors completed training	See cumulative impact. Program connected to FutureFit Homes. Program materials updated.	Working on new graduate bonus
Electric Showcase Awards 2.0	$1.5M	Highlight building electrification success stories	150 applications, 16 winners, $95,000 awarded	See cumulative impact	Promote winners, present to local councils and tour two of the winning homes
FutureFit Homes and Buildings: C&I and SMB Incentives	$1.25M	20-30 SMBs electrified	In progress	Building electrification rebates launched for small and medium business customers in July	Continue program roll out
Customer Resource Center (eHub)	$1.1M	• 1.5M email opens • 250K unique web visits	1.4M email opens, 262K web visits, 206 rebate claims	See cumulative impact	100K email opens, 10K web visits, 100 rebate claims, launch induction cooktop promo

PROGRAMS PORTFOLIO

FY23 Q4

Active Programs

Name	Budget	Potential Impact	Cumulative Impact To-Date	Last Quarter (Update)	Next Quarter (Target)
Priority Zone DC Fast Charger (PZDCFC) 2.0	$875K	10 DCFC installations near MUD hotspots	4 DFCF sites with 10 100+ kW ports	See cumulative impact	Monitor site construction progress and milestones
FutureFit Assist	$725K	• 60 assessments • 36 projects done • 250 ports	52 applications	See cumulative impact	Expand enrollment
GridShift EV Charging	$600K	Bill/emissions savings and load shifting capacity	• 1,184 EVs enrolled • 31 rebates	Launched August sign-up incentive & marketing efforts (direct mail, email, DMV ads)	Launch ongoing sign-up incentive & referrals
Reach Codes 2.0	$600K	Require all new buildings to be emissions-free	12 agencies adopt electrification ordinances	Ninth Circuit's Berkeley decision stalled progress	Monitor and support agencies as the legal case evolves
Decarbonization Engagement Grants	$442K	5 communities engage residents on climate action topics	In progress	5 communities executed agreements	Work to complete projects, share during MAWG meetings
Fleet Electrification	$300K	Complete for 5 member agency and 5 SMB fleets	In progress	5 agencies in process to complete electrification plans	Solicit additional participants, and work with 5 enrolled agencies to complete plans
SV Transportation Electrification Clearinghouse	$150K	Create cohort to enable equitable electrification.	In progress	Planned to host a stakeholder meeting on MF EV charging opportunities	Conduct relaunch to assess how to increase impact
Lights On Silicon Valley	Power Supply Budget	750 SFH and 5 MF completed	581 enrolled SFH	Sunrun continued to enroll and install customers	Construction to complete, delivery will begin

PROGRAMS PORTFOLIO

FY23 Q4

Planning

Name	Budget	Potential Impact	Last Quarter (Update)	Next Quarter (Target)
Multifamily Direct Install (TE and BE)	$12.5M	300 to 1,000 MF AH units electrified	RFP released	Evaluate proposals, select winner
Permit Modernization	$3.2M	13 member agencies improve electrification permitting	Program design completed	Release to member agencies
Tariffed On Bill (TOB) Financing	$3M	500 to 1,000 customers finance electrification	CPUC decision received which outlines path for IOUs to develop TOB proposals based on SVCE's	Working group develops TOB proposals and evaluates next steps with TECH
Existing Building Policy Experiment	$1.9M	Spur action on building electrification and reduce building gas combustion	Program design completed	Release to member agencies
FutureFit Homes Concierge	$892K	3,600 customers use hotline, 1,200 use tech assistance, 350 use electrification plans	Worked with vendor on implementation plan and tech requirements	Develop webpage, train vendor on SVCE programs, and prepare for launch
Feasibility Assessment, Natural Gas Phase Out	$300K	Complete study that informs local, regional, and statewide policies	Developed SPW for phase 1 analysis	Hire contractor and kickoff work
SV Building Electrification Strategic Taskforce	$150K	Educate stakeholders about building electrification	Completed program design and joined 2 workforce coordination efforts	Map stakeholders, list feedback received on workforce, housing, and LMI building electrification issues

Closed/Inactive

Name	Budget	Summary
Innovation Onramp	$2.4M	10 pilots complete. The final pilot from 2021 with NeoCharge was completed in May 2023. Future program pathway is being determined. $1.2M budget remaining.
FutureFit Homes Heat Pump Water Heater	$1.5M	Program closed in December 2022. Active applications were transitioned to FutureFit Homes Incentives program.
Reach Codes 2019	$400K	Reach Codes 2019 were adopted by 12 of 13 member agencies. Several agencies updated Reach Codes in the 2022 code cycle.
Medical Battery Program	$200K	All 50 batteries are claimed by customers who require electricity for medical devices and are at high risk of power outages.

PROGRAMS HIGHLIGHTS

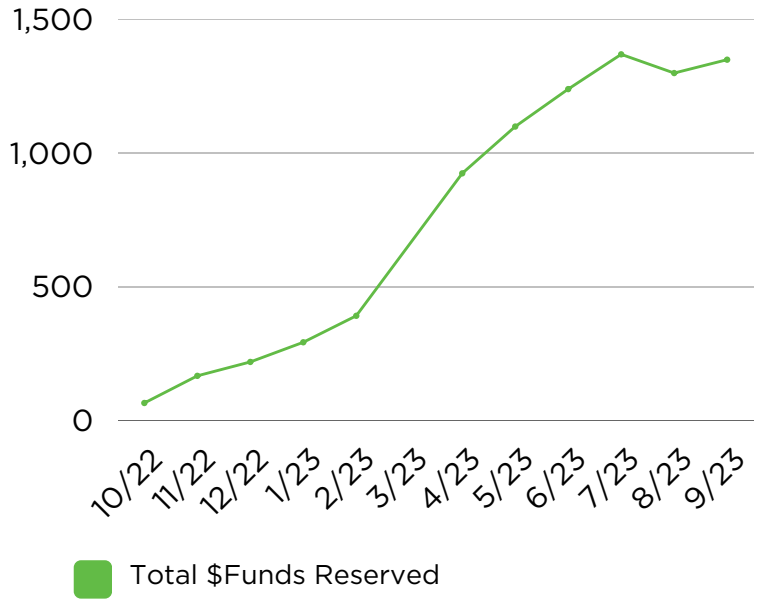
FY23 Q4

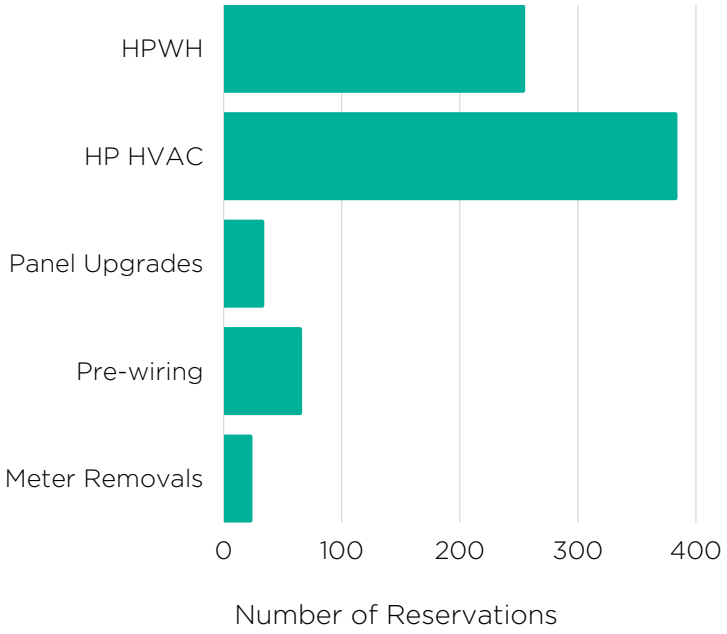
FutureFit Homes

Provide incentives to residents for electric heat pump water heaters (HPWH), heat pump HVAC systems, service panel upgrades, and pre-wiring upgrades to replace gas appliances.

Rebates claimed: $611K

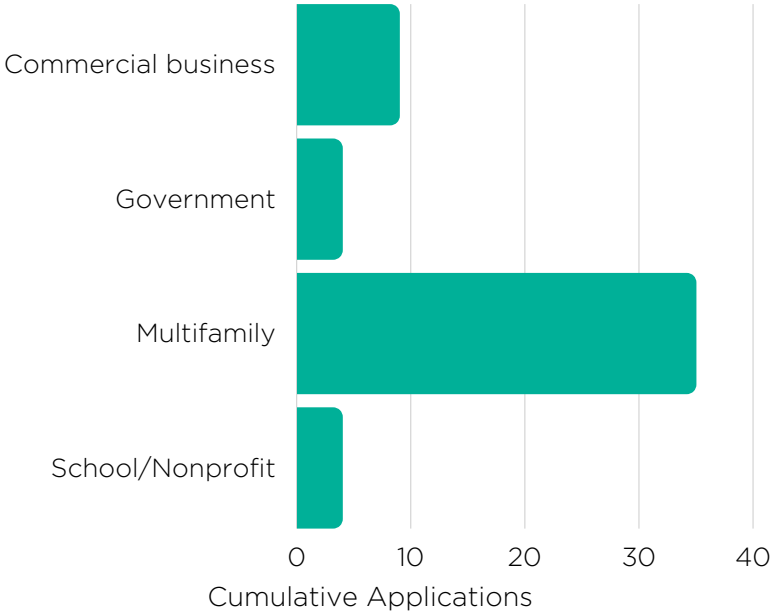
Rebates reserved: $1.35M





Future Fit Assist

Assistance in site assessment, preliminary design, and applying to rebates for charging at multifamily housing and small and medium workplace properties.



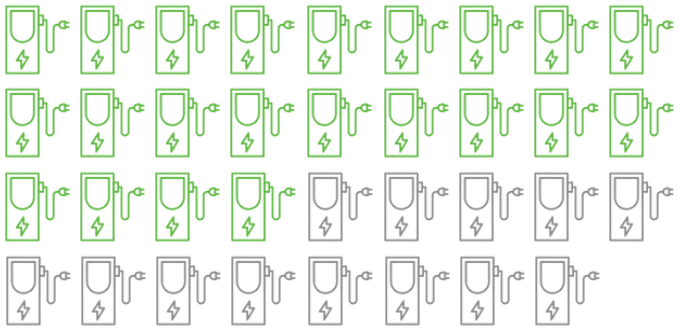
Charging Installation Incentive Program (CHIIP)

Incentive program for L1 and L2 EV charging infrastructure at multifamily properties

Funds Reserved: $824K

Approved Reservations: 22

Goal: 35 Sites, 150 ports



PROGRAMS HIGHLIGHTS

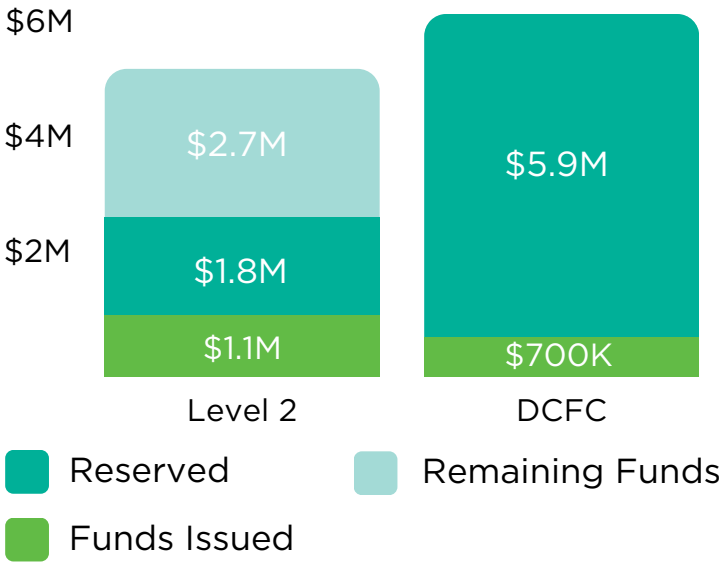
FY23 Q4

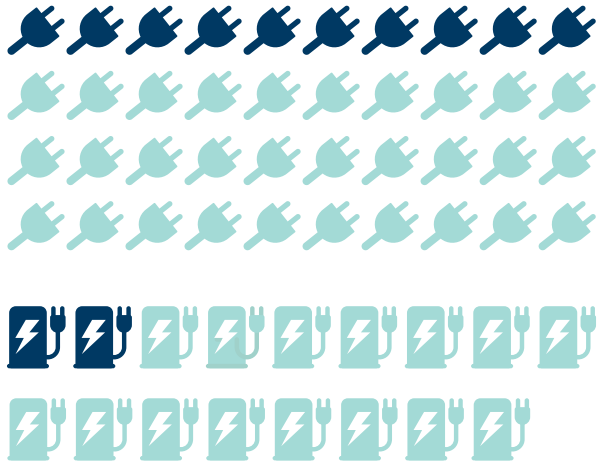
CALeVIP

Provide incentives for electric vehicle (EV) chargers as part of a regional program.

Funding: $11.58M

Goal: 1K Level 2 + 85 DC Fast Chargers by 2023





= 25 Level 2 Installations

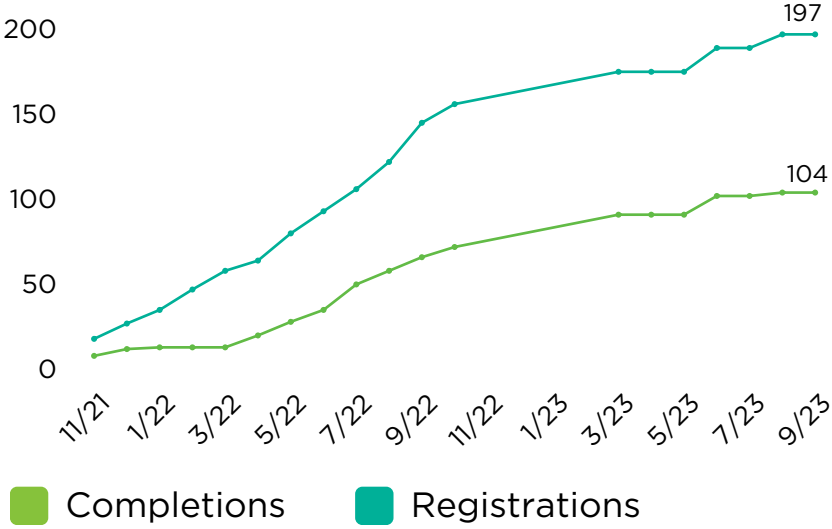
= 5 DCFC Installations

FutureFit Fundamentals

Provide financial relief to contractors by expanding their knowledge of electrification technologies.

Funding: $1.5M

Goal: 150 Participants Complete the Course (Phase 1)





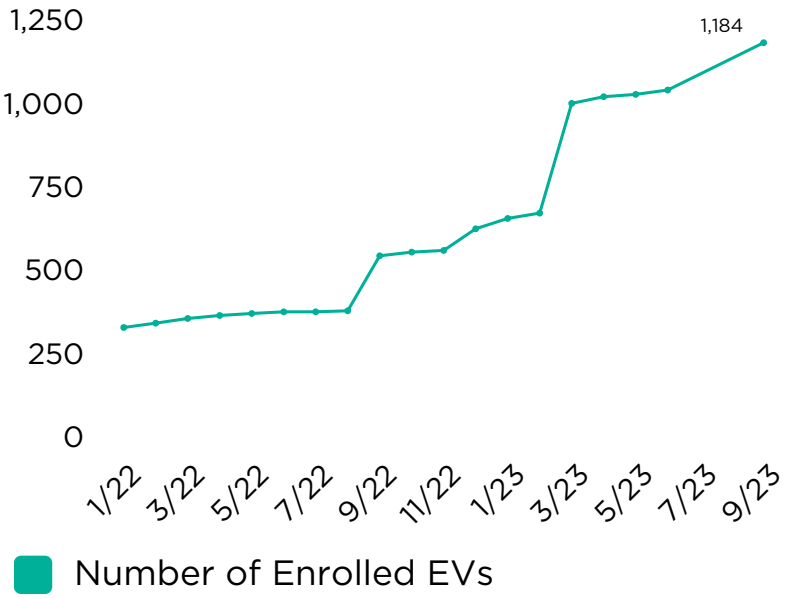
= 5 Participants Complete Course

PROGRAMS HIGHLIGHTS

FY23 Q4

GridShift EV Charging

Managed EV charging app that optimizes charging to reduce associated costs and emissions.



Rebate Goal: $30K

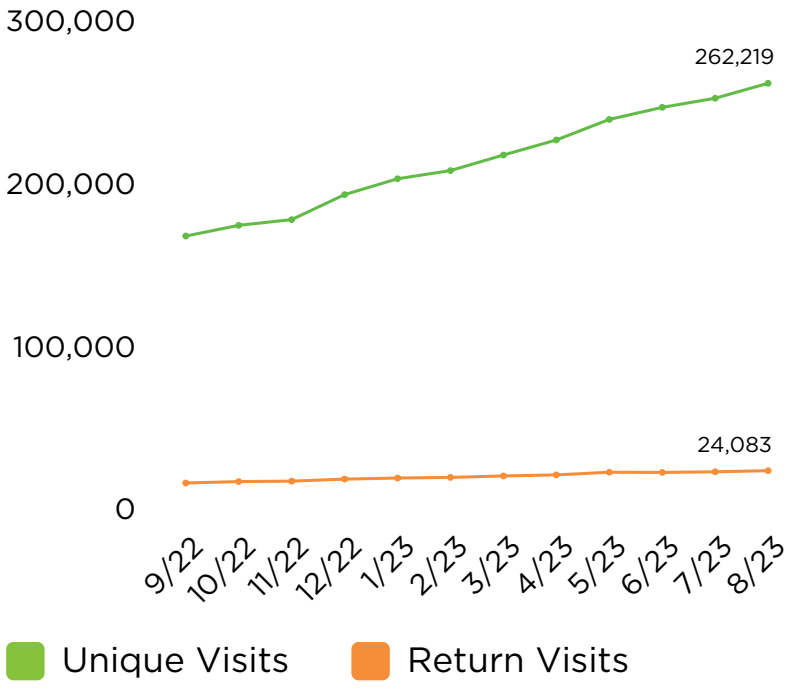
Goal: 120 EV Chargers



Charger Rebates Reserved: 31

eHub Report

Online customer resource center to enable engagement, education and action related to clean electricity, EVs and home electrification.



Website Visit Goal:
Reach 250K Unique Visitors

Email Goal:
Conduct 10 email campaigns



= 1 email campaign completed

GLOSSARY

Built Environment

Community Energy Resilience: Resources (grants) and tools for member agencies to increase individual and collective capacity to adapt to future power outages.

Electric Showcase Awards 2.0: Award program to recognize residential, commercial, and non-profits who are early adopters of existing building electrification.

Decarbonization Demonstration Grants: Grants to encourage member agencies and other key groups an opportunity to electrify their facilities. Focus on projects with public visibility for education/awareness purposes.

Decarbonization Engagement Grants: Grants for member agencies and other key groups to work on smaller electrification engagement initiatives to engage their communities.

Electrification Rate Discount: Custom rate to promote building electrification.

Existing Building Policy Experimentation: Assess and support potential policy levers that member agencies can explore to mitigate emissions from existing buildings.

Feasibility Assessment of Natural Gas Phase Out by 2045: Feasibility study to identify technical, legal, and economic barriers and opportunities for phasing out natural gas service by 2045 in SVCE's service territory.

FutureFit Fundamentals Contractor Training: Training and financial incentive program for contractors to expand their knowledge and installation of electrification technologies.

FutureFit Homes - Concierge: Comprehensive one-on-one phone or web assistance to SVCE customers to assist them in applying for electrification incentives, technical assistance, or developing a whole-home electrification plan.

FutureFit Homes - Residential Incentives: Incentives for various building electrification technologies for single- and small multi-family residential customers. Includes major appliances as well as eventual gas meter removal.

FutureFit Homes and Buildings - C&I Incentives: Incentives for demonstration projects at a handful of small and medium business properties.

Multifamily BE Direct Install: Comprehensive building electrification retrofits with a direct installer for multifamily affordable housing sites.

Permit Modernization: Benchmark and streamline member agency permitting and inspection processes to identify barriers and opportunities to electrification.

Reach Codes 2.0: Provide model building energy codes supportive of all-electric design and EV infrastructure to member agencies along with consultant support.

GLOSSARY

Built Environment

SVBEST: Regular regional stakeholder convenings to coordinate program alignment across building decarbonization workstreams.

Tariffed On Bill (TOB) Financing: Equitable financing pilot program for electrification for low-moderate income residents focusing cost recovery through on-bill charges that are lower than bill savings.

Mobility

CALeVIP 1.0: Incentives for L2 and DCFC publicly-accessible EV chargers funded by California Energy Commission and SVCE as part of a regional collaboration.

CHIIP: Incentive program for L1 and L2 EV charging at hard-to-reach multifamily properties.

Fleet Electrification Program: Competitive application for SVCE's fleet electrification planning support and funding for site upgrades targeting a broad set of fleet types.

FutureFit Assist: Technical assistance for preliminary site design and pertinent rebates for charging at multifamily housing and small and medium workplace properties.

Multifamily TE Direct Install: Comprehensive transportation electrification retrofits with a direct installer for multifamily affordable housing sites.

Priority Zone DC Fast Charger (PZDCFC) 2.0: Competitive grant application for DCFC installations in "priority zones" that support designated multifamily housing clusters.

SVTEC: Regular regional stakeholder meetings focused on information sharing, solving critical issues, and attracting external funding to the SVCE community in support of EV infrastructure deployment.

Power Supply

Lights On Silicon Valley: Provide incentives for enrolling solar and battery systems in the SVCE grid services program.

Medical Battery Program: Pilot program to deploy ~50 portable batteries to qualified customers who rely on power for medical equipment.

Education & Outreach

Customer Resource Center (eHub): Online customer resource center and marketplace to enable engagement, education, and action related to clean electricity, EVs, and home electrification.

Grid Integration

GridShift EV Charging: Managed EV charging phone app that optimizes charging to reduce associated costs and emissions. Includes incentives for reducing grid peak demand.

1. Outreach Events & Sponsorships

Date	Sponsorship	Location
12/1/2023	**Leadership Sunnyvale, Special Districts Day** 11 a.m. – noon *Presentation*	LinkedIn Sunnyvale
12/1/2023	**Los Altos Holiday Tree Lighting and Trim-A-Tree** 6:00 p.m. – 8:00 p.m. *Sponsorship*	Veterans Community Plaza Main St. & State St. Los Altos, CA 94022
12/2/2023	**Los Gatos Parade** 11:00 a.m. *SVCE truck in parade*	Downtown Los Gatos, Almendra Ave. at North Santa Cruz Ave. Los Gatos, CA 95030
12/8/2023	**Assemblymember Low Holiday Open House** 4:00 p.m. – 7:00 p.m. *Tabling*	Triton Museum of Art 1505 Warburton Ave. Santa Clara, CA 95050
12/10/2023	**4th Annual Morgan Hill Holiday Posada** 3:30 p.m. – 9:00 p.m. *Sponsorship*	Morgan Hill Community and Cultural Center 17000 Monterey Highway Morgan Hill, CA, 95037

1. Outreach Events & Sponsorships

Date	Sponsorship	Location
12/12/2023	**Sunnyvale Library, "Electrify your Life" Series** 7:00 p.m. - 8:00 p.m. *Presentation*	Sunnyvale Public Library 665 W. Olive Ave Sunnyvale, California 94086

2. Customer Participation

	Participation Rate	Overall Participation Rate
Residential	96.29%	96.33%
Commercial	96.73%	

SILICON VALLEY CLEAN ENERGY

3. FutureFit Homes Spanish Ads

November marked a milestone for the FutureFit Homes rebate program with our debut Spanish campaign on Univision.

Our ads aired on Univision TV channels as well as on the Univision on-demand platforms.

In total, the ads have received over half a million impressions with the Spanish-speaking audience in our service area.



4. Education Fund

- First round of participants to be selected Nov. 30 for the fall cohort.
- Final deadline for applications this school year is Jan. 19, 2024
- Outreach
  - PeachJar advertisements are live, now visible on over 80 different virtual school boards and newsletters
  - Posting promotions to Nextdoor this month



Pictured: City of Campbell reposting an Education Fund social media advertisement

5. SVCE Lightning at Holiday Events

In partnership with community members and organizations, the SVCE F-150 Lightning provided clean power at annual holiday celebrations.





Left: Powering the KMVT media van, a local media nonprofit that films and broadcasts the Los Altos Festival of Lights. Right: Towing and powering the City of Monte Sereno float and the Summit Sisters performance in the Los Gatos parade.

6. Press Releases & Media

Press Releases

- Monica Padilla Selected as Silicon Valley Clean Energy CEO, *Press Release, 11-13-23*

Media

- New festival presents offering of tradition, art, and wellness to South Bay, *The Mercury News, 10-29-23*
- Power Providers Want Geothermal, but Not Its Emissions, on Power Content Labels, *California Energy Markets, 11-03-23*
- *Monica Padilla Selected as Silicon Valley Clean Energy CEO, American Public Power Association, 11-15-23*
- Opinion: Santa Clara County leads locally on climate change, *The Mercury News, 11-19-23*
- *Sunnyvale Community News: Bringing The Heat, The Mercury News, 11-19-23*



Festival goers dance to the Latin music perform by Los Amigos during the inaugural La Ofrenda Festival which celebrates Dia de los Muertos in Gilroy, Calif., on Saturday, Oct. 28, 2023. (Ray Chavez/Bay Area News Group)



SVCE Legislative and Regulatory Update

December 13, 2023

SILICON VALLEY CLEAN ENERGY

Policy Updates

Regulatory Update:

1. Review of CPUC's Net Billing Tariff (NEM 3.0) Decision
2. High DER Proceeding

Legislative Update:

1. SVCE Legislative Positions



Regulatory Update

Key Regulatory Activities

Activity	Purpose	Status
Resource Adequacy R.23-10-011	Order Instituting Rulemaking to Oversee the Resource Adequacy Program, Consider Program Reforms and Refinements, and Establish Forward Resource Adequacy Procurement Obligations.	The CPUC has opened a new rulemaking to consider program refinements for the Resource Adequacy program. On November 8th parties filed comments suggesting priority areas for consideration. On November 23rd a pre-hearing conference was held to discuss priority items and the schedule. Among other topics, CalCCA has requested the Commission focus on the implementation of the Slice of Day framework, updates to the Local RA Central Procurement Entity, and changes to the RA penalty structure.
2024 ERRA Forecast A.23-05-012	Application of PG&E for Adoption of Electric Revenue Requirements and Rates Associated with its 2024 Energy Resource Recovery Account (ERRA)	The CPUC tentatively approved PG&E's proposed rates for 2024 in a Proposed Decision. PG&E will collect an outstanding balance over the first 6 months of the year, instead of averaged over the entire year for which CalCCA advocated. For January through June, the rates will be higher as PG&E collects that balance, then for July through December, the rates will drop lower. The end result is two different rates in 2024.



Legislative Update

SVCE Positions

Status of the bills that SVCE has taken positions on

Bill	Summary	Legislative Platform Policy	SVCE Position	Bill Status
AB 625 (Aguiar-Curry)	Extends sunset date of the BioMAT program	Competitive Equity	Support	Died – two-year bill
SB 488 (Alvarado-Gil)	Allows CCAs to participate in the BioRAM program.	Competitive Equity	Support	Died – two-year bill
SB 410 (Becker)	Reporting, timelines, and stakeholder group for distribution-level interconnection.	Clean, Reliable Grid	Support	Signed into law
SB 527 (Min)	Requires CPUC to establish a Neighborhood Decarb Program.	Climate Mitigation/Fuel Switching	Support	Died – two-year bill
AB 593 (Haney)	Directs CEC to create a statewide building decarb strategy	Climate Mitigation/Fuel Switching	Support	Died – two-year bill

SVCE Positions

Status of the bills that SVCE has taken positions on

Bill	Summary	Legislative Platform Policy	SVCE Position	Bill Status
AB 1393 (Garcia)	Governor's energy reliability proposal.	Competitive Equity	Neutral	Signed into law

Key State Legislative Milestones

- ~~January 4 – Legislature Reconvenes~~
- ~~February 17 – Last day for bills to be introduced~~
- ~~April 28 – Last day for policy committees to vote on fiscal bills~~
- ~~May 5 – Last day for policy committees to vote on non-fiscal bills~~
- ~~May 19 – Last day for fiscal committees to hear bills introduced in that house~~
- ~~June 2 – Last day for each house to pass bills introduced in that house~~
- ~~June 15 – Budget bill must pass by midnight~~
- ~~July 14 – Last day for policy committees to vote on bills~~
- ~~September 1 – Last day for fiscal committees to vote on bills~~
- ~~September 14 – Last day for each house to pass bills~~
- ~~October 14 – Last day for Governor to sign bills~~

SVCE Agenda Look Ahead
December 2023 - April 2024

December 2023	January 2024	February 2024	March 2024	April 2024
	Board of Directors, January 10: Consent: Minutes November 2023 Treasurer Report Scheduling Coordinator Services Agreement Battery Energy Storage System Optimization Software Agreement Receive SVCE Rate Schedules Effective Jan. 1, 2024 Approve Updates to Non-Standard Pricing Policy Committee Reports Regular Calendar: Chair and Vice Chair Appointment Executive Committee Membership Selection	**Board of Directors, February 14:** Consent: Minutes December 2023 Treasurer Report Update to Exhibits C and D of the SVCE JPA Committee Reports Regular Calendar: Committee Selections - 2024 Preview of SVCE's Load Management Standards Compliance Plan MRP/Gas Peaker Community Investment Policy	**Board of Directors, March 13:** Consent: Minutes January 2024 Treasurer Report Committee Reports Regular Calendar: Mid-Year Budget Audited Financial Statements Approve SVCE's Load Management Standards Compliance Plan	**Board of Directors, April 10:** Consent: Minutes February 2024 Treasurer Report Committee Reports Regular Calendar: TBD
Executive Committee: CANCELLED	**Executive Committee, TBD (tentatively scheduled for Jan. 26):** Appointment of Committee Chair and Vice Chair Establish regular meeting schedule MRP/Gas Peaker Community Investment Policy Introduction to SVCE's Load Management Standards Compliance Plan Obligation	**Executive Committee, TBD (tentatively scheduled for Feb. 23):** Policy Review Status Update	**Executive Committee, TBD (tentatively scheduled for March 22):** TBD	**Executive Committee, TBD (tentatively scheduled for April 26):** **TBD**

SILICON VALLEY CLEAN ENERGY

Staff Report – Item 3

Item 3:	**Budget Update, 2024 Customer Rate Setting, and Additional Budget Funding Items**
From:	Girish Balachandran, CEO
Prepared by:	Amrit Singh, CFO and Director of Administration
Date:	12/13/2023

RECOMMENDATION

Adopt Resolution 2023-20:

1. Authorizing the CEO to implement SVCE generation rate changes to establish a 4% discount to PG&E's applicable generation rates when PG&E's updated rates are implemented, expected to be January 1, 2024, or after allocation of the sufficient time window for implementing new generation rates in SVCE's billing system, expected to be within three weeks of PG&E's release of the new 2024 rates.
2. Adopting the adjusted operating budget that projects depositing $73.8 million into the reserves, considering the above increase in customer discount; updated revenue, power supply, and interest-earning forecasts; and the following additional allocations to the original fiscal year 2023-2024 adopted budget:
    a) $1.16 million bill credits for CARE/FERA customers,
    b) $20 million towards the purchase of an SVCE office building and
    c) An additional $20 million to the Programs Fund, which includes grants to cities' decarbonization programs.
3. Authorize previously budget-allocated but not explicitly approved rollover of $10.125 million to the Program Funds from reserves.

EXECUTIVE COMMITTEE AND FINANCE AND ADMINISTRATION COMMITTEE RECOMMENDATIONS

At the November 27th Executive Committee meeting and the November 30th Finance and Administration Committee meeting, staff presented multiple rate discount scenarios, along with additional budget funding proposals, based upon an updated Fiscal Year 2023-2024 (FY24) budget analysis that improves SVCE's financial projections by about $120 million from the adopted budget. In balancing priorities of supporting customer affordability, strengthening SVCE's financial health, and promoting SVCE's decarbonization mission, both Committees endorsed staff's recommendation to:

1. Maintain the general customer discount level at 4% next year because doing so gives customers a meaningful discount while enabling SVCE to balance other priorities. Maintaining a 4% discount also promotes stability in messaging the rate discount. Rate messaging stability is enhanced when coupled with item #4 below, to set aside reserves to fund a 4% discount for two additional years.
2. Increasing the bill credit for low-income (CARE/FERA) customers because it aligns with the original budget intention of supporting these customers with the dollar equivalent of a 1% overall discount given the now higher projected rates.
3. Setting aside funds for an SVCE office building because it builds assets and is potentially more economical than leasing over the longer term.
4. Setting aside reserves to fund a 4% discount over the next two additional years to support rate stability and indicate the Board's direction on future rate setting. This Board is not asked to transfer this amount from the reserves at this time because the Board will approve the discount after assessing each year's financial forecast.

5. Transfer an additional $20 million to the Programs Fund, including grants provided to the cities for their decarbonization projects. Increasing funding for decarbonization programs furthers SVCE's mission.

Both committees engaged in a robust discussion before aligning with the above recommendations. The second funding scenario that the Executive Committee considered was providing additional customer discounts such that, inclusive of Power Charge Indifference Adjustment (PCIA)[1], the customers' generation rates remain at the current levels, which at the projected rate levels would be about 7.2%, amounting to an additional expenditure of about $27 million. The Finance and Administration Committee strongly supported increasing decarbonization programs funding and purchasing an SVCE office building. The Committee discussed whether the purchase of the office building project was appropriately funded. Staff mentioned that preliminary analysis supports a funding request of $20 million, and staff will request adjustments if necessary. Staff also discussed with the Committee that the decarbonization programs at this point are sufficiently funded, and along with continuing to design and implement new programs, the organization is increasing efforts in marketing and promoting these programs.

BACKGROUND

In adopting the FY 2024 budget at the September 2023 Board meeting, the Board voted to maintain the current 4% customer discount rate until the CPUC makes the new PCIA and PG&E generation rates effective, which was expected to occur in January 2024. To set the budget, the Board adopted an effective discount of 2% starting January 2024. The 2 percent effective discount rate is composed of a 1 percent general discount relative to comparable PG&E generation rates for all customers and an additional 1 percent converted to dollar bill credits to the CARE and FERA customers, which amounts to $3.14 million or about $8.70 per month bill credit for 12 months. The Board also agreed to revisit the customer discount level and any additional expenditures when there would be more certainty on PCIA and PG&E generation rates.

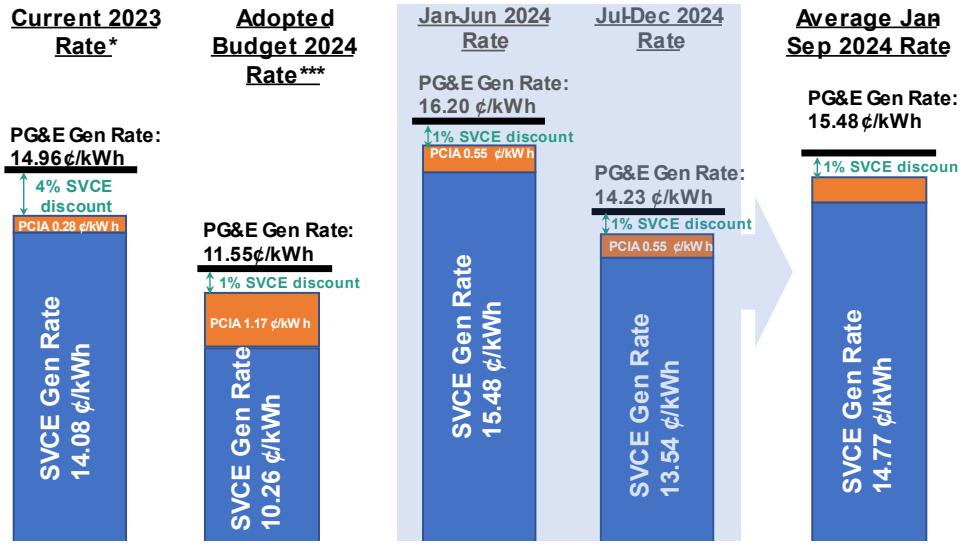
When the budget was adopted, staff informed the Board that the budget projections were conservative because the CPUC would likely adopt higher Resource Adequacy (RA) and Renewable Portfolio Standard (RPS) prices in adopting the market price benchmarks (MPB). Higher MPB decreases the PCIA and increases PG&E's generation charges. It was uncertain to what extent the CPUC would raise the MPB. Staff stated in the report that higher MPB could increase revenues by about $100 million.

The recently issued CPUC MPBs reflect the higher RA and RPS prices, significantly improving SVCE's financial projections. The 2023/2024 RA prices are up 94%/79%, and RPS prices are up 140%/154%, respectively, compared to estimates staff used in generating the budget. Using the updated MPBs, in October, PG&E issued its revised ERRA[2] rate forecast that shows its generation rates in January increasing on average by 8 percent from current rates and then from there dropping in July by about 4.5 percent while PCIA on average increases from 0.28 to 0.55 cents per kWh. The PG&E generation rate is about 34 percent higher than those used in developing the adopted budget, while the PCIA is 53 percent lower. On average, SVCE's margins improve by about 44 percent, which increases revenue projections by $127 million. These changes are depicted in the chart below.

[1] Public Utility Code Sections 366.1 and 366.2 require the CPUC to make sure that customers leaving PG&E do not burden remaining PG&E customers with costs that were incurred to serve them. To ensure customer indifference, CCAs and Direct Access or departing load customers are required to pay a power charge indifference adjustment (PCIA).

[2] ERRA, the Energy Resource Recovery Account, is a balancing account utilized by PG&E to record and recover power costs associated with PG&E's authorized procurement plan. ERRA proceedings are used to determine fuel and purchased power costs, which can be recovered in rates.

Agenda Item: 3 **Agenda Date: 12/13/2023**



ANALYSIS & DISCUSSION

Based on the updated PG&E generation and PCIA rates included in PG&E's October ERRA update filing, which the CPUC is expected to vote on December 14, 2023, the projected net contribution to reserves is anticipated to increase from the adopted budget forecast of $7.7 million to $127.9 million as illustrated in the table below[3].

($ in thousands)

DESCRIPTION	FY 2023-24 ADOPTED BUDGET	FY 2023-24 Updated BUDGET	Change $	Change %
Energy Revenues	440,404	567,585	127,181	28.9%
Power Supply Expense	391,624	399,546	7,922	2.0%
Operating Margin	**48,780**	**168,038**	**119,259**	**244.5%**
Operating Expenses	32,361	32,361	0	0.0%
Non-Operating Revenue (Expense)	5,498	6,431	932	17.0%
Annual Transfers and Other Expenses				
Program Fund	8,874	8,874	0	0.0%
Nuclear Allocation	2,188	2,188	0	0.0%
Multi Family Direct Install Program	0	0	0	-
Electrification Discount Program	0	0	0	-
Customer Bill Relief	3,136	3,136	0	0.0%
Building Fund	0	0	0	-
Other	50	50	0	0.0%
BALANCE AVAILABLE FOR RESERVES	**$7,669**	**$127,860**	**$120,191**	**1567.1%**

The primary driver for the improved financials is the improvement to SVCE's margins resulting from lower PCIA and higher PG&E generation rates than those used in creating the adopted budget. The above projections reflect the board-adopted assumptions of a 1 percent customer discount in 2024 and an additional 1% discount converted to dollar bill credits for low-income customers.

[3] The updated budget projections are before accounting for additional expenditures. The adjusted budget, incorporating additional expenditures, is shown in Attachment 2.

The forecast of SVCE's reserves projection improves to 334 days of cash on hand (DCOH), above the target threshold of 300 but below the maximum level of 490 DCOH.

Uncertainty of CPUC Approval of Rates

The final 2024 PCIA and PG&E generation rates are unknown until the CPUC adopts them, which is expected at its meeting on December 14, 2023. The CPUC could adopt the rates as PG&E has proposed, modify the proposal, or deny some or all the elements in PG&E's filing contributing to the overall rate increase. The CPUC could also delay the implementation of the rate changes, in which case SVCE's current rates will remain in effect. These rate changes are an annual process, and the rates adopted by the CPUC are usually not materially different from PG&E's fall ERRA updates. While certain assumptions in PG&E's filings could differ from those adopted by the CPUC, these are not expected to have a significant impact. These elements include having one blended rate increase instead of two rate changes. In the rare event of substantial changes, staff will delay implementing the proposed changes and will return to the Board with a revised proposal in January.

Discussion of Funding Scenarios

With improved financial projections, staff proposed the following funding items for the Executive and the Finance and Administration Committees' consideration:

- Increasing the customer discount
- Trueing up the intended dollar bill credit to amount to 1% of the overall customer discount for low-income customers because of higher rates than anticipated in the adopted budget
- Setting aside funds for an SVCE office building
- Setting aside funds to maintain higher customer discounts over the next two years
- Increasing funding for programs that include grants for cities to support their local decarbonization efforts

The table below summarizes the cost of each item and the impact on financial reserve projections for the end of the current fiscal year and over the next 3 to 5 years. Under all these four funding scenarios, the high-level[4] reserve estimates remain at or above the target level of 300 DCOH and well below the maximum level of 490 DCOH over the next five years. Based on these projections, staff recommended funding scenario 4.

	Funding Scenarios					
$ Million	A. Build Reserves	B. Increase Rate Discount	C. Longer-term Affordability	D. Add'l Set Aside for Programs	E. Keep Rates Unchanged	F. Rates Unchanged with Lower 5th Yr Reserves
Additional Expenditures						
1. General Customer Rate Discount Level	1% -	4% 12.90	4% 12.90	4% 12.90	7.2% 26.66	7.2% 26.66
2. True-up 1% Bill Credit to Reflect Higher Rates	1.16	1.16	1.16	1.16	1.16	1.16
3. Transfer to Building Fund	20.00	20.00	20.00	20.00	20.00	20.00
4. Set Aside to Fund at least 4% Discount for 2 Additional Years			34.20	34.20	34.20	34.20
5. Additional Program Expenditures Including Grant to Cities				20.00	6.24	20.00
	21.16	34.06	68.26	88.26	88.26	102.02
**Resulting Financial Forecast Reserve Level (DCOH*)						
- End of Fiscal Year	333	322	322	322	311	311
- High-Level Estimate*** Reserve 3 years out	350	340	312	312	300	300
- High-Level Estimate*** Reserve 5 years out	379	369	341	324	324	313

* Days cash on hand.

***Not expected to have any significant impact on forecast of the current fiscal year financial reserves since expenditure is likely delayed to future years.*

Planned Timing and Approach for 2023 Rate Updates

After the Board approves the rate changes, the applicable SVCE rate tables will be updated during the first three weeks of the month PG&E's new rates become effective, which is expected to be January 2024. The exact timing will depend upon when PG&E's updated rates are received and the required time window for implementing new generation rates in SVCE's billing system.

[4] The 5-year reserves projections were derived using approximations made from the last 5-year financial forecast.

100% Renewable Energy Option

The GreenPrime rate for 2023, SVCE's 100% renewable energy option, will reflect the January 2024 default GreenStart rates plus the premium of $0.015 per kWh adopted by the Board at the November 2023 meeting.

Accounting True-up of Program Dollars

The programs fund was created in the fiscal year 2019-2020. Before the fund's creation, the Board allocated program funds in each fiscal year's operating budget. The purpose of the program funds was to capture program dollars allocated by the Board that span multiple fiscal years because the timing of planning, implementing, and customer's utilization of program funds often extends beyond the fiscal year the funds are allocated. When the program's fund was created, $10.125 million was allocated after adjustments for some grants received. The intent was that this amount was to roll over into the newly developed program's fund. Staff is now requesting the Board to explicitly authorize the rollover of these previously allocated funds of $10.125 million[5] to the programs fund. After the Board's approval, the accounting records and the program fund balance in the Treasurer's report will be updated.

STRATEGIC PLAN

Rate setting is directly supported by SVCE Strategic Plan Goal 12 – **"**Enact and maintain competitive service offerings for SVCE customers that deliver measurable economic and environmental benefits" and Goal 19 - "Commit to maintaining a strong financial position."

ALTERNATIVE

The table earlier in the report presents the Board of Directors with several funding scenarios. Staff is open to feedback and suggestions on any of these proposed or any other additional funding scenarios.

FISCAL IMPACT

The adjusted operating budget improves SVCE's financial performance, reflecting a net contribution to reserves increase from the adopted budget level of $7.7 million to $73.8 million. The table in the report summarizes the financial impact of additional funding scenarios for the Board of Director's consideration. All the proposed funding scenarios are expected to leave SVCE in a healthy financial position where reserves remain at or above the target level of 300 DCOH and below the maximum reserve level of 490 DCOH.

ATTACHMENT

1. Resolution 2023-20, approving customer generation rates; additional funding for bill credits for CARE/FERA customers, SVCE office building, and decarbonization programs; and rollover of $10.125 million to the Program Funds from reserves
2. Fiscal Year 2023-2024 Adjusted Operating Budget

[5] The reserve projections in the table summarizing the funding scenarios account for this rollover to programs funds.

SILICON VALLEY CLEAN ENERGY AUTHORITY

RESOLUTION NO. 2023-20

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE SILICON VALLEY CLEAN ENERGY AUTHORITY APPROVING CUSTOMER GENERATION RATES AND ADDITIONAL FISCAL YEAR 2023-2024 BUDGET FUNDING ITEMS

WHEREAS, the Silicon Valley Clean Energy Authority ("Authority") was formed on March 31, 2016, pursuant to a Joint Powers Agreement to study, promote, develop, conduct, operate, and manage energy programs in Santa Clara County; and

WHEREAS, at the June 8, 2016, Board of Directors Meeting, the Board adopted the policy that the Authority's customer generation rates for the default service will be 1% lower than Pacific Gas & Electric's generation rates in place as of January 2017; and the policy allows reexamination of the rates, provided significant deviations in market prices or other extraordinary circumstances mandate an adjustment to the rates; and

WHEREAS, on December 14, 2022, the Board of Directors adopted Resolution No. 2022-39, which approved the customer generation rates that are currently in effect with a discount of 4% to PG&E's generation rates; and

WHEREAS, on September 13, 2023, the Board of Directors adopted Resolution No. 2023-16 approving the fiscal year 2023-2024 operating budget, including the reduction of the generation discount from 4% to 1% when new 2024 PG&E rates are implemented, expected to be in January 2024, and allocated $3.136 million in bill credits for CARE/FERA customers; and

WHEREAS, in December 2023, due to a new improved budget projection resulting from updated 2024 PG&E Generation and PCIA rate projections, the Board of Directors desires to maintain the generation rate discount at 4%, effective when new PG&E rates are implemented, expected to be in January 2024, and amending the fiscal year 2023-2024 budget, as set forth in Exhibit A (the Adjusted Budget), to allocate an additional $1.16 million towards bill credits for CARE/FERA customers, $20 million towards the purchase of an SVCE office building, and an additional $20 million to the Programs Fund, which also includes funding grants to cities decarbonization programs effective when new PG&E rates are implemented, expected to be in January 2024; and

WHEREAS, since PG&E is expected to issue its final customer generation rates later in December 2023, the Board of Directors desires to grant the Chief Executive Officer the authority to adjust the Authority's current electric generation rates for its customers upon receiving PG&E's updated rates and with sufficient time window for implementing new generation rates in SVCE's billing system, expected to be within the first 3 weeks of when PG&E finalizes its new rates; and

WHEREAS, when the Programs Fund was first created in the fiscal year 2019-2020, the Board of Directors did not explicitly authorize the rollover of previously budget-allocated funds, including adjustments for grants received, of $10.125 million; the Board of Directors now desires to grant the rollover of $10.125 million to the Programs Fund from reserves.

NOW THEREFORE, the Board of Directors of the Silicon Valley Clean Energy Authority does hereby resolve, determine, and order as follows:

Section 1. Upon the release of PG&E's final 2024 customer generation rates, the Chief Executive Officer is hereby authorized to amend the Authority's generation rates to establish a discount of 4% from PG&E's applicable generation rates.

Section 2. The Authority shall adopt the Adjusted Budget, as set forth in Exhibit A, as the Authority's fiscal year 2023-2024 budget.

Section 3. The Authority shall rollover $10.125 million to Programs Fund from reserves.

Section 4. The Authority's electric generation rates, as adjusted by the Chief Executive Officer pursuant to Section 1 above, shall become effective when PG&E's updated rates are implemented, expected to be on January 1, 2024, or after the allocation of sufficient time window for implementing new generation rates in SVCE's billing system, expected to be within three weeks after PG&E releases its final January 1st, 2024 customer generation rates, whichever is later.

The Authority's adjusted electric generation rates shall be set forth in an updated 2024 Electric Generation Rates Schedule. The Chief Executive Officer shall provide a copy of the updated 2024 Electric Generation Rates Schedule to the Board of Directors at its first meeting after the 2024 SVCE electric generation rates are finalized.

PASSED AND ADOPTED this 13th day of December 2023 by the following vote:

JURISDICTION	NAME	AYE	NO	ABSTAIN	ABSENT
City of Campbell	Director Scozzola				
City of Cupertino	Director Mohan				
City of Gilroy	Director Hilton				
City of Los Altos	Director Meadows				
Town of Los Altos Hills	Director Tyson				
Town of Los Gatos	Director Rennie				
City of Milpitas	Director Chua				
City of Monte Sereno	Director Mekechuk				
City of Morgan Hill	Director Martinez Beltran				
City of Mountain View	Director Abe-Koga				
County of Santa Clara	Director Lee				
City of Saratoga	Director Walia				
City of Sunnyvale	Director Klein				

_____

Chair

ATTEST:

_____

Andrea Pizano, Board Secretary

Exhibit A

SILICON VALLEY CLEAN ENERGY
FY 2023-24 OPERATING BUDGET
($ in thousands)

DESCRIPTION	FY 2023-24 ADJUSTED BUDGET
ENERGY REVENUES	
Energy Sales	552,667
Green Prime	1,968
Other Income	50
TOTAL ENERGY REVENUES	**554,685**
ENERGY EXPENSES	
Power Supply	399,546
OPERATING MARGIN	**155,138**
OPERATING EXPENSES	
Data Management	3,413
PG&E Fees	1,470
Salaries and Retirement	15,406
Professional Services	8,084
Marketing & Promotions	1,349
Notifications	21
Lease	551
General & Administrative	2,067
TOTAL OPERATING EXPENSES	**32,361**
OPERATING INCOME (LOSS)	**122,778**
NON-OPERATING REVENUES	
Interest Income	6,434
Grant Income	0
TOTAL NON-OPERATING REVENUES	**6,434**
NON-OPERATING EXPENSES	
Financing	3
Interest	0
TOTAL NON-OPERATING EXPENSES	**3**
TOTAL NON-OPERATING INCOME (EXPENSES)	**6,431**
CHANGE IN NET POSITION	**129,208**
CAPITAL EXPENDITURES, INTERFUND TRANSFERS & OTHER	
Capital Outlay	50
Building Fund	20,000
Transfer to CRCR Fund	0
Program Fund	28,874
Nuclear Allocation	2,188
Multi Family Direct Install Program	0
Electrification Discount Program	0
Customer Bill Relief	4,300
Other	0
TOTAL CAPITAL EXPENDITURES, INTERFUND TRANSFERS & OTHER	**$55,412**
BALANCE AVAILABLE FOR RESERVES	**$73,796**

Attachment 2

SILICON VALLEY CLEAN ENERGY
FY 2023-24 OPERATING BUDGET
($ in thousands)

DESCRIPTION	FY 2023-24 ADOPTED BUDGET	FY 2023-24 ADJUSTED BUDGET	Change $	Change %
ENERGY REVENUES				
Energy Sales	438,342	552,667	114,325	26.1%
Green Prime	2,012	1,968	(44)	-2.2%
Other Income	50	50	0	0.0%
TOTAL ENERGY REVENUES	**440,404**	**554,685**	**114,281**	**25.9%**
ENERGY EXPENSES				
Power Supply	391,624	399,546	7,922	2.0%
OPERATING MARGIN	**48,780**	**155,138**	**106,359**	**218.0%**
OPERATING EXPENSES				
Data Management	3,413	3,413	0	0.0%
PG&E Fees	1,470	1,470	0	0.0%
Salaries and Retirement	15,406	15,406	0	0.0%
Professional Services	8,084	8,084	0	0.0%
Marketing & Promotions	1,349	1,349	0	0.0%
Notifications	21	21	0	0.0%
Lease	551	551	0	0.0%
General & Administrative	2,067	2,067	0	0.0%
TOTAL OPERATING EXPENSES	**32,361**	**32,361**	**0**	**0.0%**
OPERATING INCOME (LOSS)	**16,419**	**122,778**	**106,359**	**647.8%**
NON-OPERATING REVENUES				
Interest Income	5,501	6,434	932	16.9%
Grant Income	0	0	0	-
TOTAL NON-OPERATING REVENUES	**5,501**	**6,434**	**932**	**16.9%**
NON-OPERATING EXPENSES				
Financing	3	3	0	0.0%
Interest	0	0	0	-
TOTAL NON-OPERATING EXPENSES	**3**	**3**	**0**	**0.0%**
TOTAL NON-OPERATING INCOME (EXPENSES)	**5,498**	**6,431**	**932**	**17.0%**
CHANGE IN NET POSITION	**21,917**	**129,208**	**107,291**	**489.5%**
CAPITAL EXPENDITURES, INTERFUND TRANSFERS & OTHER				
Capital Outlay	50	50	0	0.0%
Building Fund	0	20,000	20,000	0.0%
Transfer to CRCR Fund	0	0	0	-
Program Fund	8,874	28,874	20,000	225.4%
Nuclear Allocation	2,188	2,188	0	0.0%
Multi Family Direct Install Program	0	0	0	-
Electrification Discount Program	0	0	0	-
Customer Bill Relief	3,136	4,300	1,164	37.1%
Other	0	0	0	-
TOTAL CAPITAL EXPENDITURES, INTERFUND TRANSFERS & OTHER	**$14,248**	**$55,412**	**$41,164**	**288.9%**
BALANCE AVAILABLE FOR RESERVES	**$7,669**	**$73,796**	**$66,127**	**862.2%**

SILICON VALLEY CLEAN ENERGY

Staff Report – Item 4

Item 4:	**Approve Formation of Transition Ad Hoc Committee**
To:	SVCE Board of Directors
Prepared by:	George Tyson, SVCE Board Chair and Girish Balachandran, CEO
Date:	12/13/2023

RECOMMENDATION

Approve the formation of a Transition Ad Hoc Committee made up of Board Chair George Tyson, Board Vice Chair Tina Walia, and Director Rob Rennie, with a sunset date of December 11, 2024.

EXECUTIVE COMMITTEE RECOMMENDATION

The recommendation of the formation of an Ad Hoc Transition Committee was presented to the Executive Committee on November 27, 2023. Discussion at the meeting included Brown Act implications and whether this ad hoc committee would be addressing issues that other Board Committees would normally handle. Staff clarified that this ad hoc committee would not be discussing any policy issues, and the main role of the committee is to be available to the outgoing and incoming CEOs for process and communication needs.

The committee voted unanimously to support the recommendation to form this ad hoc committee, made up of the suggested members.

BACKGROUND

CEO Girish Balachandran publicly announced his intention to retire in August 2023, with an anticipated retirement date of March 31, 2023. Since then, the SVCE Board of Directors formed an SVCE CEO Search Committee (Chair Tyson, Vice Chair Walia, Board Member Rennie), hired a recruiter to assist in the selection process, conducted interviews, and ultimately selected Monica Padilla as SVCE's new CEO.

As SVCE goes through this CEO transition period, it may be beneficial to have a small committee available to meet with the outgoing and incoming CEOs to keep communication channels open as the organization changes leadership.

ANALYSIS & DISCUSSION

The purpose of this ad hoc committee is to ensure a smooth transition from current CEO to future CEO. During the overlap where CEO Balachandran is CEO through March 2024, the Transition Ad Hoc Committee will focus on the exchange of best practices, stakeholder relations, information sharing, and general operations communication; after CEO Balachandran departs, the ad hoc committee's focus will be on supporting incoming CEO Padilla in whatever areas of support she is looking for.

Proposed membership of this ad hoc committee would include the following board members: Board Chair Tyson, Board Vice Chair Walia, and Director Rennie. Being that these members participated in the hiring of the new CEO, it is suggested that these members participate in this temporary committee.

The duration of the proposed ad hoc committee would be December 13, 2023 through December 11, 2024.

Agenda Item: 4 **Agenda Date: 12/13/2023**

STRATEGIC PLAN

Supporting SVCE in this transition directly supports our mission and goals of the Strategic Plan.

ALTERNATIVE

Should the Board of Directors choose not to recommend the formation of this ad hoc committee, board members and staff could develop a less structured information sharing process. The CEO could continue to meet informally with the Board Chair and Vice Chair to update them on areas of best practices related to general operations, stakeholder relations, and information sharing.

FISCAL IMPACT

There would be no fiscal impact as a result of creating a Transition Ad Hoc committee.

SILICON VALLEY CLEAN ENERGY

Staff Report – Item 5

Item 5:	**Authorize the Chief Executive Officer to Execute a Five-Year Agreement with the Association for Energy Affordability Inc. for Multifamily Electrification Program Design and Implementation Support Services**
From:	Girish Balachandran, CEO
Prepared by:	Justin Zagunis, Director of Decarbonization Programs and Policy Nupur Hiremath, Manager of Decarbonization Programs and Policy Leanna Huynh, Senior Programs Specialist
Date:	12/13/2023

RECOMMENDATION

Staff recommends the Board approve and authorize the CEO to execute an agreement with the Association for Energy Affordability Inc. ("AEA") for program design and implementation support services for SVCE's multifamily residential electrification program for a period of five years for an amount not to exceed $11 million.

BACKGROUND

In November 2020, the Board approved the Building Decarbonization Joint Action Plan, which identified FutureFit Homes and Buildings as one of SVCE's cornerstone programs to support the decarbonization of existing buildings. The concept recognized that deeper support would be needed for low-income residents, affordable housing, and small businesses.

In March 2022, the Board approved the Double Down on Decarbonization Programs with a total allocation of $17 million. The Double Down allocation specifically set aside $2 million in funding for a multifamily direct installation program[1] as a way of bringing electric retrofits to renters who otherwise don't have access, and an additional $1 million in funding for a direct installation program for installing electric vehicle (EV) infrastructure at toughest sites and/or affordable housing.

In December 2022, the Board approved $9.5 million of the revenue surplus for the multifamily direct installation program, bringing the total approved program funding to $12.5 million. The Board's approval also broadened the scope of the program to expand eligibility to the nearly 40% of multifamily buildings in SVCE territory with existing electric heating to upgrade to heat pump technology.

Staff has spent much of this year engaging stakeholders, analyzing the multifamily landscape, and working to design the program concept to deliver a multifamily direct installation program for building and transportation, and is seeking Board approval to execute an agreement with AEA for final program design and implementation of this concept.

ANALYSIS & DISCUSSION

Program Concept

[1] Defined as start-to-finish installation of equipment by a program-provided contractor at no cost to the customer

This contract will support a new program, the Clean and Healthy Affordable Multifamily Properties program ("CHAMP"). CHAMP aims to fully electrify between 300 to 1,000 dwelling units and install 125 electric vehicle charging ports at existing deed-restricted affordable multifamily properties (5+ units) at no cost to property owners or tenants. The program's contractors and installers will be paid, at minimum, prevailing wage rates to install building and transportation electrification upgrades at selected properties. This program concept is intended to remove the financial, implementation, and workforce barriers in transitioning properties to all-electric. As the first building-focused direct installation program by SVCE and the first electrification-focused direct installation program for multifamily buildings in the nation[2], CHAMP plans to demonstrate the success of an electrification- and equity-focused direct installation program while also identifying potential solutions for future scalability.

For properties that prefer to use their own prevailing wage contractors for electrification projects under design, CHAMP will provide $1.5 million in Gap Funding Grants. These grants will provide flexible, cost-capped incentives that "fill the gap" after all other third-party incentives and funding sources have been exhausted. This $1.5 million is not included in the contract with AEA and will be directly administered by SVCE.

Prior to program launch (anticipated May 2024), CHAMP will host a minimum of three stakeholder focus group meetings to ensure stakeholders' needs and concerns are addressed in the final program design. Staff intends to address program eligibility and requirements, energy bill impacts, and eviction protections at these stakeholder meetings.

Staff estimates that there are 95 deed-restricted multifamily properties with a total of 7,629 units in SVCE's service territory. Given the high level of investment per dwelling unit anticipated for electrification[3], this program is not designed to reach all or even a substantial portion of these affordable properties. However, with the experience and lessons learned from this program, SVCE hopes to identify key strategies for future scalability of similar programs, should substantial funding from alternate sources (e.g., state or federal funds) become available for electrification of affordable housing.

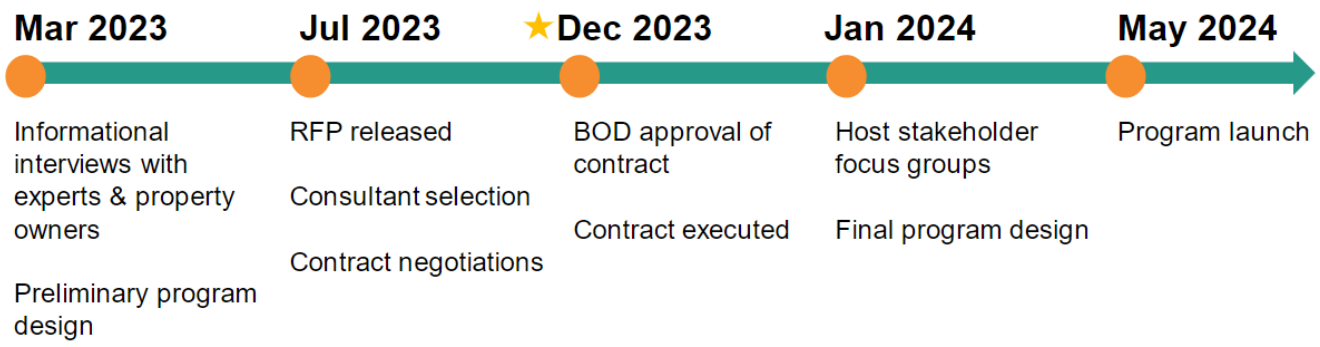
CHAMP will pursue third-party incentives (e.g., TECH Clean California, BayREN, etc.) to reduce SVCE's level of investment per dwelling unit and thereby increase the program's ability to serve additional properties. The amount of third-party incentives that the program can capture will vary across different properties based on the number of dwelling units at the property, type of property upgrades, program restrictions (e.g., rebate stacking), and other variables. Because of this variability, staff conservatively estimates that the program will be able to serve 300 to 1,000 multifamily dwelling units.

Consultant Selection

SVCE staff solicited a team of consultants to provide program design and implementation support through a competitive bid process as shown in the figure below. Staff issued a request for proposals (RFP) on July 21, which closed on September 15. The RFP was widely distributed to subscribers on SVCE's Solicitations listserv, the Building Decarbonization Coalition's listserv, and through direct outreach to existing program operators and contractors. Staff hosted a pre-proposal webinar to provide an opportunity for consultants to coordinate and form teams, which nine organizations attended. After eight weeks, the RFP garnered responses from two qualified teams with deep expertise in designing and implementing multifamily direct installation programs.

[2] As far as SVCE staff and AEA have been able to discover.

[3] AEA estimates the average gross cost to fully electrify a multifamily building is approximately $27,000 per dwelling unit.



Through this competitive bid process, the AEA team was selected. Team members will provide services as follows:

- AEA is the lead consultant and will serve as program operator for building electrification direct installation services;
- Ecology Action will lead transportation electrification direct installation services;
- Rocky Mountain Institute will provide program design support and create standardized retrofit package development;
- Atium Engineering will provide electrical engineering services and support; and
- Acterra will lead tenant engagement and education.

Each consultant on this team brings a unique set of tools, experience, and resources to effectively deliver the CHAMP program. The team is led by AEA, a 31-year-old non-profit technical services and training organization at the forefront of increasing energy efficiency and electrification in low-income communities. Since 1992, AEA has carried out a broad range of activities and programs benefitting low-income multifamily residences including the California Department of Community Services and Development's Low Income Weatherization Program and BayREN's Multifamily Program. Ecology Action is a 53-year-old non-profit consultancy and certified Women's Business Enterprise that specializes in developing scalable solutions for hard-to-reach markets. Ecology Action has successfully partnered with SVCE on a direct install pilot program at multifamily housing in the past. Ecology Action currently operates the only two multifamily electric vehicle supply equipment direct install programs in California. Rocky Mountain Institute has been an international thought leader and disseminator of deep energy retrofits for over two decades and brings extensive communication reach. Atium Engineering provides well-engineered buildings by taking a whole-building approach to electrical systems. Acterra is a non-profit based in Palo Alto that has local experience in delivering multi-lingual workshops and community events on energy and climate. Acterra has also successfully partnered with SVCE to deliver free drop-in "Energy Clinics" across Santa Clara County. Together, the AEA team brings robust experience and skills to meet the diverse needs of SVCE's CHAMP program.

The scope of work with AEA is included in Exhibit A of the proposed agreement (Attachment 1). Upon execution of this proposed agreement, AEA will subcontract with the team above to deliver:

- Program design and administration;
- Marketing and outreach;
- Technical assistance and support to property owners/managers;
- Building and transportation electrification equipment and installation services; and
- Tenant engagement and education on installed equipment & E-ELEC rate enrollment.

STRATEGIC PLAN

As referenced in SVCE's Strategic Plan Goal 14, Measure 2, this direct install program is a part of a suite of SVCE's built environment programs. The need for a program to address existing multifamily buildings was identified in the Double Down on Decarbonization Programs Initiative approved by the Board of Directors in March 2022.

ALTERNATIVE

Staff could pursue alternative designs to address multifamily electrification, such as incentives or technical assistance. However, direct installation services provided for the first time by SVCE and supported by a third-party implementer are an opportunity to test whether we can cost effectively, conveniently, and effectively electrify existing multifamily buildings.

FISCAL IMPACT

Total program funding of $12.5 million for this program is already reflected in the total Board-approved programs allocation. Approval of this contract with AEA for $11 million, therefore, will have no incremental fiscal impact. The proposed 5-year program budget will cover: program design and administration ($1,125,000); marketing and outreach ($375,000); technical assistance ($512,000); equipment and installation services ($8,862,500); and tenant engagement and education ($125,000).

The remaining $1.5 million in program funds will be administered by SVCE to electrification grants for affordable multifamily properties.

ATTACHMENTS

1. Agreement between SVCE and AEA for Multifamily Electrification Direct Install Consultant Services

AGREEMENT BETWEEN THE SILICON VALLEY CLEAN ENERGY AUTHORITY AND ASSOCIATION FOR ENERGY AFFORDABILITY INC. FOR Multifamily Electrification Direct Install Consultant Services

THIS AGREEMENT ("Agreement"), is entered into this 13 day of December 2023, by and between the SILICON VALLEY CLEAN ENERGY AUTHORITY, an independent public agency, ("Authority"), and Association for Energy Affordability Inc., a 501 c3 non-profit corporation whose address is 5900 Hollis Street Suite R2, Emeryville, CA 94608 (hereinafter referred to as "Consultant") (collectively referred to as the "Parties" and individually as a "Party").

RECITALS:

A. Authority is an independent public agency duly organized under the provisions of the Joint Exercise of Powers Act of the State of California (Government Code Section 6500 *et seq*.) ("Act") with the power to conduct its business and enter into agreements.

B. Consultant possesses the skill, experience, ability, background, certification and knowledge to provide the services described in this Agreement pursuant to the terms and conditions described herein.

C. Authority and Consultant desire to enter into an agreement for building and transportation electrification direct install services for multifamily residential customers upon the terms and conditions herein.

NOW, THEREFORE, the Parties mutually agree as follows:

1. **TERM**

The term of this Agreement shall commence on December 13, 2023, and shall terminate on December 13, 2028, unless terminated earlier as set forth herein.

2. **SERVICES TO BE PERFORMED**

Consultant shall perform each and every service set forth in Exhibit "A" pursuant to the schedule of performance set forth in Exhibit "B," both of which are attached hereto and incorporated herein by this reference.

3. **COMPENSATION TO CONSULTANT**

Consultant shall be compensated for services performed pursuant to this Agreement in a total amount not to exceed eleven million dollars ($11,000,000.00) based on the rates and terms set forth in Exhibit "C," which is attached hereto and incorporated herein by this reference.

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4. **TIME IS OF THE ESSENCE**

Consultant and Authority agree that time is of the essence regarding the performance of this Agreement.

5. **STANDARD OF CARE**

Consultant agrees to perform all services required by this Agreement in a manner commensurate with the prevailing standards of specially trained professionals in the San Francisco Bay Area under similar circumstances and in a manner reasonably satisfactory to Authority and agrees that all services shall be performed by qualified and experienced personnel. Consultant shall be responsible to Authority for any errors or omissions in the performance of work pursuant to this Agreement. If Authority determines that the Deliverable or Service does not conform to the Deliverable or Service Requirements, Authority shall give notice to Consultant any errors. Consultant shall provide plan of action to correct errors. Should any errors caused by Consultant be found in such services or products, Consultant shall correct the errors at no additional charge to Authority by redoing the professional work and/or revising the work product(s) called for in the Scope of Services to eliminate the errors. Should Consultant fail to make such correction in a reasonably timely manner, such correction may be made by Authority, and the cost thereof shall be charged to Consultant. In addition to all other available remedies, Authority may deduct the cost of such correction from any retention amount held by Authority or may withhold payment otherwise owed Consultant under this Agreement up to the amount of the cost of correction.

6. **INDEPENDENT PARTIES**

Authority and Consultant intend that the relationship between them created by this Agreement is that of an independent contractor. The manner and means of conducting the work are under the control of Consultant, except to the extent they are limited by statute, rule or regulation and the express terms of this Agreement. No civil service status or other right of employment will be acquired by virtue of Consultant's services. None of the benefits provided by Authority to its employees, including but not limited to, unemployment insurance, workers' compensation plans, vacation and sick leave are available from Authority to Consultant, its employees or agents. Deductions shall not be made for any state or federal taxes, FICA payments, PERS payments, or other purposes normally associated with an employer-employee relationship from any fees due Consultant. Payments of the above items, if required, are the responsibility of Consultant. Consultant shall indemnify and hold harmless Authority and its elected officials, officers, employees, servants, designated volunteers, and agents serving as independent contractors in the role of Authority officials, from any and all liability, damages, claims, costs and expenses of any nature to the extent arising from Consultant's personnel practices. Authority shall have the right to offset against the amount of any fees due to Consultant under this Agreement any amount due to Authority from Consultant as a result of Consultant's failure to promptly pay to Authority any reimbursement or indemnification arising under this section.

7. **NO RECOURSE AGAINST CONSTITUENT MEMBERS OF AUTHORITY**

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Authority is organized as a Joint Powers Authority in accordance with the Joint Powers Act of the State of California (Government Code Section 6500 et seq.) pursuant to a Joint Powers Agreement dated March 31, 2016, and is a public entity separate from its constituent members. Authority shall solely be responsible for all debts, obligations and liabilities accruing and arising out of this Agreement. Consultant shall have no rights and shall not make any claims, take any actions or assert any remedies against any of Authority's constituent members in connection with this Agreement.

8. **NON-DISCRIMINATION**

In the performance of this Agreement, Consultant, and any subconsultant under the Consultant, shall not discriminate against any employee, subcontractor or applicant for employment because of race, color, religious creed, sex, gender, gender identity, gender expression, marital status, national origin, ancestry, age, physical disability, mental disability, medical condition, genetic information, sexual orientation, military or veteran status, or other basis prohibited by law, except as provided in Government Code section 12940. Consultant shall have responsibility for compliance with this Section.

9. **HOLD HARMLESS AND INDEMNIFICATION**

A. General Indemnification. To the fullest extent permitted by law, Consultant shall, at its sole cost and expense, defend, hold harmless and indemnify Authority and its elected officials, officers, attorneys, agents, employees, designated volunteers, successors, assigns and those Authority agents serving as independent contractors in the role of Authority officials (collectively "Indemnitees"), from and against any and all damages, costs, expenses, liabilities, claims, demands, causes of action, proceedings, expenses, judgments, penalties, liens, and losses of any nature whatsoever, including fees of accountants, attorneys, or other professionals and all costs associated therewith and the payment of all consequential damages (collectively "Liabilities"), in law or equity, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to the acts or omissions of Consultant, its officers, agents, servants, employees, subcontractors, materialmen, consultants or their officers, agents, servants or employees (or any entity or individual that Consultant shall bear the legal liability thereof) in the performance of this Agreement, including the Indemnitees' active or passive negligence, except for Liabilities arising from the sole negligence or willful misconduct of the Indemnitees as determined by court decision or by the agreement of the Parties. Consultant shall defend the Indemnitees in any action or actions filed in connection with any Liabilities with counsel of the Indemnitees' choice, and shall pay all costs and expenses, including all attorneys' fees and experts' costs actually incurred in connection with such defense. Consultant shall reimburse the Indemnitees for any and all legal expenses and costs incurred by Indemnitees in connection therewith.

B. Intellectual Property Indemnification. Consultant hereby certifies that it owns, controls, or licenses and retains all right, title, and interest in and to any intellectual property it uses in relation to this Agreement, including the design, look, feel, features, source code, content, and other technology relating to any part of the services and including all related patents, inventions, trademarks, and copyrights, all applications therefor, and all trade names, service

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marks, know how, and trade secrets (collectively referred to as "IP Rights"), except as otherwise expressly provided by this Agreement. IP Rights created, conceived, developed, and reduced to practice by Consultant prior to the performance of the Services remain the proprietary rights of Consultant (collectively, the "Consultant's Pre-Existing IP Rights"). Consultant warrants that the services to be provided pursuant to this Agreement do not infringe, violate, trespass, or constitute the unauthorized use or misappropriation of any IP Rights of any third party. Consultant shall indemnify, defend, and hold Indemnitees, harmless from and against any Liabilities by a third party that the services to be provided pursuant to this Agreement infringe or violate any third-party's IP Rights, provided any such right is enforceable in the United States. Such costs and expenses shall include reasonable attorneys' fees of counsel of Authority's choice, expert fees and all other costs and fees of litigation.

C. The acceptance of the services by Authority shall not operate as a waiver of these rights of indemnification. The hold harmless and indemnification provisions of this Section shall apply regardless of whether or not any insurance policies are determined to be applicable to the Liability.

D. Consultant's indemnifications and obligations under this section shall survive the expiration or termination of this Agreement.

10. **INSURANCE**

A. General Requirements. On or before the commencement of the term of this Agreement, Consultant shall furnish Authority with certificates showing the type, amount, class of operations covered, effective dates and dates of expiration of insurance coverage in compliance with the requirements listed in Exhibit "D," which is attached hereto and incorporated herein by this reference. Such insurance and certificates, which do not limit Consultant's indemnification obligations under this Agreement, shall also contain substantially the following statement: "Should any of the above insurance covered by this certificate be canceled or coverage reduced before the expiration date thereof, the insurer affording coverage shall provide thirty (30) days' advance written notice to the Authority by certified mail, Attention: Chief Executive Officer." Consultant shall maintain in force at all times during the performance of this Agreement all appropriate coverage of insurance required by this Agreement with an insurance company that is acceptable to Authority and licensed to do insurance business in the State of California. Endorsements naming the Authority as additional insured shall be submitted with the insurance certificates.

B. Subrogation Waiver. Consultant agrees that in the event of loss due to any of the perils for which he/she has agreed to provide comprehensive general and automotive liability insurance, Consultant shall look solely to his/her/its insurance for recovery. Consultant hereby grants to Authority, on behalf of any insurer providing comprehensive general and automotive liability insurance to either Consultant or Authority with respect to the services of Consultant herein, a waiver of any right to subrogation which any such insurer of Consultant may acquire against Authority by virtue of the payment of any loss under such insurance.

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C. Failure to Secure or Maintain Insurance. If Consultant at any time during the term hereof should fail to secure or maintain the foregoing insurance, Authority shall be permitted to obtain such insurance in the Consultant's name or as an agent of the Consultant and shall be compensated by the Consultant for the costs of the insurance premiums at the maximum rate permitted by law and computed from the date written notice is received that the premiums have not been paid.

D. Additional Insured. Authority, its members, officers, employees and volunteers shall be named as additional insureds under all insurance coverages, except any professional liability insurance, required by this Agreement. The naming of an additional insured shall not affect any recovery to which such additional insured would be entitled under this policy if not named as such additional insured. An additional insured named herein shall not be held liable for any premium, deductible portion of any loss, or expense of any nature on this policy or any extension thereof. Any other insurance held by an additional insured shall not be required to contribute anything toward any loss or expense covered by the insurance provided by this policy.

E. Sufficiency of Insurance. The insurance limits required by Authority are not represented as being sufficient to protect Consultant. Consultant is advised to confer with Consultant's insurance broker to determine adequate coverage for Consultant.

F. Maximum Coverage and Limits. It shall be a requirement under this Agreement that any available insurance proceeds broader than or in excess of the specified minimum Insurance coverage requirements and/or limits shall be available to the additional insureds. Furthermore, the requirements for coverage and limits shall be the minimum coverage and limits specified in this Agreement, or the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named insured, whichever is greater.

11. CONFLICT OF INTEREST

Consultant warrants that it, its officers, employees, associates and subcontractors, presently have no interest, and will not acquire any interest, direct or indirect, financial or otherwise, that would conflict in any way with the performance of this Agreement, and that it, its officers, employees, associates and subcontractors, will not employ any person having such an interest. Consultant and its officers, employees, associates and subcontractors, if any, shall comply with all conflict of interest statutes of the State of California applicable to Consultant's services under this Agreement, including the Political Reform Act (Gov. Code § 81000, et seq.) and Government Code Section 1090. During the term of this Agreement, Consultant may perform similar services for other clients, but Consultant and its officers, employees, associates and subcontractors shall not, without the Authority Representative's prior written approval, perform work for another person or entity for whom Consultant is not currently performing work that would require Consultant or one of its officers, employees, associates or subcontractors to abstain from a decision under this Agreement pursuant to a conflict of interest statute. Consultant shall incorporate a clause substantially similar to this section into any subcontract that Consultant executes in connection with the performance of this Agreement. Consultant understands that it may be required to fill out a conflict of interest form if the services provided under this Agreement

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require Consultant to make certain governmental decisions or serve in a staff Authority, as defined in Title 2, Division 6, Section 18700 of the California Code of Regulations.

12. **PROHIBITION AGAINST TRANSFERS**

Consultant shall not assign, sublease, hypothecate, or transfer this Agreement, or any interest therein, directly or indirectly, by operation of law or otherwise, without prior written consent of Authority. Any attempt to do so without such consent shall be null and void, and any assignee, sublessee, pledgee, or transferee shall acquire no right or interest by reason of such attempted assignment, hypothecation or transfer. However, claims for money by Consultant from Authority under this Agreement may be assigned to a bank, trust company or other financial institution without prior written consent. Written notice of such assignment shall be promptly furnished to Authority by Consultant.

The sale, assignment, transfer or other disposition of any of the issued and outstanding capital stock of Consultant, or of the interest of any general partner or joint venturer or syndicate member or cotenant, if Consultant is a partnership or joint venture or syndicate or cotenancy, which shall result in changing the control of Consultant, shall be construed as an assignment of this Agreement. Control means fifty percent (50%) or more of the voting power of the corporation.

13. **SUBCONTRACTOR APPROVAL**

Consultant may not subcontract any of the Services it is obligated to perform under this Agreement without the prior written approval of Authority, which approval may be given at Authority sole discretion. Any approval of a subcontractor by Authority may be conditioned upon CONSULTANT contractually requiring each subcontractor to be bound by terms and conditions substantially equivalent to the terms and conditions of this Agreement. Consultant can submit a list of subcontractors throughout the term of this Agreement for approval by Authority.

In the event that Consultant employs subcontractors, such subcontractors shall be required to furnish proof of workers' compensation insurance and shall also be required to carry general, automobile and professional liability insurance in substantial conformity to the insurance carried by Consultant. In addition, any work or services subcontracted hereunder shall be subject to each provision of this Agreement. Consultant shall, at all times, be responsible for the work, and acts and omissions, of subcontractors and persons directly or indirectly employed by them in connection with the work. Consultant will remain solely responsible to Authority for the proper completion of any Services performed by subcontractors.

Consultant agrees to include within their subcontract(s) with any and all subcontractors the same requirements and provisions of this Agreement, including the indemnity and insurance requirements, to the extent they apply to the scope of the subcontractor's work. Subcontractors hired by Consultant shall agree to be bound to Consultant and Authority in the same manner and to the same extent as Consultant is bound to Authority under this Agreement. Subcontractors shall agree to include these same provisions within any sub-subcontract. Consultant shall provide a copy of the Indemnity and Insurance provisions of this Agreement to any subcontractor. Consultant shall require all subcontractors to provide valid certificates of insurance and the required

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endorsements prior to commencement of any work and will provide proof of compliance to Authority.

Authority approves the following anticipated subconsultants and their performance of the tasks noted below:

Table 1 – Anticipated Subconsultants

Anticipated Subconsultant	Role	Exhibit "A" Scope of Services Tasks
Ecology Action	Electric vehicle supply equipment (EVSE) direct installation services	• Task 1 - Program design and implementation support • Task 3 - Education and outreach support for EVSE Direct Install Measures • Task 5 - Direct installation services for EVSE Direct Install Measures
Rocky Mountain Institute	Program design and measure package development	• Task 1 – Program design and implementation support • Task 1 – Measure package development and selection support
Acterra	Tenant outreach and engagement support	• Task 1 – Program design and implementation support • Task 7 – Tenant education and outreach support • Task 7 – E-ELEC rate education and outreach support
Atium Engineering	Engineering support	• Task 1 – Program design and implementation support • Task 1 – Measure package development and selection support • Task 5 – Project-based electrical engineering support
Installation Subcontractors (Consultant to submit names to Authority prior to commencement of Direct Install Services activities.)	Direct installation services	• Task 5 – Direct installation services

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14. **REPORTS**

A. Each and every report, draft, work product, map, record and other document, hereinafter collectively referred to as "Report", reproduced, prepared or caused to be prepared by Consultant pursuant to or in connection with this Agreement, shall be the exclusive property of Authority. Consultant shall not copyright any Report required by this Agreement and shall execute appropriate documents to assign to Authority the copyright to Reports created pursuant to this Agreement. Any Report, information and data acquired or required by this Agreement shall become the property of Authority, and all publication rights are reserved to Authority. Consultant may retain a copy of any Report furnished to the Authority pursuant to this Agreement.

B. All Reports prepared by Consultant may be used by Authority in execution or implementation of: (1) The original project for which Consultant was hired; (2) Completion of the original project by others; (3) Subsequent additions to the original project; and/or (4) Other Authority projects as Authority deems appropriate in its sole discretion.

C. Consultant shall, at such time and in such form as Authority may require, furnish reports concerning the status of services required under this Agreement.

D. All Reports shall also be provided in electronic format, both in the original file format (e.g., Microsoft Word) and in PDF format.

E. No Report, information or other data given to or prepared or assembled by Consultant pursuant to this Agreement that has not been publicly released shall be made available to any individual or organization by Consultant without prior approval by Authority.

F. Authority shall be the owner of and shall be entitled upon request to immediate possession of accurate reproducible copies of Reports or other pertinent data and information gathered or computed by Consultant prior to termination of this Agreement or upon completion of the work pursuant to this Agreement.

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15. **RECORDS**

Consultant shall maintain complete and accurate records with respect to costs, expenses, receipts and other such information required by Authority that relate to the performance of services under this Agreement, in sufficient detail to permit an evaluation of the services and costs. All such records shall be clearly identified and readily accessible. Consultant shall provide free access to such books and records to the representatives of Authority or its designees at all proper times, and gives Authority the right to examine and audit same, and to make transcripts therefrom as necessary, and to allow inspection of all work, data, documents, proceedings and activities related to this Agreement. Such records, together with supporting documents, shall be maintained for a minimum period of five (5) years after Consultant receives final payment from Authority for all services required under this agreement

16. **PARTY REPRESENTATIVES**

The Chief Executive Officer ("Authority Representative") shall represent the Authority in all matters pertaining to the services to be performed under this Agreement. Andrew Brooks, Senior Director (Consultant Representative") shall represent Consultant in all matters pertaining to the services to be performed under this Agreement.

17. **CONFIDENTIAL INFORMATION AND DOCUMENTS**

A. Consultant covenants that all data, reports, documents, discussion, or other information (collectively "Data") developed or received by Consultant or provided for performance of this Agreement are deemed confidential and shall not be disclosed or released by Consultant without prior written authorization by Authority. Authority shall grant such authorization if applicable law requires disclosure. Consultant, its officers, employees, agents, or subcontractors shall not without written authorization from the Authority Representative or unless requested in writing by the Authority Attorney, voluntarily provide declarations, letters of support, testimony at depositions, response to interrogatories or other information concerning the work performed under this Agreement or relating to any project or property located within the Authority. Response to a subpoena or court order shall not be considered "voluntary," provided Consultant gives Authority notice of such court order or subpoena.

B. Consultant shall promptly notify Authority should Consultant, its officers, employees, agents or subcontractors be served with any summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, request for admissions or other discovery request, court order or subpoena from any party regarding this Agreement and the work performed thereunder or with respect to any project or property located within the Authority. Authority may, but has no obligation to, represent Consultant or be present at any deposition, hearing or similar proceeding. Consultant agrees to cooperate fully with Authority and to provide Authority with the opportunity to review any response to discovery requests provided by Consultant. However, Authority's right to review any such response does not imply or mean the right by Authority to control, direct or rewrite the response.

C. In the event Authority gives Consultant written notice of a "litigation hold", then as to all data identified in such notice, Consultant shall, at no additional cost to Authority, isolate and preserve all such data pending receipt of further direction from the Authority.

D. Consultant agrees to comply with the confidentiality and data protection provisions set forth in Exhibit "E," attached hereto and incorporated herein by this reference.

E. Consultant's covenants under this section shall survive the expiration or termination of this Agreement.

18. **NOTICES**

Any notice, consent, request, demand, bill, invoice, report or other communication required or permitted under this Agreement shall be in writing and conclusively deemed effective: (a) on personal delivery, (b) on confirmed delivery by courier service during

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Consultant's and Authority's regular business hours, (c) via electronic submission or communication as defined in Exhibit A, or (d) three Business Days after deposit in the United States mail, by first class mail, postage prepaid, and addressed to the Party to be notified as set forth below:

TO AUTHORITY:
333 W. El Camino Real
Suite 330
Sunnyvale CA 94087
Attention: Chief Executive Officer

TO CONSULTANT:
Andrew Brooks
Association for Energy Affordability
5900 Hollis St., Suite R2
Emeryville, CA 94608

19. MEDIATION AND ARBITRATION

Any dispute arising out of or relating to this Agreement or the breach thereof, which cannot be settled through good faith negotiations between the parties, shall be submitted to mediation before a single mediator, in accordance with the then applicable American Arbitration Association Construction Industry Mediation Procedures. If the parties fail to resolve any dispute arising out of or relating to this Agreement or the breach thereof in accordance with the foregoing mediation procedure, such dispute shall be submitted to mandatory arbitration. The arbitrator shall be appointed in accordance with the then applicable Construction Industry Rules of the American Arbitration Association. The parties shall share the procedural costs of mediation and/or arbitration equally. Each party shall pay its own attorneys' fees and costs incurred in connection with the mediation and/or arbitration.

20. **TERMINATION**

In the event Consultant fails or refuses to perform any of the provisions hereof at the time and in the manner required hereunder, Consultant shall be deemed in default in the performance of this Agreement. If Consultant fails to cure the default within the time specified (which shall be determined by the Authority but shall be not less than 10 days) and according to the requirements set forth in Authority's written notice of default, and in addition to any other remedy available to the Authority by law, the Authority Representative may terminate the Agreement by giving Consultant written notice thereof, which shall be effective immediately. The Authority Representative shall also have the option, at its sole discretion and without cause, of terminating this Agreement by giving seven (7) calendar days' prior written notice to Consultant as provided herein. Upon receipt of any notice of termination, Consultant shall immediately discontinue performance.

In the event of Authority's termination of this Agreement due to no fault or failure of performance by Consultant, Authority shall pay Consultant for services satisfactorily performed up to the effective date of termination. Upon termination, Consultant shall immediately deliver to

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the Authority any and all copies of studies, sketches, drawings, computations, and other material or products, whether or not completed, prepared by Consultant or given to Consultant, in connection with this Agreement. Such materials shall become the property of Authority. Consultant shall have no other claim against Authority by reason of such termination, including any claim for compensation.

21. **COMPLIANCE WITH LAWS**

Consultant shall keep itself informed of all applicable federal, state and local laws, ordinances, codes, regulations and requirements which may, in any manner, affect those employed by it or in any way affect the performance of its services pursuant to this Agreement. Consultant shall, at all times, observe and comply with all such laws and regulations, including, but not limited to the Americans with Disabilities Act, the Stored Communications Act, 18 U.S.C. Section 2701, et seq., California Civil Code Sections 1798.80 through 1798.84, and the California Consumer Privacy Act, Civil Code Section 1798.100 *et seq*. Authority, and its officers and employees, shall not be liable at law or in equity by reason of the failure of the Consultant to comply with this paragraph.

Consultant represents and agrees that all personnel engaged by Consultant in performing services are and shall be fully qualified and are authorized or permitted under state and local law to perform such services. Consultant represents and warrants to Authority that it has all licenses, permits, certificates, qualifications, and approvals required by law to provide the services and work required to perform services under this Agreement, including a business license. Consultant further represents and warrants that it shall keep in effect all such licenses, permits, and other approvals during the term of this Agreement.

Consultant understands and agrees that the installation of equipment as described in "Exhibit A Scope of Services" is subject to the payment of prevailing wage and Consultant and any subcontractors, shall be fully responsible for complying with all California public works requirements including but not limited to payment of prevailing wage.

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22. **CONFLICT OF LAW**

This Agreement shall be interpreted under, and enforced by the laws of the State of California. The Agreement and obligations of the Parties are subject to all valid laws, orders, rules, and regulations of the authorities having jurisdiction over this Agreement (or the successors of those authorities). Any suits brought pursuant to this Agreement shall be filed with the Superior Court of the County of Santa Clara, State of California.

23. **ADVERTISEMENT**

Consultant shall not post, exhibit, display or allow to be posted, exhibited, displayed any signs, advertising, show bills, lithographs, posters or cards of any kind pertaining to the services performed under this Agreement unless prior written approval has been secured from Authority to do otherwise.

24. **WAIVER**

A waiver by Authority of any breach of any term, covenant, or condition contained herein shall not be deemed to be a waiver of any subsequent breach of the same or any other term, covenant, or condition contained herein, whether of the same or a different character.

25. **INTEGRATED CONTRACT**

This Agreement represents the full and complete understanding of every kind or nature whatsoever between the Parties, and all preliminary negotiations and agreements of whatsoever kind or nature are merged herein. No verbal agreement or implied covenant shall be held to vary the provisions hereof. Any modification of this Agreement will be effective only by a written document signed by both Authority and Consultant.

26. **AUTHORITY**

The individual(s) executing this Agreement represent and warrant that they have the legal Authority and authority to do so on behalf of their respective legal entities.

27. **INSERTED PROVISIONS**

Each provision and clause required by law to be inserted into the Agreement shall be deemed to be enacted herein, and the Agreement shall be read and enforced as though each were included herein. If through mistake or otherwise, any such provision is not inserted or is not correctly inserted, the Agreement shall be amended to make such insertion on application by either Party.

28. **CAPTIONS AND TERMS**

The captions in this Agreement are for convenience only, are not a part of the Agreement and in no way affect, limit or amplify the terms or provisions of this Agreement.

29. **AUTHORITY'S RIGHTS TO EMPLOY OTHER CONSULTANTS**

Authority reserves the right to employ other consultants in connection with the subject matter of the Scope of Services.

30. **EXHIBITS**

The Exhibits referenced in this Agreement are attached hereto and incorporated herein by this reference as though set forth in full in the Agreement. If any inconsistency exists or arises between a provision of this Agreement and a provision of any exhibit, or between a provision of this Agreement and a provision of Consultant's proposal, the provisions of this Agreement shall control.

31. **FORCE MAJEURE**

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Consultant shall not be liable for any failure to perform its obligations under this Agreement if Consultant presents acceptable evidence, in Authority's sole judgment, that such failure was due to acts of God, embargoes, inability to obtain labor or materials or reasonable substitutes for labor or materials, governmental restrictions, governmental regulations, governmental controls, judicial orders, enemy or hostile governmental action, civil commotion, fire or other casualty, or other causes beyond Consultant's reasonable control and not due to any act by Consultant.

32. **FINAL PAYMENT ACCEPTANCE CONSTITUTES RELEASE**

The acceptance by Consultant of the final payment made under this Agreement shall operate as and be a release of Authority from all claims and liabilities for compensation to Consultant for anything done, furnished or relating to Consultant's work or services. Acceptance of payment shall be any negotiation of Authority's check or the failure to make a written extra compensation claim within ten calendar days of the receipt of that check. However, approval or payment by Authority shall not constitute, nor be deemed, a release of the responsibility and liability of Consultant, its employees, subcontractors and agents for the accuracy and competency of the information provided and/or work performed; nor shall such approval or payment be deemed to be an assumption of such responsibility or liability by Authority for any defect or error in the work prepared by Consultant, its employees, subcontractors and agents.

33. **SEVERABILITY**

If any provision in this Agreement is held by a court of competent jurisdiction to be illegal, invalid, void, or unenforceable, the remaining provisions will nevertheless continue in full force without being impaired or invalidated in any way.

34. **SUCCESSORS AND ASSIGNS**

The terms and conditions of this Agreement shall be binding on the successors and assigns of the Parties to this Agreement.

35. **NO THIRD PARTY BENEFICIARIES INTENDED**

This Agreement is made solely for the benefit of the Parties to this Agreement and their respective successors and assigns, and no other person or entity may have or acquire a right by virtue of this Agreement.

36. **COUNTERPARTS; FACSIMILE/PDF/ELECTRONIC SIGNATURE**

This Agreement may be executed in multiple counterparts, all of which shall be deemed an original, and all of which will constitute one and the same instrument. The Parties agree that a facsimile, PDF or electronic signature may substitute for and have the same legal effect as the original signature.

37. **DRAFTING PARTY**

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This Agreement shall be construed without regard to the Party that drafted it. Any ambiguity shall not be interpreted against either Party and shall, instead, be resolved in accordance with other applicable rules concerning the interpretation of contracts.

IN WITNESS WHEREOF, the Parties have caused the Agreement to be executed as of the date set forth above.

RECOMMENDED FOR APPROVAL

_____
Justin Zagunis, Director of Decarbonization Programs and Policy

RECOMMENDED FOR APPROVAL

_____
Amrit Singh, Chief Financial Officer/Director of Administrative Services

CONSULTANT NAME
Association for Energy Affordability Inc.

By: _____
Name: _____
Title: _____
Date: _____

SILICON VALLEY CLEAN ENERGY AUTHORITY
A Joint Powers Authority

By: _____
Name: Girish Balachandran
Title: Chief Executive Officer
Date: _____

APPROVED AS TO FORM:

_____
Counsel for Authority

ATTEST:

_____
Authority Clerk

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Exhibit A
Scope of Services

CONSULTANT shall provide the Services detailed in this Exhibit A, entitled "SCOPE of SERVICES."

Silicon Valley Clean Energy Authority's ("AUTHORITY") mission is to provide clean, carbon-free electricity at competitive rates, and to work with its member communities to reduce GHG emissions. One key avenue for this is through customer decarbonization programs. AUTHORITY has developed several programs roadmaps/plans and been deploying programs since 2019. A key focus of such programs is to provide incentives and technical assistance for building electrification[1] and transportation electrification[2].

While incentives and technical assistance may assist early adopters in transitioning to all-electric buildings or vehicles, deeper assistance is needed to reach underserved customers. For many such customers, the economic, logistical, and technological barriers to electrification are significant. Therefore, Authority envisions a program that provides building and transportation electrification services at no cost to low-income or affordable housing properties (hereafter referred to by the working title "Multifamily Program"). CONSULTANT will leverage its technical expertise and local experience to deliver the Multifamily Program to eligible AUTHORITY customers.

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I. Overview of Multifamily Program

The core component of the Multifamily Program will provide direct installation services[3] for building and transportation electrification upgrades. This will include project advising and planning, building evaluations, site visits, permitting, equipment installation, building benchmarking, and post-installation monitoring (e.g., bill impacts, equipment operation, etc.). The intent of these direct install services is to remove financial, workforce, and implementation barriers in transitioning selected multifamily properties to all-electric equipment and appliances. hopes to demonstrate the success of such a program in the Bay Area and identify challenges and potential solutions for future scalability.

A supporting component of the Multifamily Program will provide Gap Funding Grants to select properties that meet criteria defined by AUTHORITY. Despite the many incentives provided by existing federal, state, and local programs, it can be difficult for multifamily property owners to fully offset the high upfront costs of electrification and ancillary building improvements (e.g., electric infrastructure upgrades, remediation and safety, etc.). The intent of these Grants is to provide flexible, cost-capped incentives that would "fill the gap" after all other third-party incentive sources have been exhausted. AUTHORITY intends to grant up to $1.5 million in gap funding grants to properties with projects under design.

[1] Defined as the replacement of natural gas equipment for space heating, water heating, cooking, and clothes drying with efficient electric alternatives.
[2] Defined as the installation of electric vehicle charging infrastructure.
[3] Defined as the start-to-finish installation of equipment at no cost to the customer.

AUTHORITY also recognizes that electrification upgrades alone do not guarantee bill savings and that utility rate design is integral to encouraging all-electric construction. In 2022, AUTHORITY established an E-ELEC ("Electric Home") residential rate for customers that own and operate a heat pump space or water heater, an energy storage system, and/or an electric vehicle (for more information, visit https://svcleanenergy.org/E-ELEC-RATE/). By electrifying property owners' and tenants' space and/or water heating appliances, they will become eligible to participate in this new rate. Therefore, a supporting component of the Multifamily Program will be educating and enrolling participating property owners and tenants in the E-ELEC rate.

A) Multifamily Program Goals and Objectives

The intent of the Multifamily Program is to make the transition to all-electric construction as simple and easy as possible for existing deed-restricted affordable multifamily properties. The overarching goals of the Multifamily Program are to: (1) reduce greenhouse gas emissions, and (2) efficiently and cost-effectively scale building and transportation electrification at multifamily properties.

The program objectives in support of the Program goals are:

1. Provide an easily accessible, no-cost installation option for AUTHORITY multifamily customers to fully electrify wherever feasible or substantially electrify otherwise at least 300 dwelling units;
2. Lower energy bills by enrolling at least 60% of eligible property owners and tenants in AUTHORITY's E-ELEC rate;
3. Provide safer, healthier, thermally comfortable resilient, zero-carbon buildings with improved indoor air quality;
4. Establish a workforce of trusted, experienced installers with high quality equipment capable of whole building electrification without typically needing to upgrade PG&E service lines.

B) Multifamily Program Staffing

CONSULTANT agrees to staff the Multifamily Program in accordance with the Staffing Plan set forth in Table A-1. CONSULTANT will notify AUTHORITY in writing concerning proposed changes to the staffing plan, and all such changes will require the prior written consent of AUTHORITY.

AUTHORITY may (i) request CONSULTANT conduct criminal background checks to AUTHORITY's satisfaction on all CONSULTANT's staff that may enter customer premises, and (ii) require that any staff of CONSULTANT that fails the background check will not be permitted to enter any customer premises.

Table A-1 Multifamily Program Staffing Plan

Staff	Role & Responsibilities	Estimated % of Total Hours
Andrew Brooks, Senior Director of AEA West,	AEA Officer-in-Charge	5%

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Association for Energy Affordability (AEA) abrooks@aeacleanenergy.org		
Nick Dirr, Senior Director of Programs, AEA ndirr@aeacleanenergy.org	Program oversight	5%
Amy Dryden, Director of Strategic Initiatives, AEA adryden@aeacleanenergy.org	Program design, training	2%
Kevin Miller, Program Manager, AEA kmiller@aeacleanenergy.org	Program Manager	28%
Jack Aitchison, Energy Engineering Manager, AEA jaitchison@aeacleanenergy.org	AEA technical assistance provider and engineer	5%
John Neal, Director of Technical Services, AEA jneal@aeacleanenergy.org	Support implementation/technical specification	5%
Carrie Thomas, Construction Manager AEA cthomas@aeacleanenergy.org	Construction & Project Management	24%
Sherry Lee Bryan, Director, Ecology Action sherry.bryan@ecoact.org	Support program and incentive design for Electric Vehicle Supply Equipment (EVSE)	5%
Mahlon Aldridge, Vice President of Strategy, Ecology Action mahlon.aldridge@ecoact.org	Overall program design and delivery support for EVSE	2%
Frank Denizm, Construction Project Manager, Ecology Action Frank.denizm@ecoact.org	EVSE technical design, construction/contractor management, and quality control	2.5%
Darya Oreizi, Participant Advisor, Ecology Action darya.oreize@ecoact.org	EVSE customer acquisition, engagement, education, and commissioning.	2%
Martha Campbell, Principle, RMI mcampbell@rmi.org	Program scaling strategy	2.5%
Brett Webster, Manager,	Support prototype and package design	2.5%

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RMI bwebster@rmi.org		
Nicholas Jiles, Manager, RMI njiles@rmi.org	Project management	2%
Dave Maino, President, Atium Engineering maino@atiumeng.com	Electrical engineering	2.5%
Wendy Chou Senior Manager Acterra Wendy.chou@acterra.org	E-ELEC Enrollment, tenant engagement	2%
Lauren Weston Executive Director Acterra Lauren.weston@acterra.org	E-ELEC Enrollment, tenant engagement	2%
Zack Wurtz Director Acterra Zack.wurtz@acterra.org	E-ELEC Enrollment, tenant engagement	1%
Patty Christofferson Senior Manager Acterra Patty.christofferson@acterra.org	E-ELEC Enrollment, tenant engagement	1%

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II. Multifamily Program Implementation & Delivery

Task 1: Direct Install Program Design and Set Up

Task 1.1 Host Program Kick-Off and Ongoing Program Check-In Meetings

CONSULTANT will develop an agenda for the Program Kick-off meeting and organize the meeting with AUTHORITY staff to review the program design and delivery, roles, timeline, and priorities. This meeting will also cover logistics, marketing, coordination, establishing workflow systems, invoicing requirements, reports, and any remaining implementation questions.

After the Kick-off meeting, CONSULTANT will set up check-in meetings on a recurring schedule for the duration of the period of performance, unless more frequent meetings are necessary as determined by AUTHORITY. For check-in meetings, CONSULTANT will work with the AUTHORITY project manager(s) to determine the agenda at minimum one day prior to the meeting. Meetings will focus on progress updates, reviewing deliverables, and determining expected milestones for the next meeting.

Task 1.1 Deliverable: Meeting agendas and meeting minutes

Task 1.2 Design Program with Stakeholders

CONSULTANT will incorporate stakeholder feedback into its program design to ensure that customer interests, concerns, and challenges are planned for and addressed to the extent possible. Prior to program launch, CONSULTANT will form a stakeholder focus group and consult the group regarding key needs and considerations for final program design and implementation. The stakeholder focus group may comprise of affordable housing property owners, government agencies, community-based organizations, and other entities as directed by AUTHORITY. CONSULTANT will provide up to $15,000 in total compensation to the stakeholder focus group for their participation.

CONSULTANT will host a minimum of three meetings with the focus group. The meetings will include a presentation and discussion of the draft program design including, but not limited to, program eligibility and prioritization criteria, program services, program processes, and marketing and outreach. CONSULTANT will collect and collate the focus group's feedback. Based on the focus group's input and recommendations, the Proposer will revise the Program design and timeline, as necessary, for AUTHORITY approval.

Task 1.2 Deliverable: Stakeholder focus group meeting agendas, slide decks, and meeting minutes

Task 1.3 Develop Program Implementation Manual

CONSULTANT, in consultation with AUTHORITY, will draft a Program Implementation Manual ("Program Manual") for use by AUTHORITY and CONSULTANT. The Program Manual will describe in greater detail the design, implementation, and policies of the Program. The Program Manual will include, at minimum, the following:

i. overview of the Program;
ii. the terms and conditions for eligible properties to participate in the Program;
iii. the process for enrolling properties in the Program, including targeted outreach, enrollment in direct install services, and enrollment in gap funding grant;
iv. List of Direct Install Measures (Task 1.5);
v. List of Cost-capped Incentives (Task 2.1);
vi. the process for properties to participate in the Program;
vii. the process for scheduling Program activities;
viii. the process for performing Program activities;
ix. the process for installing equipment, including a Quality Assurance and Quality Control Plan that ensures equipment are installed and working properly and customers are satisfied;
x. the process for resolving customer complaints;
xi. the process for providing Program reports; and
xii. the process for completing invoicing.

CONSULTANT will submit a draft Program Implementation Manual to AUTHORITY for review and approval before finalizing. Proposer will provide written revisions and updates to the Program Implementation Manual upon AUTHORITY request. CONSULTANT will adhere to and document its compliance with applicable policies and procedures in the Program Implementation Manual as it performs the Services in this Scope of Services.

Task 1.3 Deliverable: Program Implementation Manual

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Task 1.4 Develop Direct Install Program Participation Agreement

In coordination with AUTHORITY, CONSULTANT will draft Direct Install Program Participation Agreement(s) that includes terms and conditions of the Program, and grants the CONSULTANT and its subcontractor(s) permission to perform activities necessary to participate in the Program including site visits, building evaluations, equipment installation, and EM&V. The Participation Agreement is intended to be signed or acknowledged by the property owner or manager.

CONSULTANT will submit the Direct Install Program Participation Agreement to AUTHORITY for review and approval, and will revise and update as directed by AUTHORITY before use.

Task 1.4 Deliverable: Direct Install Program Participation Agreement

Task 1.5 Develop List of Direct Install Measures

Building upon Table C-4 in Exhibit "C" Compensation, CONSULTANT will update and draft a list of building and transportation upgrade measures that are eligible for direct install services ("Direct Install Measures") through the Program for inclusion in the Program Implementation Manual. The intent of the Direct Install Measures is to support the transition to all-electric construction while also minimizing the need for costly electrical service upgrades.

The list of Direct Install Measures will include, at minimum, the following:

i. Replacement of existing electric or gas-fired heating equipment with heat pumps for space heating and cooling;
ii. Replacement of existing gas-fired water heating equipment with heat pump water heaters (central or distributed systems);
iii. Replacement of existing gas-fired range or cooktops with induction or electric resistance range or cooktop;
iv. Replacement of existing gas clothes dryer with heat pump or electric resistance clothes dryer;
v. Installation of electric vehicle charging infrastructure (Level 1 or Level 2);
vi. Energy and water efficiency measures that would decrease overall electric demand to reduce the need for electric service upgrades (e.g., LED lighting, occupancy sensors, low-flow water fixtures, load management or demand flexibility measures, circuit splitters or pausers, etc.);
vii. Remediation and safety (e.g., lead or asbestos abatement).

Each Direct Install Measure will also include, at minimum, the following criteria:

i. Description of the measure (e.g., measure name, unit of measure, equipment to be replaced, etc.)
ii. Minimum qualifications and equipment specifications (e.g., efficiency standards, code requirements, equipment model number, etc.).

CONSULTANT will submit the List of Direct Install Measures to AUTHORITY for review and approval before use. CONSULTANT will revise and update the List of Direct Install Measures

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with new measures proposed by CONSULTANT or AUTHORITY for AUTHORITY review and approval before use.

Task 1.5 Deliverable: List of Direct Install Measures

Task 1.6 Develop Electrification Plan Template

CONSULTANT will draft an Electrification Plan Template for AUTHORITY review and approval and will revise as directed by AUTHORITY before use. Once finalized and approved by AUTHORITY, the Electrification Plan will be provided by CONSULTANT to the property owner or manager, and will include information necessary for the property owner or manager to understand the building and transportation electrification opportunities available to them. CONSULTANT will provide written revisions and updates to the Electrification Plan Template upon AUTHORITY request.

The Electrification Plan will include the following elements regarding equipment and appliances:

i. An inventory of physical conditions, fuel-type, age and estimated remaining lifespan(s) of existing equipment and appliances;
ii. Identification of whole building efficiency and optimization opportunities;
iii. Clear and actionable energy savings and electrification recommendations for the property owner or manager;
iv. Identification of Direct Install Measures as a potential replacement for current equipment;
v. Building electrical service and available capacity analysis (either meter-based or electric load calculations as needed) to ensure upgrades can be supported by existing main panels with provided service capacity;
vi. Evaluation of the condition and capacity of the existing electrical systems (panels, subpanels, wiring, etc.) and recommended upgrades that may be necessary to enable the proposed electric equipment;
vii. Recommended locations for new electrical equipment, noting any observed space or structural constraints and possible remedies;
viii. Recommended configuration and locations for new central hot water storage tanks, heat pump water heaters, and distribution equipment, if applicable;
ix. Inventory of available parking spaces and existing parking site conditions (assigned and shared spaces, ADA access, garage or open lot, etc.);
x. Recommended configuration and locations of proposed electric vehicle charging ports;
xi. Description of a scope of work, including planned work and timeline, that will be executed if property opts to participate in the Program;
xii. Estimated energy, water, and GHG savings from proposed projects;
xiii. Estimated cost of work to be performed, including applicable third-party incentives and payback periods, for AUTHORITY's review.

Task 1.6 Deliverable: Electrification Plan Template

Task 1.7 Develop Feedback Form Template

In coordination with AUTHORITY and its EM&V consultant, CONULTANT will assist with drafting a Feedback Form that gives the property owner or manager, and tenants the opportunity

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to evaluate the Program including program services and processes, technical support, and the overall experience associated with the Program.

CONSULTANT will submit the Feedback Form Template to AUTHORITY for review and approval, and will revise and update as directed by AUTHORITY before use. CONSULTANT will provide the Feedback Forms to customers in either electronic or paper formats.

Task 1.7 Deliverable: Feedback Form Template

Task 1.8 Develop Program Invoice Template

CONSULTANT will develop a Program Invoice Template to meet AUTHORITY's invoicing requirements, including, but not limited to:

i. Name of company providing invoice (Association for Energy Affordability, Inc.);
ii. Invoice number;
iii. Invoice date;
iv. AEA's remit-to address for invoicing
v. Description of work performed;
vi. Invoice amount, broken down as requested by AUTHORITY according to category of work performed.

CONSULTANT will submit the Program Invoice Template to AUTHORITY for review and approval, and will revise and update the Program Invoice Template as directed by AUTHORITY before use.

Task 1.8 Deliverable: Program Invoice Template

Task 1.9 Develop Program Reporting Template

CONSULTANT will develop a Program Reporting Template to meet AUTHORITY's reporting requirements and submit to AUTHORITY for review and approval before use. The Program Report will be delivered annually. Program Reports will include program performance metrics as well as a narrative of the program implementation activities, successes and challenges, and next steps.

CONSULTANT will assist AUTHORITY in finalizing program performance metrics to include in the Program Reports. The program performance metrics, at minimum, will include:

i. Properties served via Direct Install Services including:
    a. Name of property
    b. Number of dwelling units (served and total)
    c. Number of tenants (served and total)
    d. Location in equity geographic areas (SEVI 3 or 4, Disadvantaged Communities, etc.)
    e. Scale of electrification project (partial or full electrification)
ii. Properties served via Gap Funding Grants including:
    a. Name of property and total award
    b. Number of dwelling units (served and total)
    c. Number of tenants (served and total)

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d. Location in equity geographic areas (SEVI 3 or 4, Disadvantaged Communities, etc.)
e. Scale of electrification project (partial or full electrification)

iii. Project costs including:
a. Category costs (labor, equipment, administrative, etc.)
b. Installed Direct Install Measures (quantity, cost, model)
c. Third-party incentives received (program name, total incentive, measures)
d. Cost trends (average per dwelling unit, program-wide)

iv. Project installation including:
a. Duration of major project phases (days for completion per project, average program-wide)

v. Environmental impacts including:
a. Energy impact (kWh and therms per project and program-wide)
b. Greenhouse gas emissions savings (lbs of CO_2 avoided per project and program-wide)

vi. Utility cost impacts including:
a. Bill savings (dollars saved pre- and post-installation)
b. Number of customers enrolled in E-ELEC rate (per property and total)

CONSULTANT shall track the program performance metrics in an electronic format, such as .csv and .xls file format, or customer relationship management tool such as Salesforce, that can be easily integrated with AUTHORITY's program portfolio tool.

CONSULTANT will submit the Program Reporting Template to AUTHORITY for review and approval, and will revise and update the Program Reporting Template as directed by AUTHORITY before use.

Task 1.9 Deliverable: Program Reporting Template

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Task 2: Gap Funding Grant Design and Set Up

Task 2.1 Develop Cost-Capped Incentives for Gap Funding Grant

CONSULTANT will draft a list of cost-capped incentives for projects that are seeking Gap Funding Grants for inclusion in the Program Implementation Manual. The intent of these incentives is to provide flexible funding that support all-electric construction in easy-to-understand categories.

The incentive categories, at a minimum, will include:

i. Electrification equipment;
ii. Electrical infrastructure upgrades;
iii. Remediation and safety

Each incentive category will also include, at minimum, the following criteria:

i. Description of the category (e.g., name, funding requirements, etc.)
ii. Cost cap (e.g., maximum allowable total, per unit, or building, etc.)

CONSULTANT will submit the List of cost-capped incentives to AUTHORITY for review and approval before use. CONSULTANT will revise and update the list of cost-capped incentives with new incentives proposed by CONSULTANT or AUTHORITY for AUTHORITY review and approval before use.

Task 2.1 Deliverable: List of cost-capped incentives

Task 2.2 Develop Gap Funding Grant Application

CONSULTANT will develop an application for projects seeking Gap Funding Grants. The intent of this application is for the CONSULTANT to assess how the property meets criteria for receiving funding while reducing administrative burden to the applicant. CONSULTANT will fill out these applications on the property's behalf for AUTHORITY approval. CONSULTANT will submit the Grant Funding Grant Application to AUTHORITY for review and approval, and will revise and update the Gap Funding Grant Application as directed by AUTHORITY before use.

The Gap Funding Grant Application will, at a minimum, include:

i. Applicant information (property address, number of units, etc.);
ii. Funding requested listed by cost-capped incentive category;
iii. Proposer's assessment of site opportunities for all-electric construction while reducing costs (e.g., review opportunities for energy efficiency, panel optimization, low-voltage or low-cost technologies, etc.).
iv. Funding secured for planned upgrades from other sources (e.g., community development grants, etc.)

Task 2.2 Deliverable: Gap Funding Grant Application Template

Task 2.3 Develop Gap Funding Grant Program Participation Agreement

In coordination with AUTHORITY, CONSULTANT will draft Grant Funding Grant Program Participation Agreement(s) that includes terms and conditions of the Program. The Participation Agreement is intended to be signed or acknowledged by the property owner or manager. CONSULTANT will submit the Gap Funding Grant Program Participation Agreement to AUTHORITY for review and approval, and will revise and update as directed by AUTHORITY before use.

Task 2.3 Deliverable: Gap Funding Grant Program Participation Agreement

Task 3: Marketing and Outreach

Task 3.1 Develop Property Ranking List

The Multifamily Program will target existing deed-restricted affordable multifamily properties with five or more units. CONSULTANT will provide input on the ranking criteria and develop a process to rank properties to ensure a diversity of buildings are eligible to participate in the Multifamily Program. CONSULTANT will develop a ranking list of eligible, prioritized properties to target for direct install services ("Ranking List"). CONSUTLANT will use this list

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to perform targeted outreach to properties as outlined in the Marketing and Communications Plan (Task 3.2).

Task 3.1 Deliverable: Ranking list of prioritized properties and final list of criteria used for prioritization

Task 3.2 Develop Marketing and Communications Plan

CONSULTANT will develop a marketing and communications strategy to engage and enroll properties on the Ranking List in the Program. AUTHORITY has in-house marketing and communications professionals. CONSULTANT is expected to work closely with the AUTHORITY staff to ensure alignment with existing marketing and communications practices, including but not limited to branding guidelines and writing styles.

AUTHORITY understands that engagement strategies may differ from property to property. The intent of this marketing plan is to provide a high-level approach for communicating the program services to the target audience. The marketing plan should include key messages, marketing activities and tactics, marketing materials, and method of delivery.

CONSULTANT will draft the marketing and communications plan and submit to AUTHORITY for review and approval before finalizing.

Task 3.2 Deliverable: Marketing and Communications Plan

Task 3.3 Develop Case Studies

In collaboration with AUTHORITY, CONSULTANT will facilitate interviews, photos, and other activities to produce case studies (2-4 pages each) on participating properties. The case studies are intended for public distribution and will highlight successes, challenges, costs, and best practices with transitioning to all-electric construction.

CONSULTANT will provide case studies for each participating property within 90 days of completion of upgrades. CONSULTANT will submit draft case studies to AUTHORITY for review and approval and will revise and update as directed by AUTHORITY before public distribution.

Task 3.3 Deliverable: Case Studies on Participating Properties

Task 3.4 Property owner engagement and outreach activities

CONSULTANT will market the Program to property owners or managers on the Ranking List as outlined in the Marketing and Communications Plan (Task 3.2). The Proposer will screen the property for eligibility and offer the property either Direct Install Services (Task 5) or Gap Funding Grants (Task 6).

CONSULTANT will engage targeted property owners on the Ranking List and serve as the property owner's "single point-of-contact" for accessing the Multifamily Program and third-party incentive programs such as TECH Clean California, Bay Area Regional Energy Network (BayREN), California Energy Smart Homes, and others. Although AUTHORITY intends to

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deliver the Multifamily Program at no-cost to the customer, enrolling properties in third-party incentive programs will reduce the overall cost to the Program and ensure the Multifamily Program can reach additional properties.

After engaging targeted property owners, CONSULTANT will assess whether the property is best suited for Direct Install Services or Gap Funding Grants.

Task 4: Technical Assistance

Task 4.1 Provide technical assistance to property owners

CONSULTANT will provide technical assistance to support the property owner or manager throughout the Program. The goal of this task is to be the "single point of contact" for the property on all activities related to the Program. This includes but is not limited to managing communication, program enrollment, project planning and advising, complementary program referral and layering assistance.

Task 4.2 Deliver Electrification Plan

The goal of this task is to perform the necessary activities (e.g., phone/email screenings, in-person site visits, building evaluations, technical or financial analysis, etc.) to deliver a customized Electrification Plan (Task 1.6) to the property owner or manager. The Proposer will implement these activities as detailed in the Program Implementation Manual (Task 1.3).

CONSULTANT will draft the customized Electrification Plan and submit to AUTHORITY for approval. Once approved, CONSULTANT will deliver the Electrification Plan to the property owner or manager.

Task 4.2 Deliverable: Customized Electrification Plan

Task 4.3 Apply for and receive third-party incentives

The goal of this task is to reduce project costs through enrollment in complementary multifamily incentive programs such as, but not limited to: TECH Clean California, Bay Area Regional Energy Network (BayREN), Low Income Weatherization Program, California Energy Smart Homes, and others.

CONSULTANT will apply for and maximize the total amount of (i.e., stack) third-party incentives on behalf of the property owner and/or contractor. AUTHORITY will pay for total project costs less third-party incentives.

Task 4.4 Execute Direct Install Program Participation Agreement

After delivering the Electrification Plan to the property owner or manager, CONSULTANT will provide an unsigned version of the Direct Install Program Participation Agreement (Task 1.4) for the property owner or manager to sign and enroll in direct install services. CONSULATNT will provide signed copies to AUTHORITY to issue a notice to proceed (NTP).

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Task 4.4 Deliverable: Signed Direct Install Program Participation Agreements

Task 4.5 Provide staff education on installed equipment

CONSULTANT will collaborate with AUTHORITY to develop resources, training, and education to property staff on operation and maintenance of new equipment. After installing the Direct Install measures, CONSULTANT will deliver these resources to property staff.

Task 4.5 Deliverable: Staff resources

Task 5: Direct Install Services

Task 5.1 Obtain General Contractors License and other license(s)

CONSULTANT will obtain a General Contractors License and other necessary license(s) or certification(s) to perform the Services stated in this Scope of Services. If CONSULTANT is unable to obtain the General Contractors License by the time CONSULTANT is prepared to Implement Direct Install Measures, CONSULTANT will, as an interim measure, operate in the capacity of a program implementer and will not perform work that requires a General Contractors License until such license is obtained. In such a scenario, as program implementer, CONSULTANT will be responsible for developing contractor eligibility requirements, conducting screening and/or bidding processes, and selecting contractors eligible to participate in the program; However, CONSULTANT affirms full intention and commitment to obtaining the required General Contractors License.

Task 5.1 Deliverable: General Contractor License

Task 5.2 Provide training to contractors and subcontractors

CONSULTANT will deliver training to contractors and subcontractors to ensure equipment is installed properly and program participants are satisfied, as detailed in Quality Assurance and Quality Control Plan of the Program Implementation Manual (Task 1.3). All contractors and subcontractors must hold the appropriate license(s) for any installation and work performed under this Scope of Services. All equipment must be installed in accordance with all applicable federal, state and local laws, building codes, manufacturer's specifications, and permitting requirements.

Task 5.3 Install Direct Install Measures

Upon receiving AUTHORITY's NTP, CONSULTANT will perform the necessary activities to install the Direct Install Measures in accordance with applicable federal, state and local laws, building codes, manufacturer's specifications and permitting requirements. CONSULTANT will implement a Quality Assurance and Quality Control Plan to verify each project has been installed properly and documented accurately as specified in the Program Implementation Manual (Task 1.3).

CONSULTANT will ensure all manufacturer product warranties held by CONSULTANT will be transferred to the property owner or manager upon completed installation.

Task 6: Implement Gap Funding Grants

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Task 6.1 Assist Properties with Gap Funding Grant Applications

AUTHORITY intends to grant up to $1.5 million in gap funding grants to properties with projects under design. After contacting with the property owner or manager, CONSULTANT will determine whether the property meets the AUTHORITY criteria for Gap Funding Grants. If qualified, the Proposer will:

i) develop a Gap Funding Grant Application (Task 2.2) on behalf of the property owner or manager.
ii) review the property's scope of work for opportunities to pursue all-electric construction.
iii) submit a completed Gap Funding Grant Application to AUTHORITY for approval.

Task 6.1 Deliverable: Completed Gap Funding Grant Applications

Task 6.2 Execute Gap Funding Grant Program Participation Agreement

After receiving AUTHORITY's approval, CONSULTANT will provide an unsigned version of the Program Participation Agreement (Task 2.3) for the property owner or manager to sign and receive a Gap Funding Grant. The Proposer will provide signed copies to AUTHORITY.

Task 6.2 Deliverable: Signed Gap Funding Grant Program Participation Agreement

Task 7: Tenant Education and Outreach: Electrification Equipment and E-ELEC Rate Enrollment

The goal of this task is to ensure high customer acceptance of property improvements and enrollment in AUTHORITY's E-ELEC rate. CONSULTANT shall host a minimum of the lesser of one engagement workshop per participating property or 9 engagement workshops or webinars.

CONSULTANT will engage tenants at properties receiving Direct Install Services via surveys, in-person workshops, and/or webinars. CONSULTANT will inform tenants of property improvements, provide electrification equipment education, and identify and resolve concerns. In order to facilitate greater tenant participation, CONSULTANT may provide tenants with compensation for their feedback or participation in engagement activities. CONSULTANT will recommend compensation methods and amounts for AUTHORITY approval before use.

After participating properties complete their projects, CONSULTANT will provide education (e.g., workshops, webinars, etc.) and resources to tenants on AUTHORITY's E-ELEC rate with the goal of enrolling 60% of eligible customers in the E-ELEC rate. Tenant resources should also be available in multiple languages including English, Spanish, Chinese, and Vietnamese.

Task 7 Deliverable: List of participants for each workshop and webinar

Task 8: Provide Ongoing Program Administration

Task 8.1 Provide Monthly Invoicing

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CONSULTANT will invoice AUTHORITY monthly for work performed, including all subcontractor invoices as backup documentation in accordance with the Program Invoice Template (Task 1.10) and as set forth in Exhibit "C" Compensation. Proposer will indicate if invoices are expected to be delayed or anticipated to deviate from the monthly schedule.

Task 8.1 Deliverable: Monthly Invoices

Task 8.2 Manage Prevailing Wage Compliance and Documentation

CONSULTANT will be responsible for all prevailing wage compliance, including for all subcontractors. This includes articulating to AUTHORITY what obligations exist, meeting said obligations, and providing all necessary documentation to the Department of Industrial Relations or other entities (to include any obligations that the property owner is nominally responsible for). If any materials are renewed or subcontractors changed, updated documents must be provided at that time.

Task 8.2 Deliverable: Prevailing Wage Compliance Documentation

Task 9: Evaluate Program Performance

Task 9.1 Collect Feedback from Program Participants

After program participant has completed their project, CONSULTANT will provide the Feedback Form Template (Task 1.7) to the program participant. CONSULTANT will collect and review responses from the Feedback Form and as necessary, propose modifications to the Program.

CONSULTANT will address and attempt to resolve all issues discovered through either Feedback Forms or other means of participant contact within five (5) business days of receiving feedback. CONSULTANT will document all such issues, actions taken to resolve them, and outcomes and report them to AUTHORITY. If CONSULTANT cannot resolve program-related issues to the participant's satisfaction within five (5) business days, CONSULTANT will immediately provide AUTHORITY with a detailed description of each complaint, including the program participant's name and contact information and any other information requested by AUTHORITY.

Task 9.1 Deliverable: Completed Feedback Forms

Task 9.2 Provide Program Reports

The Proposer will provide annual reports in accordance with the Program Report Template (Task 1.11). CONSULTANT will deliver the Annual Program Report within 60 days of the 12-month reporting period. Proposer will indicate if reports are expected to be delayed or anticipated to deviate from the schedule.

Task 9.2 Deliverable: Annual Program Reports

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Task 9.3 Assist EM+V Consultant with Program Evaluation

The goal of this task is to evaluate the performance of the Program. AUTHORITY currently uses a third-party consultant to provide evaluation, monitoring, and verification services for AUTHORITY programs and expects that this consultant will provide EM+V service for the Program as well. CONSULTANT is expected to provide progress reports and any additional data requested by the EM+V consultant within two weeks of request. The EM+V consultant will analyze this data and correlate it, to the extent possible, with program uptake data from across other AUTHORITY programs, to assess broader programmatic impact.

Task 9.4 Develop Final Program Report

CONSULTANT will develop a Program Final Report, which will include Program achievements, challenges, goals, lessons learned, and costs. CONSULTANT will deliver the Final Report within 30 calendar days before the end of the Program. CONSULTANT will provide AUTHORITY a draft Final Report for review and approval.

Task 9.4 Deliverable: Final Program Report

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Exhibit B
Schedule of Performance

CONSULTANT shall perform the Services so as to complete each task by the due date specified below. The time to complete each task may be increased or decreased by written agreement of the project managers for CONSULTANT and AUTHORITY so long as all work is completed within the term of the Agreement. For properties receiving Direct Install Services, CONSULTANT shall provide a detailed schedule of work within two (2) weeks of receipt of the notice to proceed (NTP).

Table B-1 – Project Deliverables and Schedule		
Task	**Deliverables**	**Timeline (start to end date, or due date)**
Finalize Contract Scope	Fully executed contract	December 13, 2023
Task 1 – Direct Install Program Design and Set Up		
1.1 Host Program Kick-off Meeting and Ongoing Program Check In-Meetings	Meeting agendas and meeting minutes	12/18/2023 (ongoing)
1.2 Design Program with Stakeholders	Stakeholder Focus Group meeting agendas, slide decks, and meeting minutes	02/01/2024 – 04/30/2024
1.3 Develop Program Implementation Manual	Program Implementation Manual	12/19/2023 – 06/30/2024
1.4 Develop Direct Install Program Participation Agreement	Direct Install Program Participation Agreement	12/19/2023 – 05/31/2024
1.5 Develop List of Direct Install Measures	List of Direct Install Measures	12/19/2023 (ongoing)
1.6 Develop Electrification Plan Template	Electrification Plan Template	12/19/2023 – 05/15/2024
1.7 Develop Feedback Form Template	Feedback Form Template	12/19/2023 – 05/15/2024
1.8 Develop Program Invoice Template	Program Invoice Template	01/01/2024 (ongoing)
1.9 Develop Program Reporting Template	Program Reporting Template	06/30/2024 (ongoing)
Task 2 – Gap Funding Grant Design and Set Up		
2.1 Develop Cost-Capped Incentives for Gap Funding Grant	List of cost-capped incentives	04/01/2024
2.2 Develop Gap Funding Grant Application	Gap Funding Grant Application Template	04/30/2024
Task 3 - Marketing and Outreach		

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3.1 Develop Property Ranking List	Ranking list of properties and final criteria used for prioritization	08/31/2024 (ongoing)
3.2 Develop Marketing and Communications Plan	Marketing and Communications Plan	08/31/2024
3.3 Develop Case Studies	Case Studies on Participating Properties	10/31/2025 (ongoing)
3.4 Property owner engagement and outreach activities		07/01/2024 (ongoing)
Task 4 – Provide Technical Assistance to Property Owners		
4.1 Provide Technical Assistance to Property Owners		07/01/2024 (ongoing)
4.2 Deliver Electrification Plan	Customized Electrification Plans	03/01/2025 (ongoing)
4.3 Apply for and receive third-party incentives		03/01/2025 (ongoing)
4.4 Execute Direct Install Program Participation Agreement	Signed Direct Install Program Participation Agreements	03/01/2025 (ongoing)
4.5 Provide staff education on installed equipment	Staff resources	03/01/2025 (ongoing)
Task 5 – Implement Direct Install Services		
5.1 Obtain General Contractor License	General Contractor License	January 1, 2025
5.2 Provide training to contractors and subcontractors		07/01/2024 (ongoing)
5.3 Install Direct Install Measures		03/01/2025 (ongoing)
Task 6 – Implement Gap Funding Grants		
6.1 Assist Properties with Gap Funding Grant Applications	Completed Gap Funding Grant Applications	07/01/2024 (ongoing)
6.2 Execute Gap Funding Grant Program Participation Agreement	Signed Gap Funding Grant Participation Agreements	08/01/2024 (ongoing)
Task 7 – Tenant Education and Outreach: Electrification Equipment and E-ELEC Rate Enrollment		
7.0 Enroll Properties in E-ELEC Rate	List of participants for each workshop or webinar	03/01/2025 (ongoing)
Task 8 – Provide Ongoing Administration		
8.1 Provide Monthly Invoicing	Monthly Invoices	Ongoing
8.2 Provide Prevailing Wage Compliance Documentation	Prevailing Wage Compliance Documentation	Ongoing
Task 9 – Evaluate Program Performance		
9.1 Collect Feedback from Program Participants	Completed Feedback Forms	Ongoing
9.2 Provide Program Reports	Annual Program Reports	Within 60 days of 12-month reporting period

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9.3 Assist EM+V Consultant with Program Evaluation		Ongoing, as requested
9.4 Develop Final Program Report	Final Program Report	Within 60 days before end of Program term

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Exhibit C
Compensation

AUTHORITY shall compensate CONSULTANT for professional services in accordance with the terms and conditions of this Agreement, and as set forth in this Exhibit C.

The compensation to be paid to CONSULTANT under this Agreement for all services described in Exhibit "A" shall not exceed a total of eleven million dollars ($11,000,000) for the Term of the Agreement and as set forth in Table C-1. Any work performed or expenses incurred for which payment would result in a total exceeding the maximum amount of compensation set forth herein shall be at no cost to AUTHORITY unless previously approved in writing by AUTHORITY.

AUTHORITY will compensate CONSULTANT based on the hourly rates as set forth in Table C-2 for non-prevailing wage positions and Table C-3 for prevailing wage positions and the materials and other direct costs schedule as set forth in Table C-4, up to the NTE amounts listed in Table C-1. CONSULTANT understands that CONSULTANT's receipt of compensation for under this Agreement will depend on the number of customers who opt to participate in the Multifamily Program by executing Program Participation Agreements, and CONSULTANT's satisfactory completion of invoicing activities as described in Exhibit "A" Scope of Work, Task 8.1. AUTHORITY makes no guarantee, express or implied, regarding the number of customers who will participate in programs covered by this Agreement.

AUTHORITY's Project Manager may approve in writing the transfer of budget amounts between any of the tasks and program years listed below provided the total compensation for Services, including Materials and Other Direct Costs (Table C-4), do not exceed eleven million dollars ($11,000,000) for the Term of the Agreement, as set forth in Section 3 of this Agreement. CONSULTANT agrees to complete all Services within the amounts set forth in Section 3.

Updates to Table C-2 and Table C-3 Hourly Rates

In the event that CONSULTANT anticipates the need to add additional Position Titles to Tables C-2 or C-3, or in the event that CONSULTANT anticipates the need to increase the rates by more than 10% in Table C-2 or Table C-3, such as for increases in published prevailing wages above Table C-3 assumptions or because procured installation subcontractors have hourly rates that exceed minimum prevailing wages, CONSULTANT shall promptly notify AUTHORITY, in writing. CONSULTANT shall provide a detailed breakdown of the estimated costs, including all relevant supporting documentation. Upon receipt of this notification, AUTHORITY shall review the provided information within a reasonable timeframe, not to exceed 14 days. The AUTHORITY may, at its discretion, approve or deny the uncategorized titles or higher-than-listed rates. If AUTHORITY approves the new titles or higher rates, CONSULTANT shall proceed with the implementation of Direct Install Measures as specified. If AUTHORITY denies the higher costs, CONSULTANT shall make necessary adjustments to ensure costs remain within the program budget.

Thirty days before the start of each calendar year, CONSULTANT shall provide to AUTHORITY up-to-date titles and rates listed in Table C-2 and C-3 of this Agreement for the subsequent year.

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When agreed upon by both parties, an updated Table C-2 and C-3 will be incorporated as an amendment to this Agreement.

Updates to Table C-4 Materials and Other Direct Costs

Thirty days before the start of each calendar year, CONSULTANT shall provide to AUTHORITY up-to-date cost ranges for materials and other direct costs listed in Table C-4 of this Agreement for the subsequent year. When agreed upon by both parties, an updated Table C-4 will be incorporated as an amendment to this Agreement.

In the event that CONSULTANT anticipates that cost exceeds the predefined average cost range listed in Table C-4 by more than 10%, or the Direct Install Measure is not listed in Table C-4 of the Agreement, CONSULTANT shall promptly notify AUTHORITY, in writing. CONSULTANT shall provide a detailed breakdown of the estimated costs, including all relevant supporting documentation. Upon receipt of this notification, AUTHORITY shall review the provided information within a reasonable timeframe, not to exceed 14 days. The AUTHORITY may, at its discretion, approve or deny the uncategorized or higher-than-average costs. If AUTHORITY approves the higher costs, CONSULTANT shall proceed with the implementation of Direct Install Measures as specified. If AUTHORITY denies the higher costs, CONSULTANT shall make necessary adjustments to ensure costs remain within the program budget.

Invoices

Monthly Invoicing: In order to request payment, CONSULTANT shall submit monthly invoices to the AUTHORITY describing the services performed and the applicable charges (including a summary of the work performed during that period, personnel who performed the services, hours worked, task(s) for which work was performed). In situations where CONSULTANT requests fund advances to facilitate expedient payment to suppliers and installation contractors for Task 5 "Direct Install Services," CONSULTANT and AUTHORITY will develop a working capital advance invoice structure to be memorialized by amendment to the Agreement. AUTHORITY shall pay all undisputed invoice amounts within thirty (30) calendar days after receipt up to the maximum compensation set forth herein. AUTHORITY does not pay interest on past due amounts.

Reimbursable Expenses

Administrative, overhead, secretarial time or overtime, word processing, photocopying, in house printing, insurance and other ordinary business expenses are included within the scope of payment for services and are not reimbursable expenses. Travel expenses must be authorized in advance in writing by AUTHORITY.

Additional Services

CONSULTANT shall provide additional services outside of the services identified in Exhibit A only by advance written authorization from AUTHORITY Representative prior to commencement of any additional services. AUTHORITY shall submit, at the Authority Representative's request, a detailed written proposal including a description of the scope of additional services, schedule, and proposed maximum compensation. Any changes mutually agreed upon by the Parties, and

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any increase or decrease in compensation, shall be incorporated by written amendments to this Agreement.

Table C-1 – Total Compensation NTE Amounts						
	Year 1 NTE	**Year 2 NTE**	**Year 3 NTE**	**Year 4 NTE**	**Year 5 NTE**	**Total Task(s) NTE**
Program Design and Set Up (Tasks 1 & 2)	$187,500	$187,500	$0	$0	$0	$375,000
Program Admin (Tasks 8 & 9)	$125,000	$125,000	$125,000	$125,000	$125,000	$625,000
Marketing & Outreach (Task 3)	$112,500	$112,500	$75,000	$56,250	$18,750	$375,000
Technical Assistance (Task 4)	$51,250	$76,875	$128,125	$128,125	$128,125	$512,500
Direct Install Services (Task 5)[1]	$1,772,500	$1,772,500	$1,772,500	$1,772,500	$1,772,500	$8,862,500
Gap Funding Grants (Task 6)[2]	$25,000	$25,000	$25,000	$25,000	$25,000	$125,000
Tenant Education and Outreach (Task 7)	$6,250	$31,250	$37,500	$37,500	$12,500	$125,000
Annual NTE[3]	**$2,268,750**	**$2,325,000**	**$2,168,750**	**$2,150,000**	**$2,087,500**	**$11,000,000**

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TABLE C-1 NOTES:
1 – 15% Contingency included
2 – Includes administration budget only.
3 – Annual NTE Amounts provided here are estimations. Actual costs for Direct Install Services, Gap Funding Grants, and other Tasks are subject to change based on realized project cost and timelines and may be moved between Program Years as needed.

Table C-2 - Hourly Rate Schedule for Non-Prevailing Wage Positions					
Title	**Year 1 Hourly rate**	**Year 2 Hourly rate**	**Year 3 Hourly rate**	**Year 4 Hourly rate**	**Year 5 Hourly rate**
AEA- Senior Director	$288.04	$296.68	$305.58	$314.75	$324.19
AEA- Director	$201.57	$209.63	$218.02	$226.74	$235.81
AEA - Associate Director	$195.50	$203.32	$211.45	$219.91	$228.71
AEA - Senior Manager	$169.47	$177.94	$186.84	$196.18	$205.99
AEA - Manager	$158.03	$167.51	$177.56	$188.21	$199.51
AEA - Construction Manager	$158.03	$167.51	$177.56	$188.21	$199.51
AEA - Site Supervisor	$169.47	$177.94	$186.84	$196.18	$205.99
AEA - Senior Associate	$145.21	$153.92	$163.16	$172.95	$183.33
AEA - Associate	$128.14	$135.83	$143.98	$152.62	$161.77
AEA - Coordinator	$105.59	$111.93	$118.64	$125.76	$133.31
Ecology Action - VP & RME	$375.96	$387.24	$398.86	$410.82	$423.15
Ecology Action - Principal	$344.83	$355.17	$365.83	$376.81	$388.11
Ecology Action - Sr. Vice President	$300.24	$309.25	$318.52	$328.08	$337.92
Ecology Action - Vice President	$239.78	$246.97	$254.38	$262.01	$269.87
Ecology Action - Senior Engineer	$221.15	$227.78	$234.62	$241.66	$248.91
Ecology Action - Marketing Director 1	$198.05	$203.99	$210.11	$216.41	$222.91
Ecology Action - Marketing Director 2	$180.17	$185.58	$191.14	$196.88	$202.78
Ecology Action - Director 3	$276.68	$284.98	$293.53	$302.34	$311.41
Ecology Action - Director 2	$172.24	$177.41	$182.73	$188.21	$193.86
Ecology Action - Director 1	$150.24	$154.75	$159.39	$164.17	$169.10
Ecology Action - Program Manager 3	$150.24	$156.25	$162.50	$169.00	$175.76
Ecology Action - Program Manager 2	$124.28	$129.25	$134.42	$139.80	$145.39
Ecology Action - Program Manager 1	$93.15	$96.88	$100.75	$104.78	$108.97
Ecology Action - Project Manager 3	$172.84	$179.75	$186.94	$194.42	$202.20
Ecology Action - Project Manager 2	$141.33	$146.98	$152.86	$158.98	$165.34
Ecology Action - Project Manager 1	$110.00	$114.40	$118.98	$123.74	$128.68
Ecology Action - Energy Analyst 3	$192.30	$201.92	$212.01	$222.61	$233.74
Ecology Action - Energy Analyst 2	$168.68	$177.11	$185.97	$195.27	$205.03

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Ecology Action - Energy Analyst 1	$113.58	$119.26	$125.22	$131.48	$138.06
Ecology Action - Associate 3	$133.89	$141.92	$150.44	$159.47	$169.03
Ecology Action - Associate 2	$112.51	$119.26	$126.42	$134.00	$142.04
Ecology Action - Associate 1	$94.55	$100.22	$106.24	$112.61	$119.37
Ecology Action - Project Assistant 2	$100.00	$106.00	$112.36	$119.10	$126.25
Ecology Action - Project Assistant 1	$90.00	$95.40	$101.12	$107.19	$113.62
RMI - Managing Director	$419.00	$435.00	$451.00	$468.00	$486.00
RMI - Sr Principle	$275.00	$286.00	$298.00	$310.00	$323.00
RMI - Principle/Director	$243.00	$253.00	$264.00	$275.00	$287.00
RMI - Manager	$162.00	$170.00	$178.00	$187.00	$196.00
RMI - Sr Associate/Lead/Analyst	$132.00	$138.00	$146.00	$153.00	$162.00
RMI - Program Marketer	$130.00	$137.00	$144.00	$152.00	$160.00
RMI - Program Operations Manager	$127.00	$134.00	$141.00	$149.00	$157.00
RMI - Associate / Specialist	$125.00	$131.00	$139.00	$146.00	$154.00
RMI - Program Operations Lead	$121.00	$128.00	$134.00	$142.00	$150.00
RMI - Program Assistant / Executive Assistant	$112.00	$118.00	$125.00	$132.00	$140.00
Atium Engineering - Principal	$200.00	$220.00	$240.00	$260.00	$280.00
Acterra - Coalitions and Projects Senior Manager	$56.88	$58.70	$60.58	$62.52	$64.52
Acterra - Equity, Access and Partnerships Senior Manager	$63.26	$65.28	$67.37	$69.53	$71.75
Acterra - Digital Media Manager	$54.11	$55.84	$57.63	$59.47	$61.38
Acterra - Beneficial Electrification and Education Fellow	$22.89	$23.62	$24.38	$25.16	$25.96
Acterra - Beneficial Electrification Manager	$51.13	$52.77	$54.45	$56.20	$58.00
Acterra - Community Engagement Associate	$45.79	$47.26	$48.77	$50.33	$51.94
Acterra - Impact Analyst	$65.63	$67.73	$69.90	$72.13	$74.44
Acterra - Executive Director	$135.41	$139.74	$144.21	$148.83	$153.59
Acterra - Chief of Staff	$71.90	$74.20	$76.58	$79.03	$81.55
Acterra - Full Charge Bookkeeper	$51.13	$52.77	$54.45	$56.20	$58.00

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Table C-3 - Hourly Rate Schedule for Prevailing Wage Positions					
Title	**Year 1 Hourly rate**	**Year 2 Hourly rate**	**Year 3 Hourly rate**	**Year 4 Hourly rate**	**Year 5 Hourly rate**
Residential Electrician (Inside Wireman)	$69.73	$72.17	$74.70	$77.31	$80.02
Residential Plumber	$53.90	$55.79	$57.74	$59.76	$61.85
Residential Roofer	$76.48	$79.16	$81.93	$84.80	$87.77
HVAC: Residential Sheet Metal Worker	$95.62	$98.97	$102.43	$106.02	$109.73
HVAC: Residential Sheet Metal Worker (Special Shift)	$101.76	$105.32	$109.01	$112.82	$116.77
HVAC: Residential Sheet Metal Worker (Second Shift)	$100.74	$104.26	$107.91	$111.69	$115.60
HVAC: Residential Sheet Metal Worker (Third Shift)	$103.30	$106.92	$110.66	$114.53	$118.54
HVAC: Residential A/C Professional	$70.51	$72.98	$75.53	$78.18	$80.91
HVAC: Residential A/C Professional (Special Shift)	$75.46	$78.10	$80.83	$83.66	$86.59
HVAC: Residential A/C Professional (Second Shift)	$74.64	$77.25	$79.95	$82.75	$85.65
HVAC: Residential A/C Professional (Third Shift)	$76.69	$79.38	$82.15	$85.03	$88.01
HVAC: Service Mechanic	$75.11	$77.74	$80.46	$83.27	$86.19
HVAC: Service Mechanic (Special Shift)	$79.88	$82.68	$85.57	$88.57	$91.67
HVAC: Service Mechanic (Second Shift)	$79.09	$81.86	$84.72	$87.69	$90.76
HVAC: Service Mechanic (third Shift)	$81.08	$83.92	$86.86	$89.90	$93.04
Residential Carpenter	$97.91	$101.34	$104.88	$108.56	$112.36

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TABLE C-3 NOTES:

1-All Prevailing Wage rates fixed overhead costs for Health & Welfare, Pension, Vacation/Dues, Training, and Other per DIR, plus 10% markup.

2- Assumes 3.5% annual increase for prevailing wage rate increases.

3- Assumes most projects will be low-rise residential, hence using residential classification.

Table C-4 - Materials and Other Direct Costs Schedule		
Direct Install Measure	**Description**	**Year 1 Cost Range**
DHW: Unitary Heat Pumps Water Heater	50 to 80 gallon tank sizes. WiFi-enabled. Prices include 12-year manufacturer's product warranty. No materials or subcontractor labor markup.	$1,500 - $3,000
DHW: Central Heat Pumps Water Heater	Based on variable capacity CO2 refrigerant based CHPWH system cost estimates. No materials or subcontractor labor markup.	$2,000 - $4,000 per apartment
DHW: Commercial Pool Heat Pump Water Heater	No materials or subcontractor labor markup	$2,000-$4,000
HVAC: Unitary Mini-Split Heat Pump	No materials or subcontractor labor markup	$3,000-$6,000
HVAC: Unitary Packaged Terminal Heat pump	No materials or subcontractor labor markup	$2,000-$4,000
HVAC: Unitary Packaged Heat Pump	No materials or subcontractor labor markup	$2,000-$4,000
Laundry: Heat Pump Dryer	No materials or subcontractor labor markup	$1,000-$2,000
Cooking: Induction Range	Cost range includes BASIC and ADVANCED. Advanced includes integrated battery storage, which brings a significant cost premium, but in some cases may reduce overall costs if it eliminates the need for electrical infrastructure upgrades. No materials or subcontractor labor markup	$1,000-$6,000
Building Infrastructure: Add circuits for a new electric appliance	No materials or subcontractor labor markup	$500-$2,000
Building Infrastructure: Upgrade Subpanels	Subpanel cost range includes BASIC and ADVANCED. Advanced includes smart panel or smart breakers. No materials or subcontractor labor markup	$1,000-$7,000
Building Infrastructure: Replace disconnects at meter bank	No materials or subcontractor labor markup	$1,000-$3,000
Building Infrastructure: Upsize feeder cable	No materials or subcontractor labor markup	$1,000-$10,000
Utility Infrastructure: Service line disconnect	No materials or subcontractor labor markup	$500-$5,000
Utility Infrastructure: Overhead service connection	No materials or subcontractor labor markup	$3,000-$10,000
Utility Infrastructure: Underground service connection	No materials or subcontractor labor markup	$10,000-$50,000
Utility Infrastructure: Pole-mount transformer	No materials or subcontractor labor markup	$3,000-$5,000
Utility Infrastructure: Pad-mount transformer	No materials or subcontractor labor markup	$10,000-$30,000
EV Charging Infrastructure: Level 1 EV charging port or outlet[3]	No materials or subcontractor labor markup	$300-$400
EV Charging Infrastructure: Level 2 EV charging port or outlet[3]	No materials or subcontractor labor markup	$700-$2,000

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Tenant Engagement: Workshop (90Min)	Virtual or in-person workshop	$7,000 - $10,000
Tenant Engagement: 1:1 Consultation	Hourly rate English and non-English consultation with Acterra staff	$300/hr - $400/hr

TABLE C-4 NOTES:
1 - Costs do not include potential bulk procurement discounts as those will need to be negotiated with manufacturers/vendors based on actual quantities.
2 - As the General Contractor, AEA will not be charging any materials or subcontractor labor markup on anything.
3 - These costs do not reflect the cost of pedestals, cellular networking equipment or modems, networking fees, shipping and freight charges and taxes.

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Exhibit D
Insurance Requirements and Proof of Insurance

Consultant shall maintain the following minimum insurance coverage:

A. **COVERAGE**:

(1) **Workers' Compensation**:
Statutory coverage as required by the State of California.

(2) **Liability**:
Commercial general liability coverage with minimum limits of $3,000,000 per occurrence and $5,000,000 aggregate for bodily injury and property damage. ISO occurrence Form CG 0001 or equivalent is required.

(3) **Automotive**:
Comprehensive automotive liability coverage with minimum limits of $1,000,000 per accident for bodily injury and property damage. ISO Form CA 0001 or equivalent is required.

(4) **Professional Liability**
Professional liability insurance which includes coverage for the professional acts, errors and omissions of Consultant in the amount of at least $1,000,000.

(5) **Privacy and Cybersecurity Liability**
Privacy and cybersecurity liability (including costs arising from data destruction, hacking or intentional breaches, crisis management activity related to data breaches, and legal claims for security breach, privacy violations, and notification costs of at least $5,000,000 US per occurrence.
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Exhibit E
Confidentiality and Data Security Requirements

Subject to the terms and conditions of the Agreement, current proprietary and confidential information of Authority regarding customers of Authority ("Authority Customers") and/or other confidential information (collectively "Confidential Information") may be disclosed to Consultant from time to time in connection herewith solely for the purposes set forth in the Agreement. Such disclosure is subject to the following legal continuing representations and warranties by Consultant:

1. The Confidential Information disclosed to Consultant in connection herewith may include, without limitation, the following information about Authority Customers: (a) names; (b) addresses; (c) telephone numbers and email addresses; (d) service agreement numbers and account numbers; (e) meter and other identification numbers; (f) Authority-designated account numbers; (g) electricity and gas usage (including monthly usage, monthly maximum demand, electrical or gas consumption, HP load, and other data detailing electricity or gas needs and patterns of usage); (h) billing information (including rate schedule, baseline zone, CARE participation, end use code (heat source) service voltage, medical baseline, meter cycle, bill cycle, balanced payment plan and other plans); (i) payment / deposit status; (j) number of units; and (k) other similar information specific to Authority Customers individually or in the aggregate. Confidential Information shall also include specifically any copies, drafts, revisions, analyses, summaries, extracts, memoranda, reports and other materials prepared by Consultant or its representatives that are derived from or based on Confidential Information disclosed by Authority, regardless of the form of media in which it is prepared, recorded or retained.

2. Except for electric and gas usage information provided to Consultant pursuant to this Agreement, Confidential Information does not include information that Consultant proves (a) was properly in the possession of Consultant at the time of disclosure; (b) is or becomes publicly known through no fault of Consultant, its employees or representatives; or (c) was independently developed by Consultant, its employees or representatives without access to any Confidential Information.

3. From the Effective Date, no portion of the Confidential Information may be disclosed, disseminated or appropriated by Consultant, or used for any purpose other than the purposes set forth in the Agreement.

4. Consultant shall, at all times and in perpetuity, keep the Confidential Information in the strictest confidence and shall take all reasonable measures to prevent unauthorized or improper disclosure or use of Confidential Information. Consultant shall implement and maintain reasonable security procedures and practices appropriate to the nature of the information, to protect the personal information from unauthorized access, destruction, use, modification, or disclosure and prohibits the use of the data for purposes not set forth in the Agreement. Specifically, Consultant shall restrict access to Confidential Information, and to materials prepared in connection therewith, to those employees or representatives of Consultant who have a "need to know" such Confidential Information in the course of their duties with respect to the Consultant program and who agree to be bound by the nondisclosure and confidentiality obligations of this Agreement. Prior to disclosing any

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Confidential Information to its employees or representatives, Consultant shall require such employees or representatives to whom Confidential Information is to be disclosed to review this Agreement and to agree to be bound by the terms of this Agreement. Consultant shall not disclose Confidential Information or otherwise make it available, in any form or manner, to any other person or entity that is not Consultant's employee or representative (a "Third Party"), except where that Third Party has separately entered into a nondisclosure agreement with Authority. Without limiting Consultant's obligation of confidentiality as further described herein, Consultant shall be responsible for establishing, maintaining, and providing a written description to Authority of, a data privacy and information security program, including physical, technical, administrative, and organizational safeguards, that comply with or are substantial similar to the security controls identified in the current version of NIST SP800-53, and that is designed to: (a) ensure the security and confidentiality of the Authority's Data; (b) protect against any anticipated threats or hazards to the security or integrity of the Data; (c) protect against unauthorized disclosure, access to, or use of the Data; (d) ensure the proper disposal of Data; and, (e) ensure that all employees, agents, and subcontractors of Consultant, if any, comply with all of the foregoing. In no case shall the safeguards of Consultant's data privacy and information security program used to protect Data be less stringent than the safeguards used by Consultant for its own data. If the services include handling credit card information, then the Consultant shall comply at all times with all applicable Payment Card Industry Data Security Standards (PCI-DSS). Consultant agrees and warrants that it is responsible for the security of "cardholder data" that Consultant possesses, stores, processes or transmits on behalf of the Authority, and for any impact on the security of Authority's cardholder data environment adversely affected by any failure of Company to maintain compliance with provisions of the PCI-DSS applicable to the services. No less than annually, Consultant shall conduct a comprehensive independent third-party audit of its data privacy and information security program and provide such audit findings to Authority. The required audit shall be a SAS-70 (or successor standard) compliant audit, and Consultant shall provide the audit findings in the form of an SAS-70 Type II report.

5. Notwithstanding the above, Consultant may disclose Confidential Information to the extent required by an order, subpoena, or lawful process requiring the disclosure of such Confidential Information issued by a court or other governmental authority of competent jurisdiction, provided that Consultant notifies Authority immediately upon receipt thereof to allow Authority to seek protective treatment for such Confidential Information.

6. In the event of any act, error or omission, negligence, misconduct, or breach that permits any unauthorized access to, or that compromises or is suspected to compromise the security, confidentiality, or integrity of the Authority's Data or the physical, technical, administrative, or organizational safeguards put in place by Consultant that relate to the protection of the security, confidentiality, or integrity of the Data, Consultant shall, as applicable: (a) notify Authority as soon as practicable but no later than twenty-four (24) hours of becoming aware of such occurrence; (b) cooperate with Authority in investigating the occurrence, including making available all relevant records, logs, files, data reporting, and other materials required to comply with applicable law or as otherwise required by Authority; (c) in the case of Confidential Information, at Authority's sole election, (i) notify the affected individuals who comprise the Confidential Information as soon as practicable but no later than is required to

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comply with applicable law including, but not limited to, the provisions of California Civil Code Section 1798.82, or, in the absence of any legally required notification period, within five (5) calendar days of the occurrence; or, (ii) reimburse Authority for any costs in notifying the affected individuals; (d) in the case of Confidential Information, provide third-party credit and identity monitoring services to each of the affected individuals who comprise the Confidential Information for the period required to comply with applicable law, or, in the absence of any legally required monitoring services, for no less than twelve (12) months following the date of notification to such individuals; (e) perform or take any other actions required to comply with applicable law as a result of the occurrence; (f) without limiting Consultant's obligations of indemnification as further described in this Agreement, indemnify, defend, and hold harmless Authority for any and all Claims (as defined herein), including reasonable attorneys' fees, costs, and expenses incidental thereto, which may be suffered by, accrued against, charged to, or recoverable from Authority in connection with the occurrence; (g) be responsible for recreating lost Data in the manner and on the schedule set by Authority without charge to Authority; (h) provide to Authority a detailed plan within ten (10) calendar days of the occurrence describing the measures Consultant will undertake to prevent a future occurrence and (i) upon conclusion of the occurrence, or at Authority's request, provide to Authority a comprehensive summary of the occurrence, including reason for occurrence, details of occurrence, how occurrence was addressed and any other information required by Authority, which shall be executed by Consultant and may be relied upon by Authority as a true and accurate account of the occurrence. Notification to affected individuals, as described above, shall comply with applicable law, be written in plain language, and contain, at a minimum: name and contact information of Consultant's representative; a description of the nature of the loss; a list of the types of data involved; the known or approximate date of the loss; how such loss may affect the affected individual; what steps Consultant has taken to protect the affected individual; what steps the affected individual can take to protect himself or herself; contact information for major credit card reporting agencies; and, information regarding the credit and identity monitoring services to be provided by Consultant. This Section shall survive the termination of this Agreement.

7. It shall be considered a material breach of this Agreement if Consultant engages in a pattern or practice of accessing, storing, using, or disclosing the Confidential Information in violation of the contractual obligations described herein. Consultant understands that if Authority finds that Consultant is engaged in a pattern or practice of accessing, storing, using, or disclosing Confidential Information in violation of this Agreement Authority shall promptly cease all disclosures of Confidential Information to Consultant. Consultant further understands that if Authority receives a customer complaint about Consultant's misuse of data or other violation of the Disclosure Provisions, Authority shall promptly cease disclosing that customer's information to Consultant and shall notify the California Public Utilities Commission of the complaint.

8. Consultant shall be liable for the actions of, or any disclosure or use by, its employees or representatives contrary to this Agreement; however, such liability shall not limit or prevent any actions by Authority directly against such employees or representatives for improper disclosure and/or use. In no event shall Consultant or its employees or representatives take any actions related to Confidential Information that are inconsistent with holding

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Confidential Information in strict confidence. Consultant shall immediately notify Authority in writing if it becomes aware of the possibility of any misuse or misappropriation of the Confidential Information by Consultant or any of its employees or representatives. However, nothing in this Agreement shall obligate the Authority to monitor or enforce the Consultant's compliance with the terms of this Agreement.

9. Consultant shall comply with the consumer protections concerning subsequent disclosure and use set forth in Attachment B to California Public Utilities Commission (CPUC) Decision No. 12-08-045.

10. In addition to any other requirements set forth in the Agreement, within ten (10) business days of receipt of Authority's written request, and at Authority's option, Consultant will either return to Authority all tangible Confidential Information, including but not limited to all electronic files, documentation, notes, plans, drawings, and copies thereof, or will provide Authority with written certification that all such tangible Confidential Information of Authority has been destroyed.

11. Consultant acknowledges that disclosure or misappropriation of any Confidential Information could cause irreparable harm to Authority and/or Authority Customers, the amount of which may be difficult to assess. Accordingly, Consultant hereby confirms that the Authority shall be entitled to apply to a court of competent jurisdiction or the California Public Utilities Commission for an injunction, specific performance or such other relief (without posting bond) as may be appropriate in the event of improper disclosure or misuse of its Confidential Information by Consultant or its employees or representatives. Such right shall, however, be construed to be in addition to any other remedies available to the Authority, in law or equity.

12. In addition to all other remedies, Consultant shall indemnify and hold harmless Authority, its officers, employees, or agents from and against and claims, actions, suits, liabilities, damages, losses, expenses and costs (including reasonable attorneys' fees, costs and disbursements) attributable to actions or non-actions of Consultant and/or its employees and/or its representatives in connection with the use or disclosure of Confidential Information.

13. When Consultant fully performs the purposes set forth in the Agreement, or if at any time Consultant ceases performance or Authority requires Consultant cease performance of the purposes set forth in the Agreement, Consultant shall promptly return or destroy (with written notice to Authority itemizing the materials destroyed) all Confidential Information then in its possession at the direction of Authority. Notwithstanding the foregoing, the nondisclosure obligations of this Agreement shall survive any termination of this Agreement.

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SILICON VALLEY CLEAN ENERGY

Staff Report – Item 6

Item 6:	**2024 SVCE Board Elections Information**
From:	Girish Balachandran, CEO
Prepared by:	Andrea Pizano, Sr. Executive Assistant and Board Clerk
Date:	12/13/2023

RECOMMENDATION

Staff recommends the Board of Directors receive the process and timeline for SVCE's 2024 Chair, Vice Chair, and Committee member appointments.

EXECUTIVE COMMITTEE RECOMMENDATION

The Executive Committee received a presentation on November 27, 2023 on the proposed process and timeline; the committee was supportive and did not have any requested changes.

BACKGROUND

At the October 24, 2018 meeting, the Board approved a timeline to appoint SVCE's Chair, Vice Chair and Executive Committee members in January, with remaining committees assigned at the February Board of Directors meeting. SVCE's Operating Rules and Regulations were then amended in November 2018 to reflect the timing of selections.

SVCE has been using a selection process for the positions of Chair, Vice Chair, and committees which includes the Board Clerk requesting letters of interest for the positions of Chair and Vice Chair prior to the board meeting to be included in the agenda packet and requesting board members inform the Board Clerk of their interest in serving on one or more of SVCE's committees. The information is then compiled and presented at the respective board meeting for approval.

The roles of Chair, Vice Chair, and the Executive Committee are scheduled to be selected at the January 10, 2024 meeting, with remaining committee assignments made at the February 14, 2024 meeting.

ANALYSIS & DISCUSSION

Using a similar process followed in previous years, the Board Clerk will send information to the Board of Directors following the December board meeting with a call for letters of interest for the positions of Chair and Vice Chair; letters of interest received for these positions will be included in the January Board of Directors meeting agenda packet. Directors interested in serving on the Executive Committee will also be asked to notify the Board Clerk during this time and names will be included in the staff report for the January board meeting. Nominations will also be accepted from the floor for Chair, Vice Chair and Executive Committee membership.

Following the January board meeting, the Board Clerk will distribute information to board members to indicate interest in SVCE's other committees (Finance and Administration Committee, Audit Committee, and the 2024 Legislative Ad Hoc Committee). The information will be collected prior to the February board meeting, and staff will include the names of interested directors for each committee in the February board meeting staff report. Requests to join committees will also be considered from the floor at the meeting.

Agenda Item: 6 **Agenda Date: 12/13/2023**

STRATEGIC PLAN
Appointing SVCE's representatives supports our mission and goals of the Strategic Plan.

ALTERNATIVE
Staff is open to suggestions from the Board of Directors on the process for Chair/Vice Chair and committee selections.

FISCAL IMPACT
There would be no fiscal impact as a result of making appointments.

ATTACHMENTS
1. 2024 Proposed SVCE Board Elections Timeline
2. 2023 Committee Membership Recap

2024 SVCE Board Elections Timeline

December 13, 2023: Staff presents item at the Board meeting outlining process for 2024 elections

December 15, 2023: Board Clerk will send a request for letters/indications of interest for the Chair/Vice Chair positions as well as interest from members looking to serve on the Executive Committee for 2024

January 3, 2024: Letters of interest for Chair/Vice Chair and expression of interest for Executive Committee membership responses due to Board Clerk

January 10, 2024: Chair, Vice Chair, and Executive Committee selections made at the Board of Directors meeting

January 11, 2024: Board Clerk will distribute information to Directors with a request to indicate interest in serving/continuing to serve on remaining committees

February 2, 2024: Interests due to Board Clerk

February 14, 2024: SVCE Committee assignments made at the Board of Directors meeting

SILICON VALLEY CLEAN ENERGY

2023 SVCE Committee Membership Recap

1. Executive Committee

Description:
Provide input and support on operational matters;
Gives feedback on staff items and recommendations to the Board of Directors

Membership:
Up to six primary board members;
Typically includes the Chair and Vice Chair of the Board

Meeting Frequency:
Monthly

	2023 Executive Committee Roster	Member Agency	Notes
1.	Tina Walia	Saratoga	Chair of 2023
2.	Bryan Mekechuk	Monte Sereno	Vice Chair of 2023
3.	George Tyson	Los Altos Hills	
4.	Rob Rennie	Los Gatos	
5.	Yvonne Martinez Beltran	Morgan Hill	
6.	Larry Klein	Sunnyvale	

2. Finance & Administration Committee

Description:
Works with SVCE staff on items related to financial and administrative issues that impact the agency.

Membership:
No fewer than three members and no greater than six members;
Can be Board members, Alternate Board members, or a Board appointed member agency staff member.
No alternate directors may attend a committee meeting on behalf of an absent primary appointed director. No more than one Committee member shall represent a particular member agency.

Meeting Frequency:
Quarterly and as-needed

	2023 Finance and Administration Committee Roster	Member Agency	Notes
1.	Hung Wei	Cupertino	Chair of 2023
2.	Sally Meadows	Los Altos	Vice Chair of 2023
3.	Elliot Scozzola	Campbell	
4.	Margaret Abe-Koga	Mountain View	
5.	Tina Walia	Saratoga	

SILICON VALLEY CLEAN ENERGY

2023 SVCE Committee Membership Recap

3. Audit Committee

Description:

Works with SVCE staff on the initiation and receiving of the annual audit

Membership:

No fewer than three members and no greater than six members;
Can be Board members, Alternate Board members, or a Board appointed member agency staff member.
No alternate directors may attend a committee meeting on behalf of an absent primary appointed director. No more than one Committee member shall represent a particular member agency.

Meeting Frequency:

Twice yearly and as needed

	2023 Audit Committee Roster	Member Agency	Notes
1.	Bryan Mekechuk	Monte Sereno	Chair of 2023
2.	Sheila Mohan	Cupertino	Vice Chair of 2023
3.	Sergio Lopez	Campbell	
4.	Murali Srinivasan	Sunnyvale	
5.	Harjot Sangha	Gilroy	City of Gilroy Finance Director – Nominated by Dir. Hilton

SILICON VALLEY CLEAN ENERGY

Silicon Valley Clean Energy
Board of Directors Meeting

December 13, 2023

Appendix A

Power Resource Contracts Executed by CEO

WSPP RESOURCE ADEQUACY CONFIRMATION LETTER BETWEEN SILICON VALLEY CLEAN ENERGY AUTHORITY AND HIGH DESERT POWER PROJECT, LLC

This confirmation letter ("Confirmation") confirms the transaction between **SILICON VALLEY CLEAN ENERGY AUTHORITY, a California joint powers authority** ("Seller"), and **HIGH DESERT POWER PROJECT, LLC**, a California limited liability company ("Buyer"), each individually a "Party" and together the "Parties", dated as of October 16, 2023 (the "Confirmation Effective Date"), in which Seller agrees to sell and deliver and Buyer agrees to purchase and receive the right to the Product, as such term is defined in Article 3 of this Confirmation (the "Transaction"). This Transaction is governed by the WSPP Agreement effective as of August 12, 2021 (the "WSPP Agreement"). The WSPP Agreement and this Confirmation, including any applicable appendices, exhibits or amendments thereto, shall be collectively referred to herein as the "Agreement" and shall constitute a single agreement between the Parties with respect to the Transaction. Capitalized terms not otherwise defined in this Confirmation or the WSPP Agreement are defined in the Tariff (as defined herein).

1. DEFINITIONS

1.1 "Alternate Capacity" means any replacement Product which Seller has elected to provide to Buyer in accordance with the terms of Section 4.5.

1.2 "Annual Supply Plan" has the meaning set forth in the Tariff.

1.3 "Applicable Laws" means any law, rule, regulation, order, decision, judgment, or other legal or regulatory determination by any Governmental Body having jurisdiction over one or both Parties or this Transaction, including without limitation, the Tariff.

1.4 "Availability Incentive Payments" has the meaning set forth in the Tariff.

1.5 "Availability Standards" shall mean Availability Standards as defined in Section 40.9 of the Tariff or otherwise applicable to CAISO.

1.6 "Buyer" as used herein shall have the same meaning as "Purchaser" under the WSPP Agreement.

1.7 "CAISO" means the California Independent System Operator or its successor.

1.8 "Capacity Replacement Price" means (a) the price actually paid for any Replacement Capacity purchased by Buyer pursuant to Section 4.7 hereof, plus costs reasonably incurred by Buyer in purchasing such Replacement Capacity, or (b) absent a purchase of any Replacement Capacity, the market price for such Designated RA Capacity not provided at the Delivery Point. The Buyer shall determine such market prices in a commercially reasonable manner. For purposes of Sections 4 and 21.3(2) of the WSPP Agreement, "Capacity Replacement Price" shall be deemed to be the "Replacement Price."

1.9 "CIRA Tool" means the CAISO Customer Interface for Resource Adequacy application, or its successor platform.

1.10 "Compliance Showings" means the Flexible RAR Showings, LAR Showings, and RAR Showings, as applicable to the Product.

1.11 "Confirmation" has the meaning specified in the introductory paragraph hereof.

1.12 "Confirmation Effective Date" has the meaning specified in the introductory paragraph hereof.

1.13 "Contingent Firm RA Product" has the meaning specified in Section 3.4 hereof.

1.14 "Contract Price" means, for any Monthly Delivery Period, the price specified under the RA Capacity Price Table in Section 4.9.

1.15 "Contract Quantity" means, with respect to any particular Showing Month of the Delivery Period, the amount of Product (in MW) set forth in the "Contract Quantity (MW)" table in Section 4.3 which Seller has agreed to provide to Buyer from the Unit for such Showing Month.

1.16 "Control Area" has the meaning set forth in the Tariff.

1.17 "CPUC Decisions" means CPUC Decisions 04-01-050, 04-10-035, 05-10-042, 06-06-064, 06-07-031, 07-06-029, 08-06-031, 09-06-028, 10-06-036, 11-06-022, 12-06-025, 13-06-024, 14-06-050, 15-06-063, 16-06-045, 17-06-027, 19-02-022 and 19-06-026, and subsequent decisions related to resource adequacy issued from time to time by the CPUC.

1.18 "CPUC Filing Guide" means the annual document issued by the CPUC which sets forth the guidelines, requirements and instructions for LSE's to demonstrate compliance with the CPUC's resource adequacy program.

1.19 "Delivery Period" has the meaning specified in Section 4.1 hereof.

1.20 "Delivery Point" has the meaning specified in Section 4.2 hereof.

1.21 "Designated RA Capacity" shall be equal to, with respect to any particular Showing Month of the Delivery Period, the Contract Quantity of Product for such Showing Month including the amount of Contract Quantity that Seller has elected to provide Alternate Capacity with respect to, minus (i) any reductions to Contract Quantity made in accordance with Section 4.4 with respect to which Seller has not elected to provide Alternate Capacity, and (ii) any reductions resulting from events described under an event described at Section B-3.9 of Service Schedule B in the WSPP Agreement that excuse Seller's performance.

1.22 "Effective Flexible Capacity" means the flexible capacity of a resource that can be counted towards an LSE's FCR obligation, as identified from time to time by the Tariff, the CPUC Decisions, LRA, or other Governmental Body having jurisdiction.

1.23 "FCR Attributes" means, with respect to a Unit, any and all FCR attributes that can be counted toward an LSE's FCR, as they are identified from time to time by the CPUC Decisions, the Tariff, an LRA, or other Governmental Body having jurisdiction that can be counted toward FCR and are consistent with the operational limitations and physical characteristics of such Unit. For clarity, it should be understood that if the CAISO, LRA, or other Governmental Body, defines new or re-defines the FCR Attributes of a Unit, then such change will not result in a change in obligations or payments made pursuant to this Transaction.

1.24 "FCR Showings" means the FCR compliance showings (or similar or successor showings) an LSE is required to make to the CPUC (and, to the extent authorized by the CPUC, to the CAISO) pursuant to the CPUC Decisions and the Tariff, or to an LRA having jurisdiction over the LSE.

1.25 "Firm RA Product" has the meaning specified in the Section 3.3 hereof.

1.26 "Flexible Capacity Category" shall be as described in the annual CPUC Filing Guide, as such may be modified, amended, supplemented or updated from time to time.

1.27 "Flexible Capacity Requirements" or "FCR" means the flexible capacity requirements established for LSEs by the CPUC pursuant to the CPUC Decisions, or by an LRA or other Governmental Body having jurisdiction.

1.28 "Flexible RA Product" has the meaning specified in the Section 3.2 hereof.

1.29 "GADS" means the Generating Availability Data System or its successor.

1.30 "Generic RA Product" means Designated RA Capacity consisting of RAR Attributes and, if applicable, LAR Attributes, which does not include FCR Attributes.

1.31 "Governmental Body" means (i) any federal, state, local, municipal or other government; (ii) any governmental, regulatory or administrative agency, commission or other authority lawfully exercising or entitled to exercise any administrative, executive, judicial, legislative, police, regulatory or taxing authority or power; and (iii) any court or governmental tribunal.

1.32 "LAR" means local area reliability, which is any program of localized resource adequacy requirements established for jurisdictional LSEs by the CPUC pursuant to the CPUC Decisions, or by another LRA having jurisdiction over the LSE, as implemented in the Tariff. LAR may also be known as local resource adequacy, local RAR, or local capacity requirement in other regulatory proceedings or legislative actions.

1.33 "LAR Attributes" means, with respect to a Unit, any and all resource adequacy attributes (or other locational attributes related to system reliability), as may be identified from time to time by the CPUC Decisions, CAISO, LRA, or other Governmental Body having jurisdiction, associated with the physical location or point of electrical interconnection of the Unit within the CAISO Control Area, that can be counted toward LAR and are consistent with the operational limitations and physical characteristics of such Unit, but exclusive of any RAR Attributes which are not associated with where in the CAISO Control Area the Unit is physically located or electrically interconnected. For clarity, it should be understood that if the CAISO, LRA, or other Governmental Body, defines new or re-defines existing local areas, then such change will not result in a change in obligations or payments made pursuant to this Transaction.

1.34 "LAR Showings" means the LAR compliance showings (or similar or successor showings) an LSE is required to make to the CPUC (and, to the extent authorized by the CPUC, to the CAISO) pursuant to the CPUC Decisions, or to an LRA having jurisdiction over the LSE.

1.35 "LRA" has the meaning set forth in the Tariff.

1.36 "LSE" means load-serving entity. LSEs may be an investor-owned utility, an electric service provider, a community aggregator or community choice aggregator, or a municipality serving load in the CAISO Control Area (excluding exports).

1.37 "Maximum Cumulative Capacity" or "MCC" shall have the meaning specified in Section 2.1 hereof.

1.38 "Monthly Delivery Period" means each calendar month during the Delivery Period and shall correspond to each Showing Month.

1.39 "Monthly RA Capacity Payment" has the meaning specified in Section 4.9 hereof.

1.40 "Monthly Supply Plan" has the meaning set forth in the Tariff.

1.41 "NERC" means the North American Electric Reliability Council, or its successor.

1.42 "NERC/GADS Protocols" means the GADS protocols established by NERC, as may be updated from time to time.

1.43 "Net Qualifying Capacity" has the meaning set forth in the Tariff.

1.44 "Non-Availability Charges" has the meaning set forth in the Tariff.

1.45 "Notification Deadline" means in respect of a Showing Month the day that is fifteen (15) Business Days before the Compliance Showing deadlines. For illustrative purposes only, as of the Confirmation Effective Date, the applicable Compliance Showing deadlines are as follows: (A) forty-five (45) days prior to the Showing Month covered by the Supply Plan for the Monthly Supply Plan; and (B) the last Business Day of October that is prior to commencement of the year for the Annual Supply Plan. The Parties acknowledge and agree that such dates may be modified by the CAISO or CPUC from time to time throughout the Delivery Period

1.46 "Outage" means disconnection, separation, or reduction in the capacity of any Unit that relieves all or part of the offer obligations of the Unit consistent with the Tariff. For the avoidance of doubt, Outage shall be deemed to include Planned Outage (defined below).

1.47 "Planned Outage" means, subject to and as further described in the CPUC Decisions and the Tariff (Planned Outage referred to as "Approved Maintenance Outage" under the Tariff), a CAISO-approved planned or scheduled disconnection, separation or reduction in capacity of the Unit that is conducted for the purposes of carrying out routine repair or maintenance of such Unit, or for the purposes of new construction work for such Unit.

1.48 "Product" has the meaning specified in Article 3 hereof.

1.49 "RA Capacity" means the qualifying and deliverable capacity of the Unit for RAR, LAR, and FCR purposes for the Delivery Period, as determined by the CAISO, or other Governmental Body authorized to make such determination under Applicable Laws. RA Capacity encompasses the RAR Attributes, LAR Attributes and FCR Attributes of the capacity provided by a Unit, as applicable pursuant to this Confirmation.

1.50 "RA Capacity Price" means the price specified in the RA Capacity Price Table in Section 4.9 hereof.

1.51 "RAR" or "Resource Adequacy Requirements" means the resource adequacy requirements, exclusive of LAR and FCR, established for LSEs by the CPUC pursuant to the CPUC Decisions, by the CAISO under the Tariff, or by an LRA or other Governmental Body having jurisdiction.

1.52 "RAR Attributes" means, with respect to a Unit, any and all resource adequacy attributes, as may be identified from time to time by the Tariff, the CPUC Decisions, LRA, or any Governmental Body having jurisdiction, that can be counted toward RAR and are consistent with the operational limitations and physical characteristics of such Unit, exclusive of any LAR Attributes or FCR Attributes. If the CPUC adopts a Slice of Day reform, or another similar type of reform that results in a change in the RA capacity product, these additional attributes shall be included within the definition of "RAR Attributes".

1.53 "RAR Showings" means the RAR compliance showings (or similar or successor showings) an LSE is required to make to the CPUC (and/or, to the extent authorized by the CPUC, to the CAISO), pursuant to the Tariff, the CPUC Decisions or LRA having jurisdiction.

1.54 "Replacement Capacity" has the meaning specified in Section 4.7 hereof.

1.55 "Replacement Unit" means a generating unit meeting the requirements specified in Section 4.5.

1.56 "Resource Adequacy Plan" has the meaning set forth in the Tariff.

1.57 "Resource Category" shall be as described in the CPUC Filing Guide, as such may be modified, amended, supplemented or updated from time to time.

1.58 "Scheduling Coordinator" or "SC" has the same meaning as in the Tariff.

1.59 "Seller" has the meaning specified in the introductory paragraph hereof.

1.60 "Showing Month" is the calendar month during the Delivery Period that is the subject of the Compliance Showing. For illustrative purposes only, pursuant to the CPUC Decisions in effect as of the Confirmation Effective Date, the monthly Compliance Showing made in June is for the Showing Month of August.

1.61 "Shown Unit" means a Unit, or any Replacement Unit meeting the requirements of Section 4.5 of this Confirmation from which RA Capacity will be provided by Seller to Buyer and that Seller identifies annually pursuant to Article 2.

1.62 "Subsequent Buyer" means the purchaser of Product from Buyer in a re-sale of Product by Buyer.

1.63 "Substitute Capacity" has the meaning set forth in the Tariff for "RA Substitute Capacity."

1.64 "Supply Plan" has the meaning set forth in the Tariff.

1.65 "Tariff" means the tariff and protocol provisions of the CAISO, including associated rules, procedures and business practice manuals, as amended or supplemented from time to time.

1.66 "Transaction" has the meaning specified in the introductory paragraph hereof.

1.67 "Unit" or "Units" shall mean the generation assets described in Article 2 hereof (including any Replacement Units), from which RA Capacity is provided by Seller to Buyer.

1.68 "Unit EFC" means the Effective Flexible Capacity set by the CAISO for the applicable Unit. If the CAISO adjusts the Effective Flexible Capacity of a Unit after the Confirmation Effective Date, then for the period in which the adjustment is effective, the Unit EFC shall be deemed the lesser of (i) the Unit EFC as of the Confirmation Effective Date, and (ii) the CAISO-adjusted Effective Flexible Capacity. To the extent the Confirmation Effective Date of this Confirmation occurs prior to the

CAISO's setting of a Unit EFC for the applicable Unit, the Unit EFC shall be as agreed to by the Parties and specified in Article 2, and Seller represents that, to the best of its knowledge, this Unit EFC is consistent with the CAISO's methodology for determining Unit EFC as of the Confirmation Effective Date. To the extent the CAISO creates new categories of flexible capacity during the term of this Transaction and a Unit can count toward such new categories of flexible capacity while operating consistent with the operational limitation and physical characteristics of such Unit, any and all such new categories of flexible capacity shall be deemed to be part of the Effective Flexible Capacity of that Unit. The above notwithstanding, to the extent the CAISO decides to reduce the applicable Unit EFC, Seller shall not be liable for any costs or damages related to such reduction and the Unit EFC shall be reduced per Section 4.4 of this Confirmation.

1.69 "Unit NQC" means the Net Qualifying Capacity set by the CAISO for the applicable Unit. If the CAISO adjusts the Net Qualifying Capacity of a Unit after the Confirmation Effective Date, then for the period in which the adjustment is effective, the Unit NQC shall be deemed the lesser of (i) the Unit NQC as of the Confirmation Effective Date, and (ii) the CAISO-adjusted Net Qualifying Capacity.

2.
UNIT DESIGNATION

2.1 Seller to Annually Designate Shown Unit

(a) On an annual basis during the term of this Transaction, Seller shall designate the Shown Unit(s) from which RA Capacity will be provided to Buyer for the following calendar year by providing Buyer with the specific Unit information contained in Appendix A by no later than five business days after execution of this contract.

(b) The Shown Unit shall meet the Product characteristics and Contract Quantity specified in Sections 3 and 4 and the Resource Category requirements set forth in Section 2.1(c). Under no circumstances shall the Shown Unit be a coal-fired generating facility.

(c) The Shown Unit shall qualify as a Maximum Cumulative Capacity ("MCC") Resource Category 4 resource, which is described in the CPUC's 2024 Filing Guide as being able to run or operate in "All Hours (planned availability is unrestricted)" and which is available all 24 hours of each day.

(d) Nothing in this Section 2.1 shall be construed to limit the applicability of Sections 4.4 (Adjustment to Contract Quantity) or 4.5 (Alternate Capacity and Replacement Units) of this Confirmation.

(e) Seller's designation of the Shown Unit each year shall not in any way (i) convert the Contingent Firm RA Product being sold under this Confirmation into Firm RA Product, or (ii) cause any change to the Monthly RA Capacity Payment.

3.
RESOURCE ADEQUACY CAPACITY PRODUCT

During the Delivery Period, Seller shall provide to Buyer, pursuant to the terms of this Confirmation, the Contract Quantity of (i) RAR Attributes and, if applicable, LAR Attributes, and (ii) FCR Attributes, if Flexible RA Product is specified in Section 3.2, and the Contract Quantity shall be either a Firm RA Product or a Contingent Firm RA Product, as specified in either Section 3.3 or 3.4 (the "Product"). The Product does not confer to Buyer any right to the electrical output from the Units, other than the right to include the Designated RA Capacity associated with the Contract Quantity in RAR Showings, LAR Showings, and FCR Showings, as applicable, and any other capacity or resource adequacy markets or proceedings as specified in this Confirmation. Specifically, no energy or ancillary services associated with any Unit is required to be made available to Buyer as part of this Transaction and Buyer shall not be responsible for compensating

Seller for Seller's commitments to the CAISO required by this Confirmation. Seller retains the right to sell pursuant to the Tariff any RA Capacity from a Unit that is in excess of that Unit's Contract Quantity and any RAR Attributes, LAR Attributes or FCR Attributes not otherwise transferred, conveyed, or sold to Buyer under this Confirmation.

3.1 RAR and LAR Attributes

Seller shall provide Buyer with the Designated RA Capacity of RAR Attributes and, if applicable, LAR Attributes from each Unit, as measured in MWs, in accordance with the terms and conditions of this Agreement.

3.2 ☐ Flexible RA Product

Seller shall provide Buyer with Designated RA Capacity of FCR Attributes from the Units in the amount of the applicable Contract Quantity.

3.3 ☐ Firm RA Product

Seller shall provide Buyer with Designated RA Capacity from the Units in the amount of the Contract Quantity. If the Units are not available to provide the full amount of the Contract Quantity for any reason other than an Uncontrollable Force, including without limitation any Outage or any adjustment of the RA Capacity of any Unit, pursuant to Section 4.4, then, Seller shall provide Buyer with Designated RA Capacity from one or more Replacement Units pursuant to Section 4.5 hereof. If Seller fails to provide Buyer with replacement Designated RA Capacity from Replacement Units pursuant to Section 4.5, then Seller shall be liable for damages and/or required to indemnify Buyer for penalties or fines pursuant to the terms of Sections 4.7 and 4.8 hereof.

3.4 ☒ Contingent Firm RA Product

Seller shall provide Buyer with Product from the Unit in the amount of the applicable Contract Quantity; provided, however, that if, and to the extent that the Unit is not available to provide the full amount of the Contract Quantity due to any reduction in Contract Quantity in accordance with Section 4.4, Seller shall have the option to notify Buyer that either (a) Seller will not provide the portion of the Contract Quantity attributable to such reduction during the period of such non-availability; or (b) Seller will supply Alternate Capacity to fulfill the remainder of the Contract Quantity during such period pursuant to Section 4.5. If Seller fails to provide Buyer with the Designated RA Capacity from the Unit and has failed to supply Alternate Capacity to fulfill the remainder of the Designated RA Capacity during such period, Seller shall be liable for damages and/or required to indemnify Buyer for penalties or fines pursuant to the terms of Section 4.7 and 4.8.

4. DELIVERY AND PAYMENT

4.1 Delivery Period

The Delivery Period shall be [redacted] inclusive.

4.2 Delivery Point

The Delivery Point for each Unit shall be the CAISO Control Area, and if applicable, the LAR region in which the Unit is electrically interconnected.

4.3 Contract Quantity

The Contract Quantity of each Unit for each Monthly Delivery Period shall be:

Contract Quantity (MW)

Month/Year	Contract Quantity (MW)
[redacted]	[redacted]

4.4 Adjustments to Contract Quantity

(a) Planned Outages: If Seller is providing Contingent Firm RA Product and is unable to provide the applicable Contract Quantity for a portion of a Showing Month due to a Planned Outage of the Unit, then Seller shall have the option, but not the obligation, upon written notice to Buyer by the Notification Deadline, to either (i) reduce the Contract Quantity in accordance with the Planned Outage for such portion of the Showing Month, provided such reduction is able to be reflected on the Supply Plans in accordance with the Tariff; or (ii) provide Alternate Capacity in accordance with Section 4.5 up to the Contract Quantity for the applicable portion of such Showing Month.

(b) Reductions in Unit NQC: If Product is both (i) Generic RA Product, and (ii) Contingent Firm RA Product specified under Section 3.4, then Seller's obligation to deliver the applicable Contract Quantity for any Showing Month may also be reduced if the Unit experiences a reduction in Unit NQC after the Confirmation Effective Date as determined by the CAISO. Seller's potential reduction in Contract Quantity for each remaining Showing Month shall equal the product of (A) the applicable Showing Month Contract Quantity and (B) the total amount (in MW) Unit NQC was reduced since Confirmation Effective Date, divided by (C) Unit NQC as of the Confirmation Effective Date. If the Unit experiences such a reduction in Unit NQC, then Seller has the option, but not the obligation, subject to written notice to Buyer by the Notification Deadline, to provide the applicable Contract Quantity for such Showing Month from (x) the same Unit, provided the Unit has sufficient remaining and available Product and/or (y) from Replacement Units, provided, that in each case Seller provides and identifies such Replacement Units in accordance with Section 4.5.

(c) Reductions in Unit EFC: If Product is both (i) Flexible RA Product specified under Section 3.2, and (ii) Contingent Firm RA Product specified under Section 3.4, then Seller's obligation to deliver the applicable Contract Quantity of Product for any Showing Month may also be reduced if the Unit experiences a reduction in Unit EFC as determined by the CAISO. Seller's potential reduction in Contract Quantity for each remaining Showing Month shall equal the product of (A) the applicable Showing Month Contract Quantity and (B) the total amount (in MW) Unit EFC was reduced since Confirmation Effective Date, divided by (C) Unit EFC as of the Confirmation Effective Date. If the Unit experiences such a reduction in Unit EFC, then Seller has the option, but not the obligation, to provide the applicable Contract Quantity for such Showing Month from (x) the same Unit, provided the Unit has sufficient remaining and available Product and/or (y) from Replacement Units, provided, that in each case Seller provides and identifies such Replacement Units in accordance with Section 4.5.

(d) UCAP: If during the Delivery Period the CAISO or the CPUC either replaces Unit NQC as the value utilized to measure the qualifying capacity of a Unit with a successor value such as unforced capacity (UCAP) or utilizes such successor value as a supplemental means of measuring the qualifying capacity of a Unit together with Unit NQC, Seller shall have the right, but not the obligation, to send written notice to Buyer of such change ("Notice of Successor Value"). Following receipt of such notice from Seller, the Parties shall negotiate an amendment to this Confirmation so that from and after such replacement Seller shall convey to Buyer an amount of qualifying capacity of such Unit of (i) no less than the amount

obtained by calculating the Buyer's share of such qualifying capacity but (ii) no more than the Contract Quantity. Under such amendment, Seller's pro-rata delivery obligation shall be equal to the product of (A) the Contract Quantity divided by the Unit NQC, multiplied by (B) the Unit's overall qualifying capacity (in MW) as measured by such new method of measuring a Unit's qualifying capacity).

4.5 Alternate Capacity and Replacement Units

(a) If Seller is unable to provide the full Contract Quantity for any Showing Month for any reason, including, without limitation, due to one of the reasons specified in Section 4.4, or Seller desires to provide the Contract Quantity for any Showing Month from a different generating unit other than the Unit, then Seller may, at no cost to Buyer, provide Buyer with Alternate Capacity from one or more Replacement Units, with the total amount of Product provided to Buyer from the Unit and Replacement Units up to an amount equal to the Contract Quantity for the applicable Showing Month; provided that in each case, Seller shall notify Buyer of its intent (i) not to provide or (ii) to provide Alternate Capacity and identify Replacement Units meeting the above requirements and the Resource Category requirements set forth in Section 2.1(c), no later than the Notification Deadline. If Seller notifies Buyer in writing as to the particular Replacement Units and such Units meet the requirements of this Section 4.5, then such Replacement Units shall be automatically deemed a Unit for purposes of this Confirmation for that Showing Month.

(b) With respect to a Contingent Firm RA Product, if Seller does not provide Alternate Capacity in an amount equal to the Contract Quantity for that Showing Month, then Buyer may, but shall not be required to, purchase replacement Product. Seller shall not be liable for damages and/or required to indemnify Buyer for penalties or fines pursuant to the terms of Sections 4.7 and 4.8 hereof if (i) the failure to deliver the full Contract Quantity is due to a reduction in Contract Quantity in accordance with Section 4.4 and (ii) Seller has notified Buyer, no later than the Notification Deadline, of Seller's intent not to provide Alternate Capacity in an amount equal to the Contract Quantity of that Showing Month.

4.6 Delivery of Product

Seller shall provide Buyer with the Designated RA Capacity of Product for each Showing Month consistent with the following:

(a) Seller shall submit, or cause the Unit's Scheduling Coordinator to submit, by the Notification Deadline (i) Monthly Supply Plans and (ii) Annual Supply Plans if the Confirmation Effective Date is prior to the year-ahead Compliance Showing deadline applicable for the Showing Months as specified in Section 4.1, in accordance with the Tariff, identifying and confirming the transfer of the Designated RA Capacity to Buyer for each Showing Month, unless Buyer specifically requests in writing that Seller not do so (it being understood that any Designated RA Capacity subject to such a request from Buyer will be deemed to have been provided to Buyer for all purposes under this Confirmation).

(b) The Product is delivered and received when the CIRA Tool shows the Supply Plan accepted for the Product from the Unit by CAISO or Seller complies with Buyer's instruction to withhold all or part of the Contract Quantity from Seller's Supply Plan for any Showing Month during the Delivery Period. Seller has failed to deliver the Product if (i) Buyer has elected to submit the Product from the Unit in its Resource Adequacy Plan and such submission is accepted by the CPUC and the CAISO but the Supply Plan and Resource Adequacy Plan are not matched in the CIRA Tool due solely to a Seller error, and are rejected by CAISO, or (ii) Seller fails to submit the volume of Designated RA Capacity for any Showing Month pursuant to this Confirmation. Buyer will have received the Contract Quantity if (x) Seller's Supply Plan is accepted by the CAISO for the applicable Showing Month, (y) Seller correctly submits the Supply Plan and the Supply Plan and/or Resource

Adequacy Plan are not matched in the CIRA Tool due solely to a Buyer error or (z) Seller complies with Buyer's instruction to withhold all or part of the Contract Quantity from Seller's Supply Plan for the applicable Showing Month. Seller will not have failed to deliver the Contract Quantity if Buyer fails or chooses not to submit the Unit and the Product in its Resource Adequacy Plan with the CPUC or CAISO.

4.7 Damages for Failure to Provide Designated RA Capacity

If Seller fails to provide Buyer with the Designated RA Capacity of Product for any Showing Month and such failure is not excused under the terms of this Confirmation, then the following shall apply:

(a) Buyer may, but shall not be required to, replace any portion of the Designated RA Capacity not provided by Seller with capacity having equivalent RAR Attributes, LAR Attributes and/or FCR Attributes as the Designated RA Capacity not provided by Seller, provided, that, if any portion of the Designated RA Capacity that Buyer is seeking to replace is Designated RA Capacity having RAR Attributes and no LAR Attributes (such capacity shall also include FCR Attributes if this is a Flexible Capacity Product) and no such RAR capacity is available, then Buyer may replace such portion of the Designated RA Capacity with other capacity having RAR Attributes and LAR Attributes (as well as FCR Attributes if this is a Flexible Capacity Product) ("Replacement Capacity"). Such Replacement Capacity may be provided by CAISO to Buyer pursuant to the Tariff. Buyer may enter into purchase transactions with one or more parties to replace any portion of Designated RA Capacity not provided by Seller. Additionally, Buyer may enter into one or more arrangements to repurchase its obligation to sell and deliver capacity to another party and, to the extent such transactions are done at prevailing market prices, such arrangements shall be considered equivalent to the procurement of Replacement Capacity. Buyer shall use commercially reasonable efforts to minimize damages when procuring any Replacement Capacity.

(b) Seller shall pay to Buyer at the time set forth in Section 9 of the WSPP Agreement, the following damages in lieu of damages specified in Section 9, 21.3 and 22 of the WSPP Agreement: an amount equal to the positive difference, if any, between (i) the sum of (A) the actual cost paid by Buyer for any Replacement Capacity, plus (B) each Capacity Replacement Price (excluding amounts included in Section 4.7(a)) times the amount of the Designated RA Capacity neither provided by Seller nor purchased by Buyer pursuant to Section 4.7(a), and (ii) the Designated RA Capacity not provided for the applicable Showing Month times the Contract Price for that month. If Seller fails to pay these damages, then Buyer may offset those damages owed it against any future amounts it may owe to Seller under this Confirmation pursuant to the WSPP Agreement.

4.8 Indemnities for Failure to Deliver Contract Quantity

Subject to any adjustments made pursuant to Section 4.4 and requests from Buyer pursuant to Section 4.6(b)(i), Seller agrees to indemnify, defend and hold harmless Buyer from any penalties, fines or costs assessed against Buyer by the CPUC or the CAISO, to the extent not otherwise paid by Seller to Buyer under Section 4.7(b), resulting from any of the following:

(a) Seller's failure to provide any portion of the Designated RA Capacity;

(b) Seller's failure to provide notice of the non-availability of any portion of Designated RA Capacity as required under Sections 4.4 and 4.5;

(c) A Unit Scheduling Coordinator's failure to timely submit Supply Plans that identify Buyer's right to the Designated RA Capacity purchased hereunder; or

(d) A Unit Scheduling Coordinator's failure to submit accurate Supply Plans that identify Buyer's right to the Designated RA Capacity purchased hereunder.

With respect to the foregoing, the Parties shall use commercially reasonable efforts to minimize such penalties, fines and costs; provided, that in no event shall Buyer be required to use or change its utilization of its owned or controlled assets or market positions to minimize these penalties and fines. If Seller fails to pay the foregoing penalties, fines or costs, or fails to reimburse Buyer for those penalties, fines or costs, then Buyer may offset those penalties, fines or costs against any future amounts it may owe to Seller under this Confirmation.

4.9 Monthly RA Capacity Payment

In accordance with the terms of Section 9 of the WSPP Agreement, Buyer shall make a Monthly RA Capacity Payment to Seller for each Unit, in arrears after the applicable Showing Month. Each Unit's Monthly RA Capacity Payment shall be equal to the product of (a) the applicable Contract Price for that Monthly Delivery Period, (b) the Designated RA Capacity actually delivered by Seller to Buyer for the Monthly Delivery Period, and (c) 1,000; provided, however, that the Monthly RA Capacity Payment shall be prorated to reflect any portion of Designated RA Capacity that was not delivered pursuant to Section 4.6 at the time of the CAISO filing for the respective Showing Month. The final product of this Monthly RA Capacity Payment calculation shall be rounded to the nearest penny (i.e., two decimal places). Seller shall deliver invoices to the address(es) specified herein; provided, however, that changes to invoice, payment, wire transfer and other banking information must be made in writing and delivered via certified mail and shall include contact information for an authorized person who is available by telephone to verify the authenticity of such requested changes.

RA CAPACITY PRICE TABLE

Contract Year/Month	RA Capacity Price ($/kW-month)
[redacted]	[redacted]

4.10 Allocation of Other Payments and Costs

Seller may retain any revenues it may receive from the CAISO or any other third party with respect to any Unit for (a) start-up, shut-down, and minimum load costs, (b) capacity revenue for ancillary services, (c) energy sales, (d) any revenues for black start or reactive power services, or (e) the sale of the unit-contingent call rights on the generation capacity of the Unit to provide energy to a third party, so long as such rights do not confer on such third party the right to claim any portion of the RA Capacity sold hereunder in order to make an RAR Showing, LAR Showing, FCR Showing, or any similar capacity or resource adequacy showing with the CAISO or CPUC. Buyer acknowledges and agrees that all Availability Incentive Payments are for the benefit of Seller and for Seller's account, and that Seller shall receive, retain, or be entitled to receive all credits, payments, and revenues, if any, resulting from Seller achieving or exceeding Availability Standards. The Parties acknowledge and agree that any Non-Availability Charges are the responsibility of Seller, and for Seller's account and Seller shall be responsible for all fees, charges, or penalties, if any, resulting from Seller failing to achieve Availability Standards. However, Buyer shall be entitled to receive and retain all revenues associated with the Designated RA Capacity of any Unit during the Delivery Period (including any capacity or availability revenues from RMR Agreements for any Unit, Reliability Compensation Services Tariff, and Residual Unit Commitment capacity payments, but excluding payments described in clauses (a) through (c) above). In accordance with Section 4.9 of this Confirmation

and Section 9 of the WSPP Agreement, all such revenues received by Seller, or a Unit's SC, owner, or operator shall be remitted to Buyer, and Seller shall indemnify Buyer for any such revenues that Buyer does not receive, and Seller shall pay such revenues to Buyer if the Unit's SC, owner, or operator fails to remit those revenues to Buyer. If Seller fails to pay such revenues to Buyer, Buyer may offset any amounts owing to it for such revenues pursuant to Section 9 of the WSPP Agreement against any future amounts it may owe to Seller under this Confirmation.

5.
CAISO OFFER REQUIREMENTS

During the Delivery Period, except to the extent any Unit is in an Outage, or is affected by an Uncontrollable Force that results in a partial or full Outage of that Unit, Seller shall either schedule or cause the Unit's Scheduling Coordinator to schedule with, or make available to, the CAISO each Unit's Designated RA Capacity in compliance with the Tariff, and shall perform all, or cause the Unit's Scheduling Coordinator, owner, or operator, as applicable, to perform all obligations under the Tariff that are associated with the sale of Designated RA Capacity hereunder. Buyer shall have no liability for the failure of Seller or the failure of any Unit's Scheduling Coordinator, owner, or operator to comply with such Tariff provisions, including any penalties or fines imposed on Seller or the Unit's Scheduling Coordinator, owner, or operator for such noncompliance.

6.
RESERVED CAPACITY AND SUBSTITUTE CAPACITY

6.1 For any Showing Month, no later than three (3) Business Days before the applicable Compliance Showing deadline, Buyer may designate in writing that Seller not list, or cause the Unit's Scheduling Coordinator not to list, in the Unit's Supply Plan a portion or all of the Contract Quantity for that Showing Month ("Reserved Capacity").

6.2 Subject to Section 6.3, all Reserved Capacity shall be treated as Designated RA Capacity actually delivered under Section 4.6(b) for purposes of calculating the Monthly RA Capacity Payment.

6.3 In any Showing Month in which Buyer has designated Reserved Capacity, Buyer may request, in writing, that Seller make the Reserved Capacity available for Buyer's use as Substitute Capacity within the respective Showing Month ("Substitute Capacity Request") with the following schedule.

(a) For Buyer's Substitute Capacity Requests that are to be scheduled with CAISO prior to the Showing Month (e.g., through the CAISO RA Substitute Capacity Assessment), the Substitute Capacity Request shall be received by Seller at least two (2) Business Days prior to the applicable CAISO scheduling deadline. Seller shall, or shall cause the Unit's Scheduling Coordinator to, comply with Buyer's request under this Section 6.3, provided that to the extent Seller is unable to provide the requested Substitute Capacity from the Unit due to a forced outage of the Unit, including as a result of an Uncontrollable Force, Seller shall not be liable for any amounts under Sections 4.7 and 4.8.

(b) For Buyer's Substitute Capacity Requests that are to be scheduled with CAISO after the commencement of the Showing Month, the Substitute Capacity Request shall be received by Seller at least five (5) Business Days before Buyer submits its Substitute Capacity in CIRA. Seller shall, or shall cause the Unit's Scheduling Coordinator to, comply with Buyer's request under this Section 6.3, provided that to the extent Seller is unable to provide the requested Substitute Capacity from the Unit due to a forced outage of the Unit, including as a result of an Uncontrollable Force, Seller shall not be liable for any amounts under Sections 4.7 and 4.8.

6.4 Nothing in this Article 6 changes any of Seller or Buyer's rights or obligations under this Confirmation with respect to Contract Quantity not designated as Reserved Capacity.

7.
OTHER BUYER AND SELLER COVENANTS

7.1 Buyer and Seller shall, throughout the Delivery Period, take all commercially reasonable actions and execute any and all documents or instruments reasonably necessary to ensure Buyer's right to the use of the Contract Quantity for the sole benefit of Buyer's RAR, LAR and/or FCR, as applicable, or that of a Subsequent Buyer under Article 10. Such commercially reasonable actions (neither Party shall be required to spend more than $10,000 in total under the Agreement in support of such actions) shall include, without limitation:

(a) Cooperating with and providing, and in the case of Seller causing each Unit's Scheduling Coordinator, owner, or operator to cooperate with and provide requested supporting documentation to the CAISO, the CPUC, or any other Governmental Body responsible for administering RAR, LAR and/or FCR under Applicable Laws, to certify or qualify the Contract Quantity as RA Capacity and Designated RA Capacity. Such actions shall include, without limitation, providing information requested by the CAISO, the CPUC, or by an LRA having jurisdiction, to demonstrate for each month of the Delivery Period the ability to deliver the Contract Quantity from each Unit to the CAISO Controlled Grid for the minimum hours required to qualify as RA Capacity, and providing information requested by the CPUC, the CAISO or other Governmental Body having jurisdiction to administer RAR, LAR or FCR to demonstrate that the Contract Quantity can be delivered to the CAISO Controlled Grid, pursuant to "deliverability" standards established by the CAISO, or other Governmental Body having jurisdiction to administer RAR, LAR and/or FCR; and

(b) Subject to Section 4.4, negotiating in good faith to make necessary amendments, if any, to this Confirmation to conform this Transaction to subsequent clarifications, revisions, or decisions rendered by the CPUC, CAISO, FERC, or other Governmental Body having jurisdiction to administer RAR, LAR and FCR, in each case occurring after the Confirmation Effective Date, so as to maintain the benefits of the bargain struck by the Parties on the Confirmation Effective Date.

7.2 Seller represents, warrants and covenants to Buyer that, throughout the Delivery Period:

(a) Seller owns or has the exclusive right to the RA Capacity sold under this Confirmation from each Unit, and shall furnish Buyer, CAISO, CPUC or other jurisdictional LRA, or other Governmental Body with such evidence as may reasonably be requested to demonstrate such ownership or exclusive right;

(b) No portion of the Contract Quantity has been committed by Seller to any third party in order to satisfy RAR, LAR, FCR or such analogous capacity obligations in CAISO markets, other than pursuant to an RMR Agreement between the CAISO and either Seller or the Unit's owner or operator;

(c) No portion of the Contract Quantity has been committed by Seller in order to satisfy RAR, LAR, FCR, or analogous capacity obligations in any non-CAISO market;

(d) Each Unit is connected to the CAISO Controlled Grid, is within the CAISO Control Area, or is under the control of CAISO;

(e) The owner or operator of each Unit is obligated to maintain and operate each Unit using Good Utility Practice and, if applicable, General Order 167 as outlined by the CPUC in the Enforcement of Maintenance and Operation Standards for Electric Generating Facilities

Adopted May 6, 2004, and is obligated to abide by all Applicable Laws in operating such Unit; provided, that the owner or operator of any Unit is not required to undertake capital improvements, facility enhancements, or the construction of new facilities;

(f) The owner or operator of each Unit is obligated to comply with Applicable Laws, including the Tariff, relating to RA Capacity and, as applicable, RAR, LAR and/or FCR;

(g) If Seller is the owner of any Unit, the respective cumulative sums of LAR Attributes, RAR Attributes, and FCR Attributes that Seller has sold, assigned or transferred for any Unit does not exceed that Unit's RA Capacity;

(h) With respect to the RA Capacity provided under this Confirmation, Seller shall, and each Unit's SC is obligated to, comply with Applicable Laws, including the Tariff, relating to RA Capacity, and RAR, LAR and FCR;

(i) Seller shall notify the SC of each Unit that Seller has transferred the Designated RA Capacity to Buyer, and the SC is obligated to deliver the Supply Plans in accordance with the Tariff;

(j) Seller shall notify the SC of each Unit that Seller is obligated to cause each Unit's SC to provide to the Buyer, by the Notification Deadline, the Designated RA Capacity of each Unit that is to be submitted in the Supply Plan associated with this Agreement for the applicable period; and

(k) Seller shall notify each Unit's SC that Buyer is entitled to the revenues set forth in Section 4.10 of this Confirmation, and such SC is obligated to promptly deliver those revenues to Buyer, along with appropriate documentation supporting the amount of those revenues.

8. ASSIGNMENT

Neither Party may voluntarily assign its rights under this Transaction without the prior written consent of the other Party; provided, however, that notwithstanding anything in the WSPP Agreement to the contrary, such consent shall not be unreasonably withheld, conditioned, or delayed if the proposed assignee has a Credit Rating that is at least investment grade or its creditworthiness is otherwise reasonably satisfactory.

9. CONFIDENTIALITY

The Parties agree that Buyer may disclose information regarding this Transaction to any Governmental Body, the CPUC, the CAISO or any LRA having jurisdiction as necessary to support its LAR Showings, RAR Showings, and/or FCR Showings, as applicable, and Seller may disclose information regarding this Transaction to the SC of each Unit in order for such SC to timely submit accurate Supply Plans. Buyer may also disclose to any Subsequent Buyer whatever information regarding this Transaction is commercially reasonable for such party to evaluate the re-sale; provided that any Subsequent Buyer agrees in writing to maintain the confidentiality of such information consistent with this Section 9. Upon request or demand of any third person or entity not a Party hereto to Buyer pursuant to the California Public Records Act for production, inspection and/or copying of confidential information regarding this Transaction, Buyer will as soon as practical notify Seller in writing via email that such request has been made. Seller will be responsible for taking whatever legal steps are necessary to prevent Buyer's release of such information to the third party. Seller acknowledges that Buyer is a public agency subject to the requirements of the California Public Records Act (Cal. Gov. Code section 6250 et seq.).

10.
BUYER'S RE-SALE OF PRODUCT

(a) Buyer may re-sell all or a portion of the Contract Quantity of Product hereunder; provided, however, that (i) any Subsequent Buyer assumes all of Buyer's obligations and liabilities hereunder, and (ii) any such re-sale does not increase Seller's obligations or liabilities hereunder. Seller will, or will cause the Unit's SC, to follow Buyer's instructions with respect to providing such resold Product to Subsequent Buyers, to the extent such instructions are consistent with Seller's obligations under this Confirmation. Seller will, and will cause the Unit's SC, to take all commercially reasonable actions and execute all documents or instruments reasonably necessary to allow such Subsequent Buyers to use such resold Product in a manner consistent with Buyer's rights under this Confirmation. If Buyer incurs any liability to a Subsequent Buyer due to the failure of Seller or the Unit's SC to comply with this Confirmation, Seller will be liable to Buyer for the same amounts Seller would have owed Buyer under this Confirmation if Buyer had not resold the Product. If Seller incurs any liability to a Subsequent Buyer due to the failure of Buyer or the Subsequent Buyer to comply with this Confirmation, Buyer will be liable to Seller for the same amounts Buyer would have owed Supplier under this Confirmation if Buyer had not resold the Product.

(b) Buyer will notify Seller in writing of any resale of Product and the Subsequent Buyer no later than two (2) Business Days before the Notification Deadline for the Showing Month. Buyer will notify Seller of any subsequent changes or further resales no later than two (2) Business Days before the Notification Deadline for the Showing Month. Seller agrees, and agrees to cause the Unit's SC, to: (i) follow Buyer's reasonable instructions with respect to providing such resold Product to Subsequent Buyers of such resold Product; and (ii) take all commercially reasonable actions and execute any and all documents or instruments reasonably necessary to allow such Subsequent Buyers to use such resold Product.

(c) If CAISO or CPUC develops a centralized capacity market, Buyer will have exclusive rights to direct Seller to offer, bid, or otherwise submit the applicable Contract Quantity of Product for each day during the Delivery Period provided to Buyer pursuant to this Confirmation for re-sale in such market, and Seller and the Unit's SC shall comply with Buyer's direction and Buyer shall retain and receive all revenues from such re-sale. Seller agrees to take all commercially reasonable actions to assist Buyer with such re-sale, provided that Seller's obligation to assist shall not require modification of any of the commercial terms of this Confirmation.

11.
MARKET BASED RATE AUTHORITY

Seller agrees, in accordance with Federal Energy Regulatory Commission (FERC) Order No. 697, to, upon request of Buyer, submit a letter of concurrence in support of any affirmative statement by Buyer that this contractual arrangement does not transfer "ownership or control of generation capacity" from Seller to Buyer as the term "ownership or control of generation capacity" is used in 18 CFR Section 35.42. Seller also agrees that it will not, in filings, if any, made subject to Order Nos. 652 and 697, claim that this contractual arrangement conveys ownership or control of generation capacity from Seller to Buyer.

12.
COLLATERAL REQUIREMENTS

Notwithstanding any provision in the WSPP Agreement to the contrary, including Section 27, neither Party shall be required to post collateral or other security for this Transaction.

13.
OTHER WSPP AGREEMENT CHANGES

13.1 For this Transaction, the WSPP Agreement shall be amended as follows:

(a) Section 9.4 is deleted in its entirety and replaced with the following:

"In the event an invoice or portion thereof, or any other claim or adjustment arising hereunder, is disputed, payment of the undisputed portion of the invoice shall be required to be made when due, with notice of the objection given to the other Party. Any invoice dispute or invoice adjustment shall be in writing and shall state the basis for the dispute or adjustment. Payment of the disputed amount shall not be required until the dispute is resolved. Upon resolution of the dispute, any required payment shall be made within two (2) Business Days of such resolution along with interest accrued at the Interest Rate from and including the due date to but excluding the date paid. Inadvertent overpayments shall be returned upon request or deducted by the Party receiving such overpayment from subsequent payments, with interest accrued at the Interest Rate from and including the date of such overpayment to but excluding the date repaid or deducted by the Party receiving such overpayment. Any dispute with respect to an invoice is waived unless the other Party is notified in writing within twelve (12) months after the invoice is rendered or any specific adjustment to the invoice is made. If an invoice is not rendered within twelve (12) months after the close of the month during which performance of a Transaction occurred, the right to payment for such performance is waived."

(b) Section 22.1 is modified by inserting the following new text at the end thereof:

"(f) the failure of the Defaulting Party to pay its debts generally as they become due or the Defaulting Party's admission in a writing that is unable to generally pay its debts as they become due;

(g) the institution, by the Defaulting Party, of a general assignment for the benefit of its creditors; or

(h) the application for, consent to, or acquiescence to, by the Defaulting Party, the appointment of a receiver, custodian, trustee, liquidator, or similar official for all or a substantial portion of its assets."

(c) Section 22.2(b) is amended by inserting "and is continuing" after "Event of Default occurs" in the first line thereof and deleting the second sentence therein.

(d) Section 22.3(c) is amended by deleting the third sentence thereof and replacing it with the following:

"If the Non-Defaulting Party's aggregate Gains exceed its aggregate Losses and Costs, if any, resulting from the termination of this Agreement or a Confirmation, the Termination Payment for all such Terminated Transactions shall be zero, notwithstanding any provision in this Section or Agreement to the contrary."

(e) In Section 22.3(e), delete the entire provision (including subsections) and replace it with the following: "[Intentionally omitted]"

(f) In Section 22.3(f), delete the entire provision and replace it with the following:

"If the Defaulting Party disagrees with the calculation of the Termination Payment and the Parties cannot otherwise resolve their differences, and provided that the Defaulting Party has paid the undisputed part of the Termination Payment to the Non-Defaulting Party as

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provided under Section 22.3(c), and that any amounts disputed by the Defaulting Party are disputed in good faith, then the Defaulting Party may submit the calculation issue to Dispute Resolution pursuant to Section 34."

(g) Section 28.1 is applicable and the Parties shall net monthly payments in accordance with Exhibit A of the WSPP. Both Parties intend for the netting provisions of Exhibit A to the WSPP Agreement to be effective on the Confirmation Effective Date.

(h) Section 30.1 is amended by inserting "or requested" after the word "required" in Section 30.1(4) and by adding the following at the end of the first sentence: "; or (8) to the Party's and such Party's affiliates' lenders, counsel, accountants, advisors and agents who have a need to know such information and have agreed to keep such terms confidential".

(i) Subsections 34.1 and 34.2 are deleted and replaced with the following:

"34.1 INFORMAL DISPUTE RESOLUTION

IN THE EVENT OF ANY DISPUTE ARISING UNDER THIS TRANSACTION, WITHIN TEN (10) DAYS FOLLOWING THE RECEIPT OF A WRITTEN NOTICE FROM EITHER PARTY IDENTIFYING SUCH DISPUTE, THE PARTIES SHALL MEET, NEGOTIATE AND ATTEMPT, IN GOOD FAITH, TO RESOLVE THE DISPUTE QUICKLY, INFORMALLY AND INEXPENSIVELY. IF THE PARTIES ARE UNABLE TO RESOLVE A DISPUTE ARISING HEREUNDER WITHIN THIRTY (30) DAYS AFTER RECEIPT OF SUCH NOTICE, THEN EITHER PARTY MAY SEEK ANY AND ALL REMEDIES AVAILABLE TO IT AT LAW OR IN EQUITY, SUBJECT TO THE LIMITATIONS SET FORTH IN THIS TRANSACTION."

"34.2 EXCLUSIVE JURISDICTION

EACH PARTY SUBMITS TO THE EXCLUSIVE JURISDICTION OF THE STATE OR FEDERAL COURTS LOCATED IN SAN FRANCISCO, CALIFORNIA, FOR ANY ACTION OR PROCEEDING RELATING TO THIS AGREEMENT OR ANY TRANSACTION, AND EXPRESSLY WAIVES ANY OBJECTION IT MAY HAVE TO SUCH JURISDICTION OR THE CONVENIENCE OF SUCH FORUM."

(j) The phrase "arbitration or" is deleted from the first line of Section 34.4.

(k) The following shall be inserted as a new Section 34.5:

"34.5LIMITATION OF DAMAGES. EXCEPT AS OTHERWISE SPECIFIED IN ANY CONFIRMATION, FOR BREACH OF ANY PROVISION OF THIS CONFIRMATION AGREEMENT FOR WHICH AN EXPRESS REMEDY OR MEASURE OF DAMAGES IS PROVIDED, THE EXPRESS REMEDY OR MEASURE OF DAMAGES PROVIDED IS THE SOLE AND EXCLUSIVE REMEDY UNDER THIS AGREEMENT AND THE AGREEMENT FOR THE BREACH, LIABILITY FOR THE BREACH IS LIMITED AS SET FORTH IN THE PROVISION AND ALL OTHER REMEDIES FOR DAMAGES AT LAW OR IN EQUITY ARE WAIVED. EXCEPT AS OTHERWISE SPECIFIED IN ANY CONFIRMATION, IF NO EXPRESS REMEDY OR MEASURE OF DAMAGES IS PROVIDED IN THIS AGREEMENT FOR A PARTICULAR BREACH, LIABILITY FOR THE BREACH IS LIMITED TO DIRECT DAMAGES ONLY, THE DIRECT DAMAGES ARE THE SOLE AND EXCLUSIVE REMEDY UNDER THIS AGREEMENT FOR THE BREACH, AND ALL OTHER REMEDIES FOR DAMAGES AT LAW OR IN EQUITY ARE WAIVED. EXCEPT AS OTHERWISE SPECIFIED IN ANY CONFIRMATION, NEITHER PARTY IS LIABLE FOR ANY OTHER TYPE OF DAMAGE, INCLUDING INCIDENTAL, PUNITIVE, EXEMPLARY, CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES OF ANY NATURE (INCLUDING DAMAGES ASSOCIATED WITH LOST PROFITS, BUSINESS

INTERRUPTION AND LOSS OF GOODWILL) ARISING AT ANY TIME, WHETHER IN TORT (INCLUDING THE SOLE OR CONTRIBUTORY NEGLIGENCE OF EITHER PARTY OR ANY RELATED PERSON), WARRANTY, STRICT LIABILITY, CONTRACT OR STATUTE, UNDER ANY INDEMNITY PROVISION, OR OTHERWISE."

(l) Section 37 is amended by inserting the following in the beginning of the section: "On the date of entering into this Confirmation,".

(m) Section 41 "Witness" shall become Section 42 and the following "Standard of Review" Section shall be substituted in its place:
"The Parties agree as follows:

From the date of entering into a Transaction under this Agreement and throughout the term of such Transaction, the Parties each warrant and covenant as follows:

(i) Absent the agreement of all Parties to the proposed change, the standard of review for changes to any section of this Agreement (including all Transactions and/or Confirmations) specifying the rate(s) or other material economic terms and conditions agreed to by the Parties herein, whether proposed by a Party, a non-party or FERC acting sua sponte, shall be the "public interest" standard of review set forth in United Gas Pipe Line Co. v. Mobile Gas Service Corp., 350 U.S. 332 (1956) and Federal Power Commission v. Sierra Pacific Power Co., 350 U.S. 348 (1956)(the "Mobile-Sierra" doctrine) and clarified in Morgan Stanley Capital Group, Inc. v. Public Util. Dist. No. 1 of Snohomish 554 U.S. 527 (2008) and NRG Power Marketing LLC v. Maine Pub. Util. Comm'n, 558 U.S. 165 (2010).

(ii) The Parties, for themselves and their successors and assigns, (i) agree that this "public interest" standard shall apply to any proposed changes in any other documents, instruments or other agreements executed or entered into by the Parties in connection with this Agreement and (ii) hereby expressly and irrevocably waive any rights they can or may have to the application of any other standard of review, including the "just and reasonable" standard."

13.2 Governing Law

Notwithstanding Section 24 of the WSPP Agreement, this Transaction and the rights and duties of the Parties hereunder shall be governed by and construed, enforced and performed in accordance with the laws of the state of California, without regard to principles of conflicts of law.

13.3 No Recourse to Members of Buyer

Buyer is organized as a Joint Powers Authority in accordance with the Joint Exercise of Powers Act of the State of California (Government Code Section 6500, et seq.) and is a public entity separate from its constituent members. Buyer will solely be responsible for all debts, obligations and liabilities accruing and arising out of this Confirmation. Seller will have no rights and shall not make any claims, take any actions or assert any remedies against any of Buyer's constituent members, or the officers, directors, advisors, contractors, consultants or employees of Buyer or Buyer's constituent members, in connection with this Confirmation.

13.4 Counterparts

This Confirmation may be signed in any number of counterparts with the same effect as if the signatures to the counterparts were upon a single instrument. The Parties may rely on electronic, or scanned signatures as originals under this Confirmation. Delivery of an executed signature page of this Confirmation by electronic mail transmission (including PDF) shall be the same as delivery of a manually executed signature page.

13.5 Entire Agreement; No Oral Agreements or Modifications

This Confirmation sets forth the terms of the Transaction into which the Parties have entered and shall constitute the entire agreement between the Parties relating to the contemplated purchase and sale of the Product. Notwithstanding any other provision of the Agreement, this Transaction may be confirmed only through a Documentary Writing executed by both Parties, and no amendment or modification to this Transaction shall be enforceable except through a Documentary Writing executed by both Parties.

ACKNOWLEDGED AND AGREED TO AS OF THE CONFIRMATION EFFECTIVE DATE

SILICON VALLEY CLEAN ENERGY AUTHORITY, a California joint powers authority	**HIGH DESERT POWER PROJECT, LLC a California limited liability company**
By: DocuSigned by: Girish Balachandran 5CA64B9AC4C24C3...	By:
Name: Girish Balachandran	Name: Jim Suehr
Title: CEO	Title: Vice President & Secretary

Appendix A

Shown Unit Information

Name:	Middle Fork and Ralston PRP
Location:	
CAISO Resource ID:	MDFKRL_2_PROJCT
Unit SCID:	MFP1
Unit NQC:	210
Unit EFC:	NA
Resource Type:	Natural Gas
Resource Category (MCC 1, 2, 3 or 4):	4
Flexible Capacity Category (1, 2 or 3):	NA
Path 26 (North or South):	North
Local Capacity Area (if any, as of Confirmation Effective Date):	n/a
Deliverability restrictions, if any, as described in most recent CAISO deliverability assessment:	none
Run Hour Restrictions:	None.

Appendix B

Notice Information

Seller: Silicon Valley Clean Energy Authority	Buyer: High Desert Power Project, LLC
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]

MASTER POWER PURCHASE AND SALE AGREEMENT
CONFIRMATION LETTER – RESOURCE ADEQUACY
BETWEEN
SHELL ENERGY NORTH AMERICA (US), L.P.
AND
SILICON VALLEY CLEAN ENERGY AUTHORITY

This Confirmation Letter ("Confirmation") confirms the Transaction between **Shell Energy North America (US), L.P.**, a Delaware limited partnership ("Buyer") and **Silicon Valley Clean Energy Authority**, a California joint powers authority ("Seller"), and each individually a "Party" and together the "Parties", dated as of November 15, 2023 (the "Confirmation Effective Date") in which Seller agrees to provide to Buyer the right to the Product, as such term is defined in Article 3 of this Confirmation.

This Transaction is governed by the Edison Electric Institute Master Power Purchase and Sale Agreement between the Parties, effective as of November 28, 2016, along with any annexes (including Paragraph 10 of the Collateral Annex, as applicable) and amendments thereto (collectively, the "Master Agreement"). The Master Agreement and this Confirmation shall be collectively referred to herein as the "Agreement". Capitalized terms used but not otherwise defined in this Confirmation have the meanings ascribed to them in the Master Agreement or the Tariff (defined herein below).

ARTICLE 1. DEFINITIONS

1.1 "Alternate Capacity" means any replacement Product which Seller has elected to provide to Buyer in accordance with the terms of Section 4.5.

1.2 "Applicable Laws" means any law, rule, regulation, order, decision, judgment, or other legal or regulatory determination by any Governmental Body having jurisdiction over one or both Parties or this Transaction, including without limitation, the Tariff.

1.3 "Availability Incentive Payments" shall mean Availability Incentive Payments as defined in FERC filing ER09-1064 or such other similar term as modified and approved by FERC thereafter to be incorporated in the Tariff or otherwise applicable to CAISO.

1.4 "Availability Standards" shall mean the availability standards set forth in Section 40.9 of the Tariff.

1.5 "Buyer" has the meaning specified in the introductory paragraph hereof.

1.6 "CAISO" means the California Independent System Operator Corporation or its successor.

1.7 "Capacity Replacement Price" means (a) the price actually paid for any Replacement Capacity purchased by Buyer pursuant to Section 4.7 hereof, plus costs reasonably incurred by Buyer in purchasing such Replacement Capacity, or (b) absent a purchase of any Replacement Capacity, the market price for such Designated RA Capacity not provided at the Delivery Point. Buyer shall determine such market prices in a commercially reasonable manner. For purposes of Section 1.51 of the Master Agreement, "Capacity Replacement Price" shall be deemed to be the "Replacement Price" as used in the Master Agreement.

1.8 "Confirmation" has the meaning specified in the introductory paragraph hereof.

1.9 "Confirmation Effective Date" has the meaning specified in the introductory paragraph hereof.

1.10 "Contingent Firm RA Product" has the meaning specified in Section 3.2 hereof.

1.11 "Contract Price" means, for any Monthly Delivery Period, the price for such Monthly Delivery Period as specified in the "RA Capacity Price Table" set forth in Section 4.9.

1.12 "Contract Quantity" means, with respect to any particular Showing Month of the Delivery Period, the amount of Product (in MWs) set forth in the "Contract Quantity Table" in Section 4.3 which Seller has agreed to provide to Buyer from the Unit for such Showing Month.

1.13 "CPUC Decisions" means, CPUC Decisions 04-01-050, 04-10-035, 05-10-042, 06-06-064, 06-07-031, 07-06-029, 08-06-031, 09-06-028, 10-06-036, 11-06-022, 12-06-025, 13-06-024, 14-06-050 and subsequent decisions related to resource adequacy, as may be amended from time to time by the CPUC.

1.14 "CPUC Filing Guide" means the annual document issued by the CPUC which sets forth the guidelines, requirements and instructions for LSE's to demonstrate compliance with the CPUC's resource adequacy program.

1.15 "Delivery Period" has the meaning specified in Section 4.1 hereof.

1.16 "Delivery Point" has the meaning specified in Section 4.2 hereof.

1.17 "Designated RA Capacity" shall be equal to, for each day during any particular Showing Month of the Delivery Period, the Contract Quantity of Product for such Showing Month, including the amount of Contract Quantity that Seller has elected to provide Alternate Capacity with respect to, minus any reductions to Contract Quantity specified in Section 4.4 with respect to which Seller has not elected to provide Alternate Capacity.

1.18 "Effective Flexible Capacity" has the meaning specified for such term in the Tariff.

1.19 "Flexible Capacity Requirements" or "FCR" means the flexible capacity requirements established for LSEs by the CPUC pursuant to the CPUC Decisions, or by an LRA or other Governmental Body having jurisdiction.

1.20 "Flexible RA Product" means Designated RA Capacity consisting of FCR Attributes, and, if applicable, LAR Attributes and/or RAR Attributes.

1.21 "FCR Attributes" means, with respect to a Unit, any and all flexible resource adequacy attributes, that can be counted toward an LSE's FCR, as they are identified from time to time by the CPUC Decisions, the Tariff, an LRA or other Governmental Body having jurisdiction, exclusive of any LAR Attributes and RAR Attributes.

1.22 "FCR Showing" means the FCR compliance showings (or similar or successor showings) an LSE is required to make to the CPUC (and, to the extent authorized by the CPUC, to the CAISO) pursuant to the CPUC Decisions and the Tariff, or to an LRA having jurisdiction over the LSE.

1.23 "Generic RA Product" means Designated RA Capacity consisting of RAR Attributes and, if applicable, LAR Attributes, but not FCR Attributes.

1.24 "Governmental Body" means (i) any federal, state, local, municipal or other government; (ii) any governmental, regulatory or administrative agency, commission or other authority lawfully exercising or entitled to exercise any administrative, executive, judicial, legislative, police, regulatory or taxing authority or power; and (iii) any court or governmental tribunal.

1.25 "LAR" means local area reliability, which is any program of localized resource adequacy requirements established for jurisdictional LSEs by the CPUC pursuant to the CPUC Decisions, or by another LRA having jurisdiction over the LSE, as implemented in the Tariff. LAR may also be known as local resource adequacy, local RAR, or local capacity requirement in other regulatory proceedings or legislative actions.

1.26 "LAR Attributes" means, with respect to a Unit, any and all resource adequacy attributes (or other locational attributes related to system reliability), as they are identified from time to time by the CPUC Decisions, CAISO, LRA, or other Governmental Body having jurisdiction, associated with the physical location or point of electrical interconnection of such Unit within the CAISO Control Area, that can be counted toward LAR, exclusive of any RA Attributes which are not associated with where in the CAISO Control Area the Unit is physically located or electrically interconnected. For clarity, it should be understood that if the CAISO, LRA, or other Governmental Body, defines new or re-defines existing local areas, then such change will not result in a change in payments made pursuant to this Transaction.

1.27 "LAR Showings" means the LAR compliance showings (or similar or successor showings) an LSE is required to make to the CPUC (and, to the extent authorized by the CPUC, to the CAISO) pursuant to the CPUC Decisions, or to an LRA having jurisdiction over the LSE.

1.28 "LRA" has the meaning set for in the Tariff for the term "Local Regulatory Authority".

1.29 "LSE" has the meaning specified in the Tariff for the term "Load Serving Entity".

1.30 "Master Agreement" has the meaning specified in the introductory paragraph hereof.

1.31 "Monthly Delivery Period" means each calendar month during the Delivery Period and shall correspond to each Showing Month.

1.32 "Net Qualifying Capacity" has the meaning set forth in the Tariff.

1.33 "Non-Excusable Event" means any event, other than a Planned Outage and those events described under the definition of "Unit Firm" in the Master Agreement that excuse Seller's performance, that causes Seller to fail to perform its obligations under this Confirmation, including, without limitation, any such event resulting from (a) the negligence of the owner, operator or Scheduling Coordinator of a Unit, or (b) Seller's failure to comply, or failure to cause the owner, operator or Scheduling Coordinator of the Units to comply, with the terms of the Tariff with respect to the Units providing RA Attributes, Flexible RA Attributes or LAR Attributes, as applicable.

1.34 "Non-Availability Charges" are as defined in the Tariff.

1.35 "Notification Deadline" means, for each Showing Month, the date that is fifteen (15) Business Days before the earlier of the relevant deadlines for (a) the corresponding RAR Showings, FCR Showings and/or LAR Showings for such Showing Month, and (b) the Supply Plan filings applicable to that Showing Month.

1.36 "Outage" means any CAISO approved disconnection, separation, or reduction in the capacity of any Unit that relieves all or part of the offer obligations of the Unit consistent with the Tariff. For the avoidance of doubt, Outage shall be deemed to include Planned Outage (defined below).

1.37 "Planned Outage" means, subject to and as further described in the Tariff, a CAISO-approved planned or scheduled disconnection, separation or reduction in capacity of the Unit that is conducted for the purposes of carrying out routine repair or maintenance of such Unit.

1.38 "Product" has the meaning specified in Article 3 hereof.

1.39 "RA Capacity" means the qualifying and deliverable capacity of the Unit for RAR and, if applicable, LAR, and FCR purposes for the Delivery Period, as determined by the CAISO or other Governmental Body authorized to make such determination under Applicable Laws. RA Capacity encompasses the applicable RA Attributes, and if applicable, LAR Attributes and FCR Attributes of the capacity provided by a Unit.

1.40 "RA Capacity Payment" has the meaning specified in Section 4.9 hereof.

1.41 "RAR" means the resource adequacy requirements, exclusive of LAR established for LSEs by the CPUC pursuant to the CPUC Decisions, or by an LRA or other Governmental Body having jurisdiction.

1.42 "RAR Attributes" means, with respect to a Unit, any and all resource adequacy attributes, as identified and existing as of the Confirmation Date by the Tariff, CPUC Decisions, LRA, or any Governmental Body having jurisdiction that can be counted toward RAR, exclusive of any LAR Attributes and FCR Attributes.

1.43 "RAR Showings" means the RAR compliance showings (or similar or successor showings) an LSE is required to make to the CPUC (and/or, to the extent authorized by the CPUC, to the CAISO), pursuant to the Tariff or CPUC Decisions, or to an LRA having jurisdiction.

1.44 "Replacement Capacity" has the meaning specified in Section 4.7 hereof.

1.45 "Replacement Unit" means any generating unit having comparable RAR Attributes, LAR Attributes and, if applicable, FCR Attributes to the Unit(s), meeting the requirements for a Unit specified herein and meeting the requirements specified in Section 4.5.

1.46 "Resource Category" shall be as described in the CPUC Filing Guide, as such may be modified, amended, supplemented or updated from time to time.

1.47 "Scheduling Coordinator" has the same meaning as in the Tariff.

1.48 "Seller" has the meaning specified in the introductory paragraph hereof.

1.49 "Showing Month" shall be the calendar month during the Delivery Period that is the subject of the RAR Showing, LAR Showing, and/or FCR Showing, as applicable, as set forth in the CPUC Decisions or Tariff. For illustrative purposes only, the monthly RAR Showing made in June is for the Showing Month of August.

1.50 "Supply Plan" has the meaning specified in the Tariff.

1.51 "Tariff" means the tariff and protocol provisions of the CAISO, as amended or supplemented from time to time. For purposes of Article 5, the Tariff refers to the tariff and protocol provisions of the CAISO as they exist on the Confirmation Effective Date.

1.52 "Transaction" has the meaning specified in the introductory paragraph hereof.

1.53 "Unit" or "Units" shall mean the generation assets described in Article 2 hereof (including any Replacement Units), from which RA Capacity is provided by Seller to Buyer.

1.54 "Unit EFC" means the Effective Flexible Capacity set by the CAISO for the applicable Unit. If the CAISO adjusts the Unit EFC after the Confirmation Effective Date, then for the period in which the adjustment is effective, the Unit EFC shall be deemed the lessor of (i) the Unit EFC as of the Confirmation Effective Date, or (ii) the CAISO-adjusted Effective Flexible Capacity.

1.55 "Unit NQC" means the Net Qualifying Capacity set by the CAISO for the applicable Unit. If the CAISO adjusts the Net Qualifying Capacity of a Unit after the Confirmation Effective Date, then for the period in which the adjustment is effective, the Unit NQC shall be deemed the lesser of (i) the Unit NQC as of the Confirmation Effective Date, or (ii) the CAISO-adjusted Net Qualifying Capacity.

ARTICLE 2. UNIT INFORMATION

Name	Elk Hills Power
Location	4026 Skyline Road, Tupman, CA
CAISO Resource ID	ELKHIL_2_PL1X3
Unit SCID	EMM2
Unit NQC	380 MWs
Unit EFC	NA
Resource Type	Natural Gas Fired
Resource Category (1, 2, 3 or 4)	4
Flexible RAR Category (1, 2 or 3)	NA
Path 26 (North or South)	North
Local Capacity Area (if any, as of Confirmation Effective Date)	NA
Deliverability restrictions, if any, as described in most recent CAISO deliverability assessment	None
Run Hour Restrictions	None

ARTICLE 3. RESOURCE ADEQUACY CAPACITY PRODUCT

3.1 During the Delivery Period, Seller shall provide to Buyer, pursuant to the terms of this Confirmation, the Designated RA Capacity in accordance with the product types selected in Section 3.2 (the "Product") and the Contract Quantity set forth in Section 4.3. The Product does not confer to Buyer any right to the electrical output from the Units, other than the right to include the Designated RA Capacity associated with the Contract Quantity in RAR Showings, LAR Showings, and/or FCR Showings, as applicable, and any other capacity or resource adequacy markets or proceedings as specified in this Confirmation. Specifically, no energy or ancillary services associated with any Unit is required to be made available to Buyer as part of this Transaction and Buyer shall not be responsible for compensating Seller for Seller's commitments to the CAISO required by this Confirmation. Seller retains the right to sell any pursuant to the Tariff any RA Capacity from a Unit in excess of that Unit's Contract Quantity and any RA Attributes, LAR Attributes or FCR Attributes not otherwise transferred, conveyed, or sold to Buyer under this Confirmation.

3.2 Product Type

☐ Flexible RA Product
The Designated RA Capacity is a Flexible RA Product. For avoidance of doubt, the Flexible RA Product to be delivered by Seller to Buyer hereunder shall include the following Product attributes:

[ ] FCR Attributes with LAR Attributes
[ ] FCR Attributes with RAR Attributes

☒ Generic RA Product
The Designated RA Capacity is a Generic RA Product. For avoidance of doubt, the Generic RA Product to be delivered by Seller to Buyer hereunder shall include the following Product attributes:

[X] RAR Attributes
[ ] LAR Attributes

3.3 Delivery Obligation

☒ Contingent Firm RA Product
Seller shall provide Buyer with Designated RA Capacity from the Units. If those Units are not able to provide the full amount of the Contract Quantity as a result of a Non-Excusable Event, then, subject to Section 4.4, Seller shall have the option to notify Buyer in writing by the Notification Deadline that either (a) Seller will not provide the full Contract Quantity during the period of such non-availability; or (b) Seller will supply Alternate Capacity to fulfill the remainder of the Contract Quantity during such period. If Seller fails to provide Buyer with the Contract Quantity as a result of a Non-Excusable Event and has failed to notify Buyer in writing by the Notification Deadline that it will not provide the full Contract Quantity during the period of such non availability as provided in Section 4.4, then Seller shall be liable for damages and/or required to indemnify Buyer for any resulting penalties or fines pursuant to the terms of Sections 4.7 and 4.8 hereof. Notwithstanding anything herein to the contrary, if Seller provides less than the full amount of the Contract Quantity for any reason other than a Non-Excusable Event or in accordance with Section 4.4, and Seller provides notice of such by the Notification Deadline, Seller is not obligated to provide Buyer with Alternate Capacity or to indemnify Buyer for any resulting penalties or fines. The Product is a Contingent Firm RA Product, and with respect to this Contingent Firm RA Product, "Contingent Firm" shall have the same meaning as "Unit Firm" in the Master Agreement.

☐ Firm RA Product
Seller shall provide Buyer with Designated RA Capacity from the Unit(s) in the amount of the Contract Quantity. If the Units are not available to provide the full amount of the Contract Quantity for any reason other than Force Majeure, including without limitation any Outage or any adjustment of the RA Capacity of any Unit, pursuant to Section 4.4, then, Seller shall provide Buyer with Designated RA Capacity from one or more Replacement Units pursuant to Section 4.5 hereof. If Seller fails to provide Buyer with replacement Designated RA Capacity from Replacement Units pursuant to Section 4.5, then Seller shall be liable for damages and/or required to indemnify Buyer for penalties or fines pursuant to the terms of Sections 4.7 and 4.8 hereof.

ARTICLE 4. DELIVERY AND PAYMENT

4.1 Delivery Period

The Delivery Period shall be: [redacted]

4.2 Delivery Point

The Delivery Point for each Unit shall be the CAISO Control Area, and if applicable, the LAR region in which the Unit is electrically interconnected.

4.3 Contract Quantity

The Contract Quantity for each Monthly Delivery Period shall be:

Contract Quantity Table

Contract Month / Year	Contract Quantity (MWs)
[redacted]	[redacted]

4.4 Adjustments to Contract Quantity

(a) Planned Outages: If Seller is unable to provide the applicable Contract Quantity for all or a portion of a Showing Month due to a Planned Outage of a Unit, then Seller shall have the option, but not the obligation, upon written notice to Buyer by the Notification Deadline, to either (a) reduce the Contract Quantity in accordance with the Planned Outage for such portion of the Showing Month; or (b) provide Alternate Capacity up to the Contract Quantity for the applicable portion of such Showing Month.

(b) Reductions in Unit NQC: If the Product is both (i) Generic RA Product, and (ii) Contingent Firm RA Product, then Seller's obligation to deliver the applicable Contract Quantity for any Showing Month may also be reduced by Seller if the Unit experiences a reduction in Unit NQC as determined by the CAISO. If the Unit experiences such a reduction in Unit NQC then Seller has the option, but not the obligation, upon written notice to Buyer by the Notification Deadline, to provide the applicable Contract Quantity for such Showing Month from (i) the same Unit, provided the Unit has sufficient remaining and available Product, and/or (ii) from Replacement Units, provided, that in each case Seller provides and identifies such Replacement Units in accordance with Section 4.5.

(c) If Product is both (i) Flexible RA Product specified under Section 3.2, and (ii) Contingent Firm RA Product specified under Section 3.3, then Seller's obligation to deliver the applicable Contract Quantity for any Showing Month may also be reduced if the Unit experiences a reduction in Unit EFC or Unit NQC as determined by the CAISO. If the Unit experiences such a reduction in Unit EFC or Unit NQC, then Seller has the option, but not the obligation, to provide the applicable Contract Quantity for such Showing Month from (i) the same Unit, provided the Unit has sufficient remaining and available Product and/or (ii) Alternate Capacity up to the Contract Quantity.

4.5 Alternative Capacity and Replacement Units

(a) If Seller elects or is unable to provide the full Contract Quantity for any Showing Month for any reason, including, without limitation, due to one of the reasons specified in Section 4.4, or Seller desires to provide the Contract Quantity for any Showing Month from a different generating unit other than the Unit, then Seller, at no additional cost to Buyer, may provide Buyer with Alternate Capacity from one or more Replacement Units, with the total amount of Product provided to Buyer from the Unit and Replacement Units up to an amount equal to the Contract Quantity for the applicable Showing Month; provided that in each case, Seller shall notify Buyer in writing of such Replacement Units no later than the Notification Deadline. If Seller notifies Buyer in writing as to the particular Replacement Units and such Units meet the requirements of this Section 4.5, then such Replacement Units shall be automatically deemed a Unit for purposes of this Confirmation for the remaining portion of that Showing Month. that Showing Month and Seller shall not be liable to Buyer or any other party for damages, including any cover costs, and/or required to indemnify Buyer for costs, penalties or fines pursuant to the terms of Sections 4.7 and 4.8 hereof if and only if Seller has provided Buyer with timely notice pursuant to this Section 4.5(a) of Seller's intent not to provide Alternate Capacity in an amount equal to the Contract Quantity of that Showing Month.

(b) If Seller is unable to provide the full Contract Quantity for any Showing Month for any reason, including, without limitation, due to one of the reasons specified in Section 4.4 and Seller does not provide Alternate Capacity in an amount equal to that which allows Seller to provide the full Contract Quantity for that Showing Month, then Buyer may, but shall not be required to, purchase Replacement Capacity.

4.6 Delivery of Product

Seller shall provide Buyer with the Designated RA Capacity of Product for each Showing Month consistent with the following:

Seller shall, on a timely basis, submit, or cause the Unit's Scheduling Coordinator to submit, Supply Plans to identity and confirm the Designated RA Capacity provided to Buyer for each Showing Month so that the total amount of Designated RA Capacity identified and confirmed for such Showing Month equals the Designated RA Capacity, unless specifically requested not to do so by Buyer.

4.7 Damages for Failure to Provide Designated RA Capacity

If Seller fails to provide Buyer with the Designated RA Capacity of Product for any Showing Month, and such failure is not excused under the terms of the Confirmation, then the following shall apply:

(a) Buyer may, but shall not be required to, replace any portion of the Designated RA Capacity not provided by Seller with capacity having equivalent RA Attributes, LAR Attributes and/or FCR Attributes as the Designated RA Capacity not provided by Seller; provided, however, that if any portion of the Designated RA Capacity that Buyer is seeking to replace is Designated RA Capacity having solely RAR Attributes and no LAR Attributes or FCR Attributes, and no such RA Capacity is available, then Buyer may replace such portion of the Designated RA Capacity with capacity having any applicable FCR Attributes and/or LAR Attributes ("Replacement Capacity"). Buyer may enter into purchase transactions with one or more parties to replace any portion of Designated RA Capacity not provided by Seller so long as such transactions are done at prevailing market prices. Additionally, Buyer may enter into one or more arrangements to repurchase its obligation to sell and deliver capacity to another party, and, to the extent such transactions are done at prevailing market prices, such arrangements shall be considered equivalent to the procurement of Replacement Capacity. Buyer shall use commercially reasonable efforts to minimize damages when procuring any Replacement Capacity.

(b) Seller shall pay to Buyer an amount equal to the positive difference, if any, between (i) the sum of (A) the Replacement Capacity times the Capacity Replacement Price, and (B) the Designated RA Capacity not provided by Seller (less any Replacement Capacity) times the Capacity Replacement Price; and (ii) the Designated RA Capacity not provided by Seller times the Contract Price for that month. If Seller fails to pay these damages, then Buyer may in addition to any other remedies that may be available to Buyer, offset those damages owed it against any future amounts it may owe to Seller under this Confirmation pursuant to Article 6 of the Master Agreement. Seller will not be in breach of this Confirmation for any failure to provide any Designated RA Capacity so long as Seller complies with the provisions of this Section 4.7.

4.8 Indemnities for Failure to Deliver Contract Quantity

Subject to any adjustments made pursuant to Section 4.4, Seller agrees to indemnify, defend and hold harmless Buyer from any penalties, fines or costs assessed against Buyer by the CPUC or the CAISO, resulting from any of the following:

(a) Seller's failure to provide any portion of the Designated RA Capacity if such failure is not excused under the terms of the Product or by Buyer's failure to perform;

(b) Seller's failure to provide notice of the non-availability of any portion of Designated RA Capacity as required under Sections 4.5; or

(c) A Unit Scheduling Coordinator's failure to timely submit accurate Supply Plans that identify Buyer's right to the Designated RA Capacity purchased hereunder.

With respect to the foregoing, the Parties shall use commercially reasonable efforts to minimize such penalties, fines and costs; provided, that in no event shall Buyer be required to use or change its utilization of its owned or controlled assets or market positions to minimize these penalties and fines. If Seller fails to pay the foregoing penalties, fines or costs, or fails to reimburse Buyer for those penalties, fines or costs, then Buyer may, in addition to any other remedies that may be available to Buyer, offset those penalties, fines or costs against any future amounts it may owe to Seller under this Confirmation.

4.9 RA Capacity Payment

In accordance with the terms of Article 6 of the Master Agreement, Buyer shall make an RA Capacity Payment to Seller for each Unit, in arrears, after the applicable Showing Month. The RA Capacity Payment shall be equal to the sum for each day during the Showing Month of the product of (a) the applicable Contract Price for such Showing Month, multiplied by (b) the Designated RA Capacity for the Monthly Delivery Period, multiplied by (c) 1,000. The final product of this RA Capacity Payment calculation shall be rounded to the nearest penny (i.e., two decimal places); provided, however, that the Monthly RA Capacity Payment shall be prorated to reflect any portion of Designated RA Capacity that was not delivered pursuant to Section 4.4 at the time of the CAISO filing for the respective Showing Month.

RA Capacity Price Table

Contract Month / Year	Contract Price
[redacted]	[redacted]

4.10 Allocation of Other Payments and Costs

Seller shall be entitled to receive and retain all revenues that Buyer is not expressly entitled to receive pursuant to this Agreement, including all revenues that Seller may receive from the CAISO or any other third party with respect to any Unit for (a) start-up, shut-down, and minimum load costs, (b) revenue for ancillary services, (c) energy sales, (d) any revenues for black start or reactive power services, or (e) the sale of the unit-contingent call rights on the generation capacity of the Unit to provide energy to a third party, so long as such rights do not confer on such third party the right to claim any portion of the RA Capacity sold hereunder in order to make an RAR Showing, LAR Showing, FCR Showing, or any similar capacity or resource adequacy showing with the CAISO or CPUC. Buyer acknowledges and agrees that all Availability Incentive Payments are for the benefit of Seller and for Seller's account, and that Seller shall receive, retain, or be entitled to receive all credits, payments, and revenues, if any, resulting from Seller achieving or exceeding Availability Standards. The Parties acknowledge and agree that any Non-Availability Charges are the responsibility of Seller, and for Seller's account and Seller shall be responsible for all fees, charges, or penalties, if any, resulting from Seller failing to achieve Availability Standards. If a centralized capacity market develops within the CAISO region, Buyer will have exclusive rights to offer, bid, or otherwise submit Designated RA Capacity provided to Buyer pursuant to this Confirmation for re-sale in such market, and retain and receive any and all related revenues.

ARTICLE 5. CAISO OFFER REQUIREMENTS

During the Delivery Period, except to the extent any Unit is in an Outage, or is affected by an event of Force Majeure that results in a partial or full outage of that Unit, Seller is responsible for either scheduling or causing the Unit's Scheduling Coordinator to schedule with, or make available to, the CAISO each Unit's Designated RA Capacity in compliance with the Tariff, and performing, or causing the Unit's Scheduling Coordinator, owner, or operator, as applicable, to perform all obligations under the Tariff that are associated with the sale of Designated RA Capacity hereunder. Buyer shall have no liability for the failure of Seller or the failure of any Unit's Scheduling Coordinator, owner, or operator to comply with such Tariff provisions, including any penalties or fines imposed on Seller or the Unit's Scheduling Coordinator, owner, or operator for such noncompliance.

ARTICLE 6. CHANGE IN LAW

If any statutes, rules, regulations, permits or authorizations are enacted, amended, granted or revoked which have the effect of changing the transfer and sale procedure for Product set forth in this Confirmation so that the implementation of this Confirmation becomes impossible or impracticable, or if a new product that is a derivative of the Product(s) contracted for herein is created, the Parties hereto agree to negotiate in good faith to amend this Confirmation, to conform with such new statutes, regulations, or rules in order to maintain the original intent of the Parties under this Confirmation or to provide Buyer with Product pursuant to another program if possible; provided, however, that neither Party shall be obligated to enter into any such amendment except in its sole discretion.

ARTICLE 7. OTHER BUYER AND SELLER COVENANTS

7.1 Further Assurances

Buyer and Seller shall, throughout the Delivery Period, take all commercially reasonable actions and execute any and all documents or instruments reasonably necessary to ensure Buyer's right to the use of

the Contract Quantity for the sole benefit of Buyer's applicable RAR, LAR and/or FCR, as applicable, including, without limitation:

(a) Cooperating with and providing, and in the case of Seller causing each Unit's Scheduling Coordinator, owner, or operator to cooperate with and provide requested supporting documentation to the CAISO, the CPUC, or any other Governmental Body responsible for administering RAR, LAR, and/or FCR under Applicable Laws, to certify or qualify the Contract Quantity as RA Capacity and Designated RA Capacity. Such actions shall include, without limitation, providing information requested by the CAISO, CPUC, or by an LRA having jurisdiction, to demonstrate for each month of the Delivery Period the ability to deliver the Contract Quantity from each Unit to the CAISO Controlled Grid for the minimum hours required to qualify as RA Capacity, and providing information requested by the CPUC, the CAISO or other Governmental Body having jurisdiction to administer the applicable RAR, LAR and FCR to demonstrate that the Contract Quantity can be delivered to the CAISO Controlled Grid pursuant to the "deliverability" standards established by the CAISO or other Governmental Body having jurisdiction to administer RAR, LAR and/or FCR; and

(b) Negotiating in good faith to make necessary amendments, if any, to this Confirmation, which remain subject to agreement of such Parties, in each Party's sole discretion, to conform this Transaction to subsequent clarifications, revisions, or decisions rendered by the CPUC, FERC, or other Governmental Body having jurisdiction to administer the applicable RAR or FCR so as to maintain the purpose and intent of the Transaction agreed to by the Parties on the Confirmation Effective Date.

7.2 Seller Representations and Warranties

Seller represents, warrants and covenants to Buyer that, throughout the Delivery Period:

(a) Seller owns or has the exclusive right to the RA Capacity sold under this Confirmation from each Unit, and shall furnish Buyer, the CAISO, CPUC, or other jurisdictional LRA of or other Governmental Body with such evidence as may reasonably be requested to demonstrate such ownership or exclusive right;

(b) No portion of the Contract Quantity has been committed by Seller to any third party in order to satisfy RAR, LAR, FCR or analogous obligations in CAISO markets, other than pursuant to an RMR Agreement between the CAISO and either Seller or the Unit's owner or operator;

(c) No portion of the Contract Quantity has been committed by Seller in order to satisfy RAR, LAR, FCR, or analogous obligations in any non-CAISO market;

(d) Each Unit is connected to the CAISO Controlled Grid, is within the CAISO Control Area, or is under the control of CAISO;

(e) The owner or operator of each Unit is obligated to comply with Applicable Laws, including the Tariff, relating to RA Capacity, RAR, LAR and FCR;

(f) If Seller is the owner of any Unit, the cumulative amounts of LAR Attributes, RAR Attributes and FCR Attributes that Seller has sold, assigned or transferred for any Unit does not exceed that Unit's RA Capacity;

(g) With respect to the RA Capacity provided under this Confirmation, Seller shall, and each Unit's Scheduling Coordinator is obligated to, comply with Applicable Laws, including the Tariff, relating to RA Capacity, RAR, LAR and FCR;

(h) Seller has notified the Scheduling Coordinator of each Unit that Seller has transferred the Designated RA Capacity to Buyer, and the Scheduling Coordinator is obligated to deliver the Supply Plans in accordance with the Tariff;

(i) Seller has notified the Scheduling Coordinator of each Unit that Seller is obligated to cause each Unit's Scheduling Coordinator to provide to Buyer, no later than the Notification

Deadline, of the Designated RA Capacity of each Unit that is to be submitted in the Supply Plan associated with this Agreement for the applicable period; and

(j) Seller has notified each Unit's Scheduling Coordinator that Buyer is entitled to the revenues set forth in Section 4.10 of this Confirmation, and such Scheduling Coordinator is obligated to promptly deliver those revenues to Buyer, along with appropriate documentation supporting the amount of those revenues.

ARTICLE 8. CONFIDENTIALITY

Notwithstanding any agreement or obligation of confidentiality or non-disclosure between Buyer and Seller, the Parties agree that Buyer may disclose the Designated RA Capacity under this Transaction to any Governmental Body, the CPUC, the CAISO or any LRA having jurisdiction in order to support its LAR Showings, RAR Showings and/or FCR Showings, as applicable, and Seller may disclose the transfer of the Designated RA Capacity under this Transaction to the SC of each Unit in order for such SC to timely submit accurate Supply Plans. In addition, If Buyer becomes legally compelled (by interrogatories, requests for information or documents, subpoenas, summons, civil investigative demands, or similar processes or otherwise in connection with any litigation or to comply with any applicable law, order, regulation, ruling, regulatory request, accounting disclosure rule or standard or any exchange, control area or independent system operator rule, or a request to Buyer under the California Public Records Act (California Government Code Section 6250 et seq.)) to disclose any confidential information of Seller, Buyer may do so after providing Seller with prompt notice so that Seller, at its sole expense, may seek an appropriate protective order or other appropriate remedy against disclosure. Notwithstanding anything to the contrary in Section 10.11 of the Master Agreement, Buyer may make portions of this Confirmation available to the public as part of Buyer's process of seeking approval from its Board of Directors for this Transaction.

ARTICLE 9. BUYER'S RE-SALE OF PRODUCT

Buyer may re-sell all or a portion of the Product hereunder. In the event of any such re-sale, Seller shall cause its Scheduling Coordinator to cooperate reasonably with Buyer and Buyer's transferee (and their respective Scheduling Coordinators) to allow such transferee to utilize the re-sold Product.

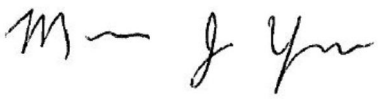
ARTICLE 10. MARKET BASED RATE AUTHORITY

Upon Buyer's written request, Seller shall, in accordance with Federal Energy Regulatory Commission (FERC) Order No. 697, submit a letter of concurrence in support of any affirmative statement by Buyer that this contractual arrangement does not transfer "ownership or control of generation capacity" from Seller to Buyer as the term "ownership or control of generation capacity" is used in 18 CFR Section 35.42. Seller shall not, in filings, if any, made subject to Order Nos. 652 and 697, claim that this contractual arrangement conveys ownership or control of generation capacity from Seller to Buyer.

ARTICLE 11. COLLATERAL REQUIREMENTS

The Parties further agree that for the purposes of calculating the Collateral Requirement pursuant to Paragraph 3 of the Collateral Annex, the Current Mark-to-Market Value for this Transaction is deemed to be zero.

ACKNOWLEDGED AND AGREED TO AS OF THE CONFIRMATION EFFECTIVE DATE.

SHELL ENERGY NORTH AMERICA (US), L.P.	**SILICON VALLEY CLEAN ENERGY AUTHORITY**
By: 	By: DocuSigned by: Girish Balachandran 5CA64B9AC4C24C3...
Name: Michael J. Yen	Name: Girish Balachandran
Title: Confirmations Team Lead	Title: CEO
Date: November 15, 2023	Date: 11/15/2023

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Confirmation for Bilateral Import Capability Transfer

This confirmation letter ("Confirmation") confirms the transaction between **Shell Energy North America (US), L.P.**, a Delaware limited partnership ("Seller"), and **Silicon Valley Clean Energy Authority,** a Pennsylvania limited liability company ("Buyer"), each individually a "Party" and together the "Parties", effective as of November 15, 2023 (the "Confirmation Effective Date") in which Seller agrees to sell and deliver, and Buyer agrees to purchase and receive, the Product, as such term is defined in Section 3 of this Confirmation (the "Transaction").

This Transaction is governed by the Edison Electric Institute Master Power Purchase and Sale Agreement between the Parties, effective as of November 28, 2016, along with any annexes (including Paragraph 10 of the Collateral Annex, as applicable) and amendments thereto (collectively, the "Master Agreement"). The Master Agreement and this Confirmation shall be collectively referred to herein as the "Agreement". Capitalized terms used but not otherwise defined in this Confirmation have the meanings ascribed to them in the Master Agreement or the Tariff (defined herein below).

1. Definitions

1.1 "Bilateral Import Capability Transfer" is the transfer of Remaining Import Capability from one Market Participant to another, as described in the Tariff.

1.2 "CAISO" means the California Independent System Operator Corporation, or any or any successor entity performing the same functions.

1.3 "CIRA" has the meaning in Section 3.3.

1.4 "CIRA System Failure" means a disruption in transfer of Product caused solely by the CIRA System that is not within the control of, or the result of the negligence of, either Party and which could not have been avoided by the exercise of due diligence.

1.5 "Confirmation" has the meaning specified in the introductory paragraph.

1.6 "Confirmation Effective Date" has the meaning specified in the introductory paragraph.

1.7 "Contract Price" has the meaning set forth in Section 4.2.

1.8 "Contract Quantity" has the meaning set forth in Section 3.4.

1.9 "CPUC" means the California Public Utilities Commission.

1.10 "Governmental Body" means any federal, state, local, municipal or other government; any governmental, regulatory or administrative agency, commission or other authority lawfully exercising or entitled to exercise any administrative, executive, judicial, legislative, police, regulatory or taxing authority or power; and any court or governmental tribunal.

1.11 "Master Agreement" has the meaning specified in the introductory paragraph.

1.12 "Net Qualifying Capacity" has the meaning set forth in the Tariff.

1.13 "Period of Delivery" means the months defined in Section 2.1, inclusive.

1.14 "Product" has the meaning specified in Section 3.1.

1.15 "Seller" has the meaning specified in the introductory paragraph.

1.16 "Tariff" means the tariff and protocol provisions, including any current CAISO-published "Operating Procedures" and "Business Practice Manuals," as amended or supplemented from time to time, of the CAISO.

1.17 "Transaction" has the meaning specified in the introductory paragraph.

2. Term

2.1 Period of Delivery

The "Period of Delivery" shall be [redacted].

2.2 Binding Nature

This Agreement shall be effective and binding as of the Confirmation Effective Date.

3. Transaction

3.1 Product

Seller shall transfer in the manner set forth in Section 3.3, to Buyer the Remaining Import Capability, as such term is defined by the Tariff (the "Product") in the Contract Quantity, for the Period of Delivery, and at the applicable Contract Price.

3.2 Delivery Point

Name	Bilateral Import Capability Transfer
CAISO BG/MSL Name	NOB_ITC

3.3 Performance

Within three (3) Business Days of the Confirmation Effective Date, Seller shall transfer to Buyer the Product in the amount of the Contract Quantity by registering the transfer with the CAISO as a Bilateral Import Transfer Capability as such terms is defined by the Tariff, and completing any other action of documentation required by the CAISO to effect such transfer, including registering such transfer in the CAISO Customer Interface for Resource Adequacy (CIRA) system. Upon Seller registering transfer with CAISO, Buyer shall immediately confirm the transfer with CAISO by e-mail or by confirming such transfer is registered in the CIRA system.

3.4 Contract Quantity

For the Period of Delivery, Seller shall transfer the Product in the total amount ("Contract Quantity"), as follows:

Contract Quantity Table

Month - Year	Quantity (MW)
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]

4. Payment

4.1 One-Time Payment

Buyer shall make a payment to Seller for the Product within ten (10) Business Days after the later of (a) Seller's performance and CAISO's email indicating successful transfer, or confirmation that such transfer is registered in the CIRA system, as described in Section 3.3 or (b) receipt of Seller's invoice. This payment is calculated as follows:

Payment = (A X B X C) **Error! Digit expected.**

where:

A= Contract Price (in $/kW-month)

B= Contract Quantity (in MW) transferred by Seller

C= 1000kW/MW

The payment shall be rounded to two decimal places.

4.2 Contract Price

CONTRACT PRICE TABLE

Month - Year	Contract Price ($/kW-month)
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]

5. CIRA System Failure

5.1 If a Party is unable to transfer or receive Product due to a CIRA System Failure, the affected Party shall, within two (2) Business Days from its discovery of the CIRA System Failure, provide the other Party with Notice and full details identifying the cause of the CIRA System Failure. Each Party shall use reasonable efforts to cause transfer or receipt of the Product.

5.2 Neither Party's failure to transfer or receive Product due solely to a CIRA System Failure constitutes an Event of Default or failure to deliver Product.

6. Confidentiality

The Parties agree that Buyer and Seller may disclose this Agreement to the CPUC, CAISO and any Governmental Body, as required by Applicable Law; provided, that each disclosing Party shall use reasonable efforts to limit, to the extent possible, the ability of any such applicable Governmental Body, CAISO, or SC to further disclose such information. Notwithstanding the foregoing, the Parties may disclose the relevant terms of this Transaction to the CAISO to effectuate Seller's performance and the transfer of the Product and the CAISO may publicly disclose the transfer of the Product from Seller to Buyer as indicated in the Tariff promptly following Seller's performance. In addition, in the event Buyer resells all or any portion of the Product, Buyer shall be permitted to disclose to the other party to such resale transaction all such information necessary to effect such resale transaction, other than the Contract Price. Buyer acknowledges that Seller is a public entity subject to the requirements of the California Public Records Act (Cal. Gov. Code section 6250 et seq.). Buyer acknowledges that Seller may submit information to Buyer that Seller considers confidential, proprietary, or trade secret information pursuant the Uniform Trade Secrets Act (Cal. Civ. Code section 3426 et seq.), or otherwise protected from disclosure pursuant to an exemption to the California Public Records Act (Government Code sections 6254 and 6255). Upon request or demand of any third person or entity not a party to this Agreement ("Requestor") to Buyer pursuant to the California Public Records Act for production, inspection and/or copying of this Agreement or any information designated as confidential by Seller ("Requested Confidential Information"), Buyer as soon practical shall notify Seller in writing that such request has been made. Parties agree that pricing information contained in the Confirmation is confidential information. Buyer agrees to redact such pricing information in any disclosure, in accordance with the statutory exemption for proprietary information in Section 6254.15 of the Act.

7. Counterparts

This Confirmation may be signed in any number of counterparts with the same effect as if the signatures to the counterparts were upon a single instrument. Delivery of an executed signature page of this Confirmation by electronic mail transmission (including PDF) shall be the same as delivery of a manually executed signature page.

[Signature page follows]

IN WITNESS WHEREOF, the Parties have caused this Confirmation to be executed by their authorized representative effective as of the Confirmation Effective Date.

BUYER	SELLER
Silicon Valley Clean Energy Authority,	
A California joint powers authority	**Shell Energy North America (US), L.P.**
By: DocuSigned by: Girish Balachandran 5CA64B9AC4C24C3...	By: M J Yen
Name: Girish Balachandran	Name: Michael J. Yen
Title: CEO	Title: Confirmations Team Lead

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WSPP RESOURCE ADEQUACY CONFIRMATION

This Confirmation confirms the transaction between Silicon Valley Clean Energy, a California joint powers authority ("Seller") and Central Coast Community Energy ("Purchaser"), and each individually a "Party" and together the "Parties", dated as of the last dated signature on the signature page hereto (the "Effective Date"), by which Seller agrees to sell and deliver, and Purchaser agrees to purchase and receive, the Product (the "Transaction"). This Transaction is governed by the WSPP Agreement dated August 26, 2022 (the "WSPP Agreement"). The WSPP Agreement and this Confirmation, including any applicable appendices, exhibits or amendments thereto, shall be collectively referred to herein as the "Agreement" and will constitute a single agreement between the Parties with respect to the Transaction. Capitalized terms not otherwise defined in this Confirmation or the WSPP Agreement are defined in the Tariff.

ARTICLE 1
TRANSACTION TERMS

Product, Delivery Period, Contract Quantity, Contract Price and other specifics of the Product are in Appendix B. Appendices A, B, C, and D are incorporated into this Confirmation.

☐ Firm RA Product:

Seller shall provide Purchaser with the Product from the Unit in the amount of the Contract Quantity. If the Unit is not available to provide the full amount of the Contract Quantity for any reason, then Seller shall have the option to supply Alternate Capacity pursuant to Section 2.3 to fulfill the remainder of the Contract Quantity during such period. If Seller fails to provide Purchaser with the Contract Quantity and has failed to supply Alternate Capacity to fulfill the remainder of the Contract Quantity during such period, then Seller shall be liable for damages and/or required to indemnify Purchaser for penalties or fines pursuant to the terms of Section 2.5.

☒ Contingent Firm RA Product:

Seller shall provide Purchaser with Product from the Unit in the amount of the Contract Quantity. If the Unit is not available to provide the full amount of the Contract Quantity as a result of any reduction of the Contract Quantity from the Unit in accordance with Section 2.2, Seller shall have the option to notify Purchaser that either (a) Seller will not provide the portion of the Contract Quantity attributable to such reduction during the period of such non-availability; or (b) Seller will supply Alternate Capacity to fulfill all or a portion of the affected Contract Quantity during such period pursuant to Section 2.3. If the Unit is not available to provide the full amount of the Contract Quantity as a result of any reason other than as provided in Section 2.2, then Seller shall have the option to supply Alternate Capacity pursuant to Section 2.3 to fulfill all or a portion of the affected Contract Quantity during such period. If Seller fails to provide Purchaser with the Expected Contract Quantity from the Unit during any Showing Month and has failed to supply Alternate Capacity to fulfill the remainder of the Expected Contract Quantity during such period, then Seller shall be liable for damages and/or required to indemnify Purchaser for penalties or fines pursuant to the terms of Section 2.5.

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ARTICLE 2
DELIVERY OBLIGATIONS AND ADJUSTMENTS

2.1 Sale and Delivery of Product

(a) For each Showing Month of the Delivery Period, Seller shall sell and deliver to Purchaser, and Purchaser shall purchase and receive from Seller, the Expected Contract Quantity of the Product from the Shown Unit(s). Seller's obligation to deliver the Expected Contract Quantity of Product for the Delivery Period is firm and will not be excused for any reason. Seller shall identify the Shown Unit(s) and Expected Contract Quantity by providing Purchaser with the specific information contemplated in Appendix B no later than the Notification Deadline for the relevant Showing Month.

(b) Seller shall deliver the Expected Contract Quantity by submitting or causing to be submitted to CAISO Seller's Supply Plans, identifying in each case the Shown Unit(s) and the characteristics of the Shown Unit(s) and Product for the relevant period, as further specified in Appendix B, all in compliance with this Confirmation.

(c) Seller shall cause all Supply Plans to meet and be filed in conformance with the requirements of the CPUC and the Tariff. Seller shall submit, or cause the Shown Unit's SC to submit, (i) monthly Supply Plans and (ii) annual Supply Plans if the Effective Date is prior to the year-ahead Compliance Showing Deadline applicable for the Showing Months specified in Appendix B, in accordance with the Tariff and CPUC requirements and no later than the initial Compliance Showing Deadline for such Showing Month, identifying and confirming the transfer of the Expected Contract Quantity of Product to Purchaser for each Showing Month. The total amount of Product identified and confirmed for such Showing Month shall equal the Expected Contract Quantity.

(d) In no event shall a Shown Unit utilize coal or coal materials as a source of fuel. A Shown Unit must be a specific resource that is connected directly to the CAISO controlled grid or be under the operational control of CAISO. A Shown Unit may not be an unspecified import.

(e) If CAISO rejects either the Supply Plan or the Resource Adequacy Plan with respect to any part of the Expected Contract Quantity for the Shown Unit(s) in any Showing Month, the Parties shall confer, make such corrections as are necessary for acceptance, and resubmit the corrected Supply Plan or Resource Adequacy Plan for validation before the applicable deadline for the Showing Month.

(f) The Product is delivered and received when the CIRA Tool shows that the Supply Plan submitted in compliance with this Confirmation, including Purchaser's instructions to withhold all or part of the Expected Contract Quantity from Seller's Supply Plan pursuant to Section 2.7, has been accepted for the Product from the Shown Unit(s) by CAISO. Seller has failed to deliver the Product if (i) Purchaser

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has elected to submit the Product from the Shown Unit in its Resource Adequacy Plan and such submission is accepted by the CPUC and the CAISO but the Supply Plan and Resource Adequacy Plan are not matched in the CIRA Tool and are rejected by CAISO notwithstanding performance of Section 2.1(e) or (ii) Seller fails to submit the volume of Expected Contract Quantity for any Showing Month in such amount as instructed by Purchaser for the applicable Showing Month. Seller will not have failed to deliver the Expected Contract Quantity if Purchaser fails or chooses not to submit the Shown Unit(s) and the Product in its Resource Adequacy Plan with the CPUC or CAISO.

(g) The Shown Unit(s) must not have characteristics that would trigger the need for Purchaser or Seller to file an advice letter or other request for authorization with the CPUC or for Purchaser to make a compliance filing pursuant to California Public Utilities Code Section 380.[1]

2.2 Reductions in Contract Quantity

(a) If Seller is providing Contingent Firm RA Product, Seller's obligation to deliver the Contract Quantity for each Showing Month may be reduced at Seller's option by the amount of any Planned Outages which exist with respect to any portion of the Unit generating capacity during the applicable Showing Month; provided, (i) Seller notifies Purchaser by the Notification Deadline applicable to that Showing Month of the amount of Product from the Unit that Purchaser may include in Purchaser's Compliance Showings applicable to that month as a result of such Planned Outage, and (ii) such reduction is able to be reflected on the Supply Plans in accordance with the Tariff.

(b) In the event Seller is unable to provide the Contract Quantity for any portion of a Showing Month because of a Planned Outage of a Unit, Seller has the option, but not the obligation, to provide Product for such portions of such Showing Month from Replacement Units, provided Seller provides and identifies such Replacement Units in accordance with Section 2.3.

2.3 Seller's Option To Provide Alternate Capacity

If Seller is unable to provide the full Contract Quantity for a Showing Month for any reason, including, without limitation, as provided in Section 2.2, or Seller desires to provide some or all of the Contract Quantity for any Showing Month from a different generating unit other than the Unit, then Seller may, at no cost to Purchaser, provide Purchaser with replacement Product from one or more Replacement Units in an amount such that the total amount of Product provided to Purchaser from the Unit and any Replacement Unit(s) for each Showing Month is not more than the Contract Quantity, provided that in each case:

(a) Seller shall notify Purchaser in writing of its intent to provide Alternate Capacity and shall identify the proposed Replacement Units from which such Alternate

[1] For example, contracts with Once-Through Cooling resources that terminate one year or less before the State Water Resources Control Board compliance deadline require an advice letter filing under CPUC Decision 12-04-046

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Capacity shall be provided no later than the Notification Deadline for Purchaser's Compliance Showings related to such Showing Month;

(b) The proposed Replacement Units must (i) be accepted by the CAISO, and (ii) otherwise satisfy the requirements of this Agreement;

(c) Seller shall, or shall cause the Unit's SC to submit a Supply Plan that includes the Replacement Units for each applicable Showing Month and, if applicable, annual filing, no later than the Compliance Showing Deadline for Purchaser's Compliance Showings; and

(d) If Seller does not comply with the requirements of Sections 2.3(a), (b) and (c) for the applicable Showing Month and, if applicable, annual filing, then any such Replacement Units shall not be deemed a Replacement Unit for purposes of this Confirmation for that Showing Month and Seller shall not receive payment for such Product.

Subject to the satisfaction of the conditions contained in subsections (a) – (c) of this Section 2.3, once Seller has identified in writing any Replacement Units that meet the requirements of this Section 2.3, then any such Replacement Units shall be deemed a Unit for purposes of this Confirmation for that Showing Month.

2.4 Planned Outages

As of the Effective Date, Seller and Purchaser have agreed to all Planned Outages as specified in Appendix D ("Planned Outage Schedule") for all relevant Showing Months for the following calendar year, or until the end of the Delivery Period, whichever is shorter. Seller may provide Purchaser with proposed changes to the Planned Outage Schedule from time to time. Within ten (10) Business Days after Purchaser's receipt of any Seller proposed changes, Purchaser shall notify Seller in writing of any reasonable requests for modifications to such Seller proposed changes, and Seller shall, to the extent consistent with Prudent Operating Practice, accommodate Purchaser's requests regarding the timing of any Seller proposed changes to the Planned Outage Schedule.

2.5 Purchaser's Remedies for Seller's Failure to Deliver Expected Contract Quantity

(a) If Seller fails to deliver any part of the Expected Contract Quantity as required herein for any Showing Month, Seller shall be liable for damages pursuant to Section 21.3 of the WSPP Agreement, without reference to the word "hourly" therein.

(b) Seller shall indemnify, defend and hold harmless Purchaser from any penalties, fines or costs, assessed against Purchaser by the CPUC, CAISO or other Governmental Body resulting from Seller's failure to deliver the Product or a Shown Unit's SC's failure to timely or accurately submit Supply Plans in accordance with the Tariff and this Confirmation. The Parties shall use commercially reasonable efforts to minimize such penalties, fines or costs; provided, that in no event will Purchaser be required to use or change its utilization

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of its owned or controlled assets or market positions to minimize these penalties, fines or costs.

(c) If Seller fails to pay the foregoing damages, penalties, fines or costs, or fails to reimburse Purchaser for those damages, penalties, fines or costs, then, without prejudice to its other rights and remedies, Purchaser may setoff and recoup those damages, penalties, fines or costs against any future amounts it may owe to Seller under this Confirmation or the WSPP Agreement.

2.6 Purchaser's Re-Sale of Product

(a) Purchaser may re-sell all or part of the Product; provided that any such re-sale must not increase Seller's obligations hereunder other than as set forth in this Section 2.6(a). For any such a resale, the Resource Adequacy Plan of Purchaser as used herein will refer to the Resource Adequacy Plan of Subsequent Purchaser. Seller shall, or shall cause the Shown Unit's SC, to follow Purchaser's instructions with respect to providing such resold Product to Subsequent Purchasers, to the extent such instructions are consistent with Seller's obligations under this Confirmation. Seller shall, and shall cause the Shown Unit's SC, to take all commercially reasonable actions and execute all documents or instruments reasonably necessary to allow such Subsequent Purchasers to use such resold Product in a manner consistent with Purchaser's rights under this Confirmation. If Purchaser incurs any liability to a Subsequent Purchaser due to the failure of Seller or the Shown Unit's SC to comply with this Confirmation, Seller will be liable to Purchaser for the amounts Seller would have owed Purchaser under this Confirmation if Purchaser had not resold the Product.

(b) Purchaser shall notify Seller in writing of any resale of Product and the Subsequent Purchaser no later than three (3) Business Days before the Compliance Showing Deadline for each Showing Month for which Purchaser has resold the Product.

(c) If CAISO or CPUC develops a centralized capacity market, Purchaser will have exclusive rights to offer, bid, or otherwise submit, or if necessary to direct the Seller or the Unit's SC to offer, bid, or otherwise submit the Expected Contract Quantity of Product for each Showing Month for re-sale into such market, and Seller and the Unit's SC shall comply with the Purchaser's direction and Purchaser shall retain and receive all revenues from such re-sale.

(d) Purchaser shall have the exclusive right to direct the Seller or the Unit's SC to offer, bid, or otherwise submit the Expected Contract Quantity into the CAISO Competitive Solicitation Process (CSP) for CPM Capacity. Seller and the Unit's SC shall comply with the Purchaser's direction and, to the extent that the CAISO designates the Expected Contract Quantity as CPM Capacity, Purchaser shall be entitled to retain and receive the CPM Capacity Payment. Unless otherwise instructed by Purchaser, (i) Seller shall not, and shall cause the Unit's SC to not, offer any portion of the Expected Contract Quantity to CAISO as CPM Capacity and (ii) if CAISO designates any portion of the Contract Capacity as CPM

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Capacity, then Seller shall, and shall cause the Unit's SC to, promptly (and in any event within one (1) Business Day of the time Seller receives notification from CAISO) notify Purchaser of such designation, and if CAISO makes such a designation, Seller shall not, and shall cause the Unit's SC to not, accept any such designation by CAISO unless and until Purchaser has agreed to accept such designation.

2.7 Self-Showing Obligation; Hold-Back Capacity

(a) If the Product includes Local RAR Attributes, and Seller has self-shown the Expected Contract Quantity associated with the Shown Unit to the Central Procurement Entity (CPE), Purchaser agrees to assume Seller's self-showing obligations by showing the Expected Contract Quantity in Purchaser's Resource Adequacy Plan, or causing the Subsequent Purchaser to show such Expected Contract Quantity in its Resource Adequacy Plan, for each applicable Showing Month of the Delivery Period.

ARTICLE 3
PAYMENTS

3.1 Payment

Purchaser shall make a monthly payment to Seller for the Product by the later of (i) ten (10) calendar days after Purchaser's receipt of Seller's invoice and (ii) the twentieth (20th) day of the Showing Month, and if such day is not a Business Day, the next following Business Day ("Monthly RA Capacity Payment"). The Monthly RA Capacity Payment shall equal the product of (a) the applicable Contract Price for that Showing Month, (b) the Expected Contract Quantity for the Showing Month and (c) 1,000, rounded to the nearest penny (i.e., two decimal places); provided, however, that the Monthly RA Capacity Payment shall be adjusted to reflect any portion of Expected Contract Quantity for the Showing Month that was not delivered in accordance with Section 2.1 for such Showing Month.

3.2 Allocation of Other Payments and Costs

(a) Seller will receive any revenues from, and must pay all costs charged by, CAISO or any other third party with respect to the Shown Unit(s) for (i) start-up, shutdown, and minimum load costs, (ii) capacity for ancillary services, (iii) energy sales, (iv) flexible ramping product, or (v) black start or reactive power services. Purchaser must promptly report receipt of any such revenues to Seller. Purchaser must pay to Seller any such amounts described in this Section 3.2(a) received by Purchaser or a Subsequent Purchaser. Without prejudice to its other rights and remedies, Seller may setoff and recoup any such amounts that are not paid to it pursuant to this Section 3.2(a) against any amounts owed to Purchaser under the WSPP Agreement.

(b) Purchaser is to receive and retain all revenues associated with the Expected Contract Quantity of Product during the Delivery Period, including any capacity and availability revenues from the Capacity Procurement Mechanism, or its successor, RUC Availability Payments, or its successor, but excluding payments

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described in Section 3.2(a)(i)-(v) or 3.2(d). Seller shall promptly report receipt of any such revenues to Purchaser. Seller shall pay to Purchaser within thirty (30) days of receipt any such amounts received by Seller, or a Shown Unit's SC, owner, or operator. Without prejudice to its other rights, Purchaser may set off and recoup any such amounts that are not paid to it against amounts owed to Seller under the WSPP Agreement.

(c) If CAISO designates any part of the Contract Quantity as Capacity Procurement Mechanism Capacity, then Seller shall, or shall cause the Shown Unit's SC to, within one (1) Business Day of the time Seller receives notification from CAISO, notify Purchaser and not accept any such designation by CAISO unless and until Purchaser has agreed to accept such designation.

(d) Any Availability Incentive Payments or Non-Availability Charges are for Seller to receive and pay.

ARTICLE 4
OTHER PURCHASER AND SELLER COVENANTS

4.1 CAISO Requirements

Seller shall schedule or cause the Shown Unit's SC to schedule or make available to CAISO the Expected Contract Quantity of the Product during the Delivery Period, in compliance with the Tariff, and perform all, or cause the Shown Unit's SC, owner, or operator to perform all, obligations under applicable law and the Tariff relating to the Product. Purchaser is not liable for, and Seller shall indemnify and hold Purchaser harmless from, the failure of Seller or the Shown Unit's SC, owner, or operator to comply with the Tariff, and for any penalties, fines or costs imposed on Seller or the Shown Unit's SC, owner, or operator for noncompliance.

4.2 Seller's and Purchaser's Duties to Take Actions to Allow Product Utilization

Throughout the Delivery Period, Purchaser and Seller shall take all commercially reasonable actions and execute all documents or instruments reasonably necessary to ensure (a) Purchaser's rights to the Expected Contract Quantity for the sole benefit of Purchaser or any Subsequent Purchaser and (b) that Purchaser may use the Expected Contract Quantity to meet its Compliance Obligations. Such commercially reasonable actions shall include, without limitation cooperating with and providing, and causing each Shown Unit's SC, owner, or operator to cooperate with and provide, requested supporting documentation to the CAISO, the CPUC, or any other Governmental Body responsible for administering the applicable Compliance Obligations, including to demonstrate that the Expected Contract Quantity can be delivered to the CAISO controlled grid for the minimum hours required to satisfy the Compliance Obligations, as applicable, pursuant to the "deliverability" standards established by the CAISO or other Governmental Body of competent jurisdiction.

If necessary, the Parties further agree to negotiate in good faith to amend this Confirmation to conform this Transaction to subsequent clarifications, revisions, or decisions rendered by CAISO or an applicable Governmental Body to maintain the benefits of the Transaction.

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4.3 Seller's Representations and Warranties

Seller represents and warrants to Purchaser throughout the Delivery Period that:

(a) No part of the Contract Quantity during the Delivery Period has been committed by Seller to any third party to satisfy Compliance Obligations or analogous obligations in any CAISO or non-CAISO markets;

(b) The Shown Unit(s) qualify to provide the Product under the Tariff, and the Shown Unit(s) and Seller are capable of delivering the Product;

(c) the aggregation of all amounts of Capacity Attributes that Seller has sold, assigned, or transferred for the Shown Unit(s) during the Delivery Period does not exceed the Shown Unit's Net Qualifying Capacity and, if applicable, the Effective Flexible Capacity for that Shown Unit;

(d) if applicable, Seller has notified either the Shown Unit's SC or the entity from which Seller purchased the Product that Seller has transferred the Contract Quantity of Product for the Delivery Period to Purchaser; and

(e) Seller has notified or will notify the Shown Unit's SC that Purchaser is entitled to the revenues set forth in Section 3.2(b), and such Shown Unit's SC is obligated to promptly deliver those revenues to Purchaser, along with appropriate documentation supporting the amount of those revenues.

4.4 Market Based Rate Authority

Upon Purchaser's written request, Seller shall, in accordance with FERC Order No. 697, submit a letter of concurrence in support of any affirmative statement by Purchaser that this contractual arrangement does not transfer "ownership or control of generation capacity" from Seller to Purchaser as the term "ownership or control of generation capacity" is used in 18 CFR Section 35.42. Seller shall not, in filings, if any, made subject to FERC Order Nos. 652 and 697, claim that this contractual arrangement conveys ownership or control of generation capacity from Seller to Purchaser.

ARTICLE 5
RESERVED

ARTICLE 6
ADDITIONAL WSPP AGREEMENT AMENDMENTS; GENERAL PROVISIONS

6.1 Termination Payment

For this Transaction, the following is inserted as a penultimate paragraph in Section 22.2(b) of the WSPP Agreement:

"If Purchaser is the Non-Defaulting Party and Purchaser reasonably expects to incur or be liable for any penalties, fines or costs from CAISO, or any Governmental Body, because

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Purchaser or a Subsequent Purchaser is not able to include the applicable Expected Contract Quantity in a Compliance Showing due to Seller's Event of Default, then Purchaser may, in good faith, estimate the amount of those penalties, fines or costs and include the estimate in its determination of the Termination Payment, subject to accounting to Seller when those penalties, fines or costs are finally ascertained. If this accounting establishes that Purchaser's estimate exceeds the actual amount of penalties, fines or costs, Purchaser must promptly remit to Seller the excess amount with interest in accordance with Section 9.3 of the WSPP Agreement. The rights and obligations with respect to determining and paying any Termination Payment, and any dispute resolution provisions with respect thereto, survive the termination of this Transaction and continue until after those penalties, fines or costs are finally ascertained."

6.2 Confidentiality

Notwithstanding Section 30.1 of the WSPP Agreement:

(a) (i) Purchaser may disclose information to the CAISO, the CPUC or a Governmental Body of competent jurisdiction as necessary in order to support its Compliance Showings or otherwise show it has met its Compliance Obligations; (ii) Seller may disclose information as necessary to a Shown Unit's SC or as necessary for its Supply Plans; (iii) each Party may disclose information as necessary to the independent evaluator or other administrator of any competitive solicitation process of Purchaser, which in turn may disclose such information as necessary to CAISO or any Governmental Body; and (iv) Purchaser may disclose information to any Subsequent Purchaser as necessary for such Subsequent Purchaser to benefit from the Product and meet its Compliance Obligations.

(b) Purchaser acknowledges that Seller is a public agency subject to the requirements of the California Public Records Act (Cal. Gov. Code section 7920 et seq.) and that Seller may be required to make public this Confirmation (which may be partially redacted by Seller) in connection with the process of seeking approval from its board of directors for the execution of this Confirmation. Seller may submit information to Purchaser that Seller considers confidential, proprietary, or trade secret information pursuant the Uniform Trade Secrets Act (Cal. Civ. Code section 3426 et seq.), or otherwise protected from disclosure pursuant to an exemption to the California Public Records Act. Seller acknowledges that Purchaser may submit to Seller information that Purchaser considers confidential or proprietary or protected from disclosure pursuant to exemptions to the California Public Records Act. Upon request or demand of any third person or entity not a party to this Confirmation ("Requestor") pursuant to the California Public Records Act for production, inspection and/or copying of this Confirmation or any information designated by a disclosing Party as confidential, the receiving Party as soon as practical shall notify the disclosing Party that such request has been made, by telephone call, letter sent via electronic mail, and/or by overnight carrier to the address, or email address listed at the end of this Confirmation. The disclosing Party shall be solely responsible for taking whatever legal steps are necessary to protect information deemed by it to be confidential information and to prevent

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release of information to the Requestor by the receiving Party. If the disclosing Party takes no such action within ten (10) days, after receiving the foregoing notice from the receiving Party, the receiving Party shall be permitted to comply with the Requestor's demand and is not required to defend against it. Notwithstanding the foregoing, Purchaser may release confidential information without notice to or over the objection of Seller if Purchaser's legal counsel advises Purchaser that Purchaser is required by law to release such confidential information.

6.3 Dodd-Frank Act

The Parties intend this Transaction to be a "customary commercial arrangement" as described in Section II.A.1 of Commodity Futures Trading Commission, *Proposed Guidance, Certain Natural Gas and Electric Power Contracts*, 81 Fed. Reg. 20583 at 20586 (Apr. 8, 2016) and a "Forward Capacity Transaction" within the meaning of Commodity Futures Trading Commission, *Final Order in Response to a Petition From Certain Independent System Operators and Regional Transmission Organizations To Exempt Specified Transactions Authorized by a Tariff or Protocol Approved by the Federal Energy Regulatory Commission*, 78 Fed. Reg. 19,880 (Apr. 2, 2013).

6.4 Change in Law

If any action by the CPUC, CAISO or any Governmental Body having jurisdiction, or any change in applicable law, occurring after the Effective Date results in (i) material changes to Purchaser's or Seller's obligations with regard to the Products sold hereunder, (ii) has the effect of changing the transfer and sale procedure set forth in this Confirmation so that the performance of this Confirmation becomes impracticable, or (iii) changes the Resource Adequacy Requirements such that the Product can no longer be counted towards Purchaser's Resource Adequacy Requirements (a "Change in Law"), the Parties shall work in good faith to revise this Confirmation so that the Parties can perform their obligations regarding the purchase and sale of the Product sold hereunder in order to maintain the original intent.

6.5 Governing Law

Notwithstanding Section 24 of the WSPP Agreement, this Transaction and the rights and duties of the Parties hereunder shall be governed by and construed, enforced and performed in accordance with the laws of the state of California, without regard to principles of conflicts of law.

6.6 Collateral

Notwithstanding Section 27 of the WSPP Agreement, neither Party shall be required to post collateral or other form of financial security in connection with this Agreement.

6.7 No Recourse to Members of Either Party

The Parties are each organized as a Joint Powers Authority in accordance with the Join Exercise of Powers Act of the State of California (Government Code Section 6500, et seq.) and are public entities separate from their constituent members. Each Parties will solely be responsible for all its debts, obligations and liabilities accruing and arising out of this Confirmation. Neither Party will have any rights and shall not make any claims, take any actions or assert any remedies against any

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of the other Party's constituent members, or the officers, directors, advisors, contractors, consultants or employees of such Party or such Party's constituent members, in connection with this Confirmation.

6.8 Other WSPP Agreement Changes

For this Transaction, the WSPP Agreement shall be amended as follows:

(a) Section 9.4 is deleted in its entirety and replaced with the following:

"In the event an invoice or portion thereof, or any other claim or adjustment arising hereunder, is disputed, payment of the undisputed portion of the invoice shall be required to be made when due, with notice of the objection given to the other Party. Any invoice dispute or invoice adjustment shall be in writing and shall state the basis for the dispute or adjustment. Payment of the disputed amount shall not be required until the dispute is resolved. Upon resolution of the dispute, any required payment shall be made within two (2) Business Days of such resolution along with interest accrued at the Interest Rate from and including the due date to but excluding the date paid. Inadvertent overpayments shall be returned upon request or deducted by the Party receiving such overpayment from subsequent payments, with interest accrued at the Interest Rate from and including the date of such overpayment to but excluding the date repaid or deducted by the Party receiving such overpayment. Any dispute with respect to an invoice is waived unless the other Party is notified in writing within twelve (12) months after the invoice is rendered or any specific adjustment to the invoice is made. If an invoice is not rendered within twelve (12) months after the close of the month during which performance of a Transaction occurred, the right to payment for such performance is waived."

(b) Section 22.1 is modified by inserting the following new text at the end thereof:

"(f) the failure of the Defaulting Party to pay its debts generally as they become due or the Defaulting Party's admission in a writing that is unable to pay its debts generally as they become due;

(g) the institution, by the Defaulting Party, of a general assignment for the benefit of its creditors; or

(h) the application for, consent to, or acquiescence to, by the Defaulting Party, the appointment of a receiver, custodian, trustee, liquidator, or similar official for all or a substantial portion of its assets."

(c) Section 22.2(b) is amended by inserting "and is continuing" after "Event of Default occurs" in the first line thereof and deleting the second sentence therein.

(d) Section 22.3(c) is amended by deleting the third sentence thereof and replacing it with the following: "If the Non-Defaulting Party's aggregate Gains exceed its aggregate Losses and Costs, if any, resulting from the termination of this Agreement or a Confirmation, the Termination Payment for all such Terminated

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Transactions shall be zero, notwithstanding any provision in this Section or Agreement to the contrary."

(e) Section 22.3(e) is deleted in its entirety and replaced with the following: "[Intentionally omitted]"

(f) Section 22.3(f) is deleted in its entirety and replaced with the following:

"If the Defaulting Party disagrees with the calculation of the Termination Payment and the Parties cannot otherwise resolve their differences, and provided that the Defaulting Party has paid the undisputed part of the Termination Payment to the Non-Defaulting Party as provided under Section 22.3(c), and that any amounts disputed by the Defaulting Party are disputed in good faith, then the Defaulting Party may submit the calculation issue to dispute resolution pursuant to Section 34."

(g) Section 28.1 is applicable and the Parties shall net monthly payments in accordance with Exhibit A of the WSPP. Both Parties intend for the netting provisions of Exhibit A to the WSPP Agreement to be effective on the Effective Date.

(h) Section 30.1(4) is amended by inserting "or requested" after the word "required" and by adding the following at the end of the first sentence: "; or (8) to the Party's and such Party's affiliates' lenders, counsel, accountants, advisors and agents who have a need to know such information and have agreed to keep such terms confidential".

(i) Subsections 34.1 and 34.2 are deleted and replaced with the following:

"34.1 DISPUTE RESOLUTION

IN THE EVENT OF ANY DISPUTE ARISING UNDER THE AGREEMENT WITH RESPECT TO THIS TRANSACTION, WITHIN TEN (10) DAYS FOLLOWING THE RECEIPT OF A WRITTEN NOTICE FROM EITHER PARTY IDENTIFYING SUCH DISPUTE, THE PARTIES SHALL MEET, NEGOTIATE AND ATTEMPT, IN GOOD FAITH, TO RESOLVE THE DISPUTE QUICKLY, INFORMALLY AND INEXPENSIVELY. IF THE PARTIES ARE UNABLE TO RESOLVE A DISPUTE ARISING HEREUNDER WITHIN THIRTY (30) DAYS AFTER RECEIPT OF SUCH NOTICE, THEN EITHER PARTY MAY SEEK ANY AND ALL REMEDIES AVAILABLE TO IT AT LAW OR IN EQUITY, SUBJECT TO THE LIMITATIONS SET FORTH IN THE AGREEMENT."

"34.2 EXCLUSIVE JURISDICTION

EACH PARTY SUBMITS TO THE EXCLUSIVE JURISDICTION OF THE STATE OR FEDERAL COURTS LOCATED IN SAN FRANCISCO, CALIFORNIA, FOR ANY ACTION OR PROCEEDING RELATING TO THIS AGREEMENT OR ANY TRANSACTION, AND EXPRESSLY WAIVES ANY

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OBJECTION IT MAY HAVE TO SUCH JURISDICTION OR THE CONVENIENCE OF SUCH FORUM."

(j) In Section 34.4, the phrase "arbitration or" is deleted from the first line.

(k) The following shall be inserted as a new Section 34.5:

"34.5 LIMITATION OF DAMAGES

EXCEPT AS OTHERWISE SPECIFIED IN ANY CONFIRMATION, FOR BREACH OF ANY PROVISION OF THIS AGREEMENT FOR WHICH AN EXPRESS REMEDY OR MEASURE OF DAMAGES IS PROVIDED, THE EXPRESS REMEDY OR MEASURE OF DAMAGES PROVIDED IS THE SOLE AND EXCLUSIVE REMEDY UNDER THIS AGREEMENT AND LIABILITY FOR THE BREACH IS LIMITED AS SET FORTH IN THE PROVISION AND ALL OTHER REMEDIES FOR DAMAGES AT LAW OR IN EQUITY ARE WAIVED. EXCEPT AS OTHERWISE SPECIFIED IN ANY CONFIRMATION, IF NO EXPRESS REMEDY OR MEASURE OF DAMAGES IS PROVIDED IN THIS AGREEMENT FOR A PARTICULAR BREACH, LIABILITY FOR THE BREACH IS LIMITED TO DIRECT DAMAGES ONLY, THE DIRECT DAMAGES ARE THE SOLE AND EXCLUSIVE REMEDY UNDER THIS AGREEMENT FOR THE BREACH, AND ALL OTHER REMEDIES FOR DAMAGES AT LAW OR IN EQUITY ARE WAIVED. EXCEPT AS OTHERWISE SPECIFIED IN ANY CONFIRMATION, NEITHER PARTY IS LIABLE FOR ANY OTHER TYPE OF DAMAGE, INCLUDING INCIDENTAL, PUNITIVE, EXEMPLARY, CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES OF ANY NATURE (INCLUDING DAMAGES ASSOCIATED WITH LOST PROFITS, BUSINESS INTERRUPTION AND LOSS OF GOODWILL) ARISING AT ANY TIME, WHETHER IN TORT (INCLUDING THE SOLE OR CONTRIBUTORY NEGLIGENCE OF EITHER PARTY OR ANY RELATED PERSON), WARRANTY, STRICT LIABILITY, CONTRACT OR STATUTE, UNDER ANY INDEMNITY PROVISION, OR OTHERWISE."

(l) Section 37 is amended by inserting the following in the beginning thereof: "On the date of entering into this Confirmation,".

(m) Section 41 "Witness" shall become Section 42 and the following "Standard of Review" Section shall be substituted in its place:

"The Parties agree as follows:

From the date of entering into a Transaction under this Agreement and throughout the term of such Transaction, the Parties each warrant and covenant as follows:

(i) Absent the agreement of all Parties to the proposed change, the standard of review for changes to any section of this Agreement (including all Transactions and/or Confirmations) specifying the rate(s) or other material economic terms and conditions agreed to by the Parties herein, whether

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proposed by a Party, a non-party or FERC acting sua sponte, shall be the "public interest" standard of review set forth in United Gas Pipe Line Co. v. Mobile Gas Service Corp., 350 U.S. 332 (1956) and Federal Power Commission v. Sierra Pacific Power Co., 350 U.S. 348 (1956)(the "Mobile-Sierra" doctrine) and clarified in Morgan Stanley Capital Group, Inc. v. Public Util. Dist. No. 1 of Snohomish 554 U.S. 527 (2008) and NRG Power Marketing LLC v. Maine Pub. Util. Comm'n, 558 U.S. 165 (2010).

(ii) The Parties, for themselves and their successors and assigns, (i) agree that this "public interest" standard shall apply to any proposed changes in any other documents, instruments or other agreements executed or entered into by the Parties in connection with this Agreement and (ii) hereby expressly and irrevocably waive any rights they can or may have to the application of any other standard of review, including the "just and reasonable" standard."

6.9 Counterparts

This Confirmation may be signed in any number of counterparts with the same effect as if the signatures to the counterparts were upon a single instrument. The Parties may rely on electronic, or scanned signatures as originals under this Confirmation. Delivery of an executed signature page of this Confirmation as a PDF attachment to an email shall be the same as delivery of a manually executed signature page.

6.10 Entire Agreement; No Oral Agreements or Modifications

This Confirmation sets forth the terms of the Transaction into which the Parties have entered and shall constitute the entire agreement between the Parties relating to the contemplated purchase and sale of the Product. Notwithstanding any other provision of the Agreement, this Transaction may be confirmed only through a Documentary Writing executed by both Parties, and no amendment or modification to this Transaction shall be enforceable except through a Documentary Writing executed by both Parties.

[*Signatures appear on the following page.*]

AGREED AS OF THE EFFECTIVE DATE:

SILICON VALLEY CLEAN ENERGY AUTHORITY, a California joint powers authority.

By: DocuSigned by: Girish Balachandran 5CA04B9AC4C24C3...
Name: Girish Balachandran
Title: CEO
Date: 11/14/2023

CENTRAL COAST COMMUNITY ENERGY, a California joint powers authority.

By: DocuSigned by: Robert M Shaw 398728BE39B342A...
Name: Robert M. Shaw
Title: Chief Executive Officer
Date: 11/11/2023

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APPENDIX A
DEFINED TERMS

"Alternate Capacity" means replacement Product which Seller has elected to provide to Purchaser in accordance with the terms of Section 2.3.

"CAISO" means the California ISO or the successor organization to the functions thereof.

"Capacity Attributes" means attributes of the Shown Unit that may be counted toward Compliance Obligations, including: flexibility, dispatchability, physical location or point of electrical interconnection of the Shown Unit; Unit ability to generate at a given capacity level, provide ancillary services, or ramp up or down at a given rate; any current or future defined characteristics, certificates, tags, credits, or accounting constructs of the Shown Unit, howsoever entitled, identified from time to time by the CAISO or a Governmental Body having jurisdiction over Compliance Obligations.

"CIRA Tool" means the CAISO Customer Interface for Resource Adequacy.

"Compliance Obligations" means, as applicable, RAR, Local RAR and FCR.

"Compliance Showing Deadline" means, for each Showing Month, the Compliance Showing plan submission due date for such Showing Month. For illustrative purposes only, as of the Effective Date, the applicable Compliance Showing plan submission due dates are as follows: (A) forty-five (45) days prior to the Showing Month covered by the Supply Plan for the monthly Supply Plan; and (B) the last Business Day of October that is prior to commencement of the year for the annual Supply Plan, such dates may be modified by the CAISO from time to time throughout the Delivery Period.

"Compliance Showings" means the applicable LSE's compliance with the resource adequacy requirements of the CPUC for an applicable Showing Month.

"Contingent Firm RA Product" has the meaning set forth in Article 1 herein.

"CPUC Decisions" means any currently effective or future decisions, resolutions, or rulings related to resource adequacy.

"CPUC Filing Guide" is the document issued annually by the CPUC which sets forth the guidelines, requirements and instructions for load serving entities to demonstrate compliance with the CPUC's resource adequacy program, as such may be modified, amended, supplemented or updated from time to time.

"Effective Flexible Capacity" has the meaning given in CAISO's FERC-approved Tariff.

"Expected Contract Quantity" means, with respect to any Showing Month of the Delivery Period, (a) for Firm RA Product, the Contract Quantity of Product, including the amount of Contract Quantity of Product that Seller has elected to provide Alternate Capacity, and (b) for Contingent Firm RA Product, the Contract Quantity of Product for such Showing Month, including the amount of Contract Quantity of Product that Seller has elected to provide Alternate Capacity, less any

reductions to Contract Quantity consistent with Section 2.2 with respect to which Seller has not elected to provide Alternate Capacity.

"FCR" means the flexible capacity requirements established for LSEs by the CPUC pursuant to the CPUC Decisions, the CAISO pursuant to the Tariff, or other Governmental Body having jurisdiction over Compliance Obligations and includes any non-binding advisory showing which an LSE is required to make with respect to flexible capacity.

"FCR Attributes" means, with respect to a Shown Unit, any and all resource adequacy attributes of the Shown Unit, as may be identified from time to time by the CPUC, CAISO, or other Governmental Body having jurisdiction over Compliance Obligations, that can be counted toward an LSE's FCR.

"Firm RA Product" has the meaning set forth in Article 1 herein.

"Flexible Capacity Category" shall be as described in the annual CPUC Filing Guide, as such may be modified, amended, supplemented or updated from time to time.

"Governmental Body" means any federal, state, local, municipal or other government; any governmental, regulatory or administrative agency, commission or other authority lawfully exercising or entitled to exercise any administrative, executive, judicial, legislative, police, regulatory or taxing authority or power; and any court or governmental tribunal.

"Interest Rate" means, for any date, the lesser of (a) the per annum rate of interest equal to the prime lending rate as may from time to time be published in The Wall Street Journal under "Money Rates" on such day (or if not published on such day on the most recent preceding day on which published), plus two percent (2%) and (b) the maximum rate permitted by applicable law.

"Local RAR" means the local resource adequacy requirements established for LSEs by the CPUC pursuant to the CPUC Decisions, by CAISO pursuant to the Tariff, or by any other Governmental Body having jurisdiction over Compliance Obligations.

"Local RAR Attributes" means, with respect to a Shown Unit, any and all resource adequacy attributes of the Shown Unit, as may be identified from time to time by the CPUC, CAISO, or other Governmental Body having jurisdiction over Compliance Obligations, that can be counted toward an LSE's Local RAR.

"LSE" means "Load Serving Entity" as such term is used in Section 40.9 of the Tariff.

"MW" means megawatt.

"Net Qualifying Capacity" has the meaning given in CAISO's FERC-approved Tariff.

"Notification Deadline" is five (5) Business Days before the Compliance Showing Deadline.

"Planned Outage" means, subject to and as further described in the CPUC Decisions, a CAISO-approved, planned or scheduled disconnection, separation or reduction in capacity of the Unit

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that is conducted for the purposes of carrying out routine repair or maintenance of such Unit, or for the purposes of new construction work for such Unit.

"Product" means RAR Attributes, Local RAR Attributes and FCR Attributes, each for the Delivery Period, Unit, Contract Quantity, Contract Price and other specifications contained in Appendix B.

"Prorated Percentage of Unit Factor" means the percentage, as specified in Appendix B, of the Unit NQC as of the Effective Date that is dedicated to Purchaser under this Transaction.

"Prorated Percentage of Unit Flexible Factor" means the percentage, as specified in Appendix B, of the Unit EFC as of the Effective Date that is dedicated to Purchaser under this Transaction.

"Prudent Operating Practice" means (a) the applicable practices, methods and acts required by or consistent with applicable laws and reliability criteria, and otherwise engaged in or approved by a significant portion of the electric power industry during the relevant time period in the Western United States, or (b) any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Prudent Operating Practice is not intended to be limited to the optimum practice, method or act to the exclusion of all others, but rather to acceptable practices, methods or acts generally accepted in the electric power industry in the Western United States.

"RAR Attributes" means, with respect to a Shown Unit, any and all resource adequacy attributes of the Shown Unit, as may be identified from time to time by the CPUC, CAISO, or other Governmental Body having jurisdiction over Compliance Obligations, that can be counted toward an LSE's RAR.

"Replacement Unit" means a generating unit having the same capacity attributes as the Unit(s) originally identified in Appendix B hereof, including the same Resource Category, RAR Attributes, and, as applicable, LAR Attributes, FCR Attributes, and Flexible Capacity Category, and otherwise meeting the requirements specified Section 2.3 hereof. A Replacement Unit shall not utilize coal or coal materials as a source of fuel, must be a specific resource that is connected directly to the CAISO controlled grid, or be under the operational control of CAISO, and may not be an unspecified import.

"Resource Adequacy Requirements" or "RAR" means the resource adequacy requirements established for LSEs by the CPUC pursuant to the CPUC Decisions, by CAISO pursuant to the Tariff, or by any other Governmental Body having jurisdiction over Compliance Obligations, not including Local RAR or FCR.

"Resource Category" shall be as described in the annual CPUC Filing Guide, as such may be modified, amended, supplemented or updated from time to time.

"SC" means Scheduling Coordinator as defined in the Tariff.

"Showing Month" means the calendar month of the Delivery Period that is the subject of the related Compliance Showing.

"Shown Unit" means the Unit, or any Replacement Unit meeting the requirements of Section 2.3 of this Confirmation and specified by Seller in a Supply Plan.

"Subsequent Purchaser" means the purchaser of Product from Purchaser in a re-sale of Product by Purchaser.

"Substitute Capacity" has the meaning set forth in the Tariff for "RA Substitute Capacity".

"Tariff" means the CAISO Tariff, including any current CAISO-published "Operating Procedures" and "Business Practice Manuals," in each case as amended or supplemented from time to time.

"Unit" means the generation unit(s) described in Appendix B.

"Unit EFC" means the lesser of the Unit's Effective Flexible Capacity as set by CAISO as of the Effective Date and that of the Unit on a subsequent date of determination.

"Unit NQC" means the lesser of the Unit's Net Qualifying Capacity as set by CAISO as of the Effective Date and that of the Unit on a subsequent date of determination.

APPENDIX B
PRODUCT AND UNIT INFORMATION

Product:

☒ RAR ☐ Local RAR ☐ Flexible Capacity

and all Capacity Attributes related to such Product.

Additional Product Information (fill in all that apply):
CAISO Zone:
Resource Category (MCC Bucket): MCC 4
CPUC Local Area (if applicable):
Flexible Capacity Category (if applicable):N/A
24/7 Dispatchable: No

Delivery Period: [redacted].

Contract Quantity and Contract Price:

Showing Month and Year	Unit	RAR Contract Quantity (MW)	Local RAR Contract Quantity (MW)	Flexible Capacity Contract Quantity (MW)	Contract Price ($/kW-mo.)
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Unit 1

Unit Specific Information	
Resource Name	Kern River Cogen Facility
Physical Location	Bakersfield, CA
CAISO Resource ID	OMAR_2_UNIT 2
SCID of Resource	
Unit NQC by month (e.g., Jan=50,Feb=65):	75
Unit EFC by month (e.g., Jan=30, Feb=50)	NA
Resource Type (e.g., gas, hydro, solar, etc.)	Gas Cogen
Minimum Qualified Flexible Capacity Category (Flex 1, 2 or 3)	NA
TAC Area (e.g., PG&E, SCE)	SCE
Prorated Percentage of Unit Factor	NA
Prorated Percentage of Unit Flexible Factor	NA
Capacity Area (CAISO System, Fresno, Sierra, Kern, LA Basin, Bay Area, Stockton, Big Creek-Ventura, NCNB, San Diego-IV or Humboldt)	CAISO System
Resource Category as defined by the CPUC (DR, 1, 2, 3, 4)	4

Unit 2

Unit Specific Information	
Resource Name	Kern River Cogen Facility
Physical Location	Bakersfield, CA
CAISO Resource ID	OMAR_2_UNIT 4
SCID of Resource	
Unit NQC by month (e.g., Jan=50,Feb=65):	75
Unit EFC by month (e.g., Jan=30, Feb=50)	NA
Resource Type (e.g., gas, hydro, solar, etc.)	Gas Cogen
Minimum Qualified Flexible Capacity Category (Flex 1, 2 or 3)	NA
TAC Area (e.g., PG&E, SCE)	SCE
Prorated Percentage of Unit Factor	NA
Prorated Percentage of Unit Flexible Factor	NA
Capacity Area (CAISO System, Fresno, Sierra, Kern, LA Basin, Bay Area, Stockton, Big Creek-Ventura, NCNB, San Diego-IV or Humboldt)	CAISO System
Resource Category as defined by the CPUC (DR, 1, 2, 3, 4)	4

(*Repeat for additional Units)*

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[Information for specific Shown Units may be provided after the Effective Date pursuant to the Confirmation.]

APPENDIX C
NOTICE INFORMATION

Seller: Silicon Valley Clean Energy Authority	**Purchaser:** Central Coast Community Energy
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]

[redacted]	[redacted]

APPENDIX D
PLANNED OUTAGE SCHEDULE

Unit Name	CAISO Resource ID *	Outage (MW)	SLIC Outage Start Date	SLIC Outage End Date
N/A	N/A	N/A	N/A	N/A