



Redwood Coast Energy Authority  
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## **BOARD OF DIRECTORS MEETING AGENDA**

**Humboldt Bay Municipal Water District Office**  
**828 7<sup>th</sup> Street, Eureka, CA 95501**

**November 19, 2018**  
**Monday, 3:15 p.m.**

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In compliance with the Americans with Disabilities Act, if you need assistance to participate in this meeting, please contact the Clerk of the Board at the phone number, email or physical address listed above at least 72 hours in advance.

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Pursuant to Government Code section 54957.5, all writings or documents relating to any item on this agenda which have been provided to a majority of the Board of Directors, including those received less than 72 hours prior to the RCEA Board meeting, will be made available to the public in the agenda binder located in the RCEA lobby during normal business hours, and at [www.redwoodenergy.org](http://www.redwoodenergy.org).

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PLEASE NOTE: Speakers wishing to distribute materials to the Board at the meeting are asked to provide 12 copies to the Clerk of the Board.

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### **OPEN SESSION** Call to Order

#### **1. REPORTS FROM MEMBER ENTITIES**

#### **2. CLOSED SESSION**

- 2.1** Closed session pursuant to Government Code section 54957: Public employee discipline/dismissal/release.

#### **3. ORAL COMMUNICATIONS**

This time is provided for people to address the Board or submit written communications on matters not on the agenda. At the conclusion of all oral and written communications, the Board may respond to statements. Any request that requires Board action will be set by the Board for a future agenda or referred to staff.

#### **4. CONSENT CALENDAR**

All matters on the Consent Calendar are considered to be routine by the Board and are enacted on one motion. There is no separate discussion of any of these items. If discussion is required, that item is removed from the Consent Calendar and considered separately. At the end of the reading of the Consent Calendar, Board members or members of the public can request that an item be removed for separate discussion.

- 4.1** Approve Minutes of October 15, 2018, Board Meeting.  
**4.2** Approve Disbursements Report.  
**4.3** Accept Financial Reports.

#### **5. REMOVED FROM CONSENT CALENDAR ITEMS**

Items removed from the Consent Calendar will be heard under this section.

## **6. OLD BUSINESS**

### **6.1 Board Meeting Calendar Revision**

Approve new RCEA Board meeting dates and times effective February 2019.

### **6.2 FY 2018-2019 1<sup>st</sup> Quarter Budget Summary (Information only, no action)**

## **7. NEW BUSINESS**

### **7.1 PG&E Energy Watch 2019 Contract Work Authorization**

Approve PG&E Energy Watch Contract Work Authorization and authorize the Executive Director to execute the agreement and any associated documents contingent on final review and approval of any revisions by RCEA legal counsel.

### **7.2 Airport Microgrid Project - Schweitzer Engineering Laboratories Proposal and Agreement**

Accept the Schweitzer Engineering Laboratories Proposal for Redwood Coast Energy Authority Arcata-Eureka Airport – Microgrid Project Rev. 1a and authorize the Executive Director to execute the agreement and all associated documents.

### **7.3 RCEA Staff Reorganization**

Approve creation of a Manager of Human Resources and Workforce Development position.

## **COMMUNITY CHOICE ENERGY (CCE) BUSINESS (Confirm CCE Quorum)**

Items under this section of the agenda relate to CCE-specific business matters that fall under RCEA's CCE voting provisions, with only CCE-participating jurisdictions voting on these matters with weighted voting as established in the RCEA joint powers agreement.

## **8. OLD CCE BUSINESS**

### **8.1. CCE-Funded Customer Program Process**

Adopt the Community Advisory Committee's recommended proposed timeline and high-level, two-step solicitation process for fiscal year 2019-2020 and 2020-2021 CCE-funded customer programs.

## **9. NEW CCE BUSINESS**

### **9.1 Energy Risk Management Plan Quarterly Report**

Accept Energy Risk Management Plan quarterly report.

### **9.2 CCE Program Launch Period Guidelines Review and Discussion (no action)**

### **9.3 Biomass Procurement Discussion**

Authorize staff to enter into negotiations to amend the power purchase agreement with Humboldt Sawmill Company pursuant to the terms of that agreement's Material Change clause.

### **9.4 2019 Customer Rate Setting and Notification Process (Information only, no action)**

### **9.5 Local Renewable Power Solicitation**

Provide comments on staff's proposal to develop and issue a renewable power solicitation.

Authorize staff to develop all solicitation materials for Board review and approval.

### **9.6 Feed-In Tariff Concept Presentation**

Provide staff with feedback on the proposed feed-in tariff design.

Direct staff to draft project implementation materials for Board approval.

## **END OF COMMUNITY CHOICE ENERGY (CCE) BUSINESS**

## **10. FUTURE AGENDA ITEMS**

### **10.1 Executive Director Contract Renewal**

## **11. ADJOURNMENT**

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### **NEXT REGULAR MEETING**

Monday, December 17, 2018, 3:15 p.m.  
Humboldt Bay Municipal Water District Office  
828 7<sup>th</sup> Street, Eureka, CA 95501

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## **1Redwood Coast Energy Authority**

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### **BOARD OF DIRECTORS MEETING AGENDA**

**Humboldt Bay Municipal Water District Office**  
**828 7<sup>th</sup> Street, Eureka, CA 95501**

**October 15, 2018**  
**Monday, 3:15 p.m.**

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A regular meeting of the Board of Directors of the Redwood Coast Energy Authority was held on the above date at 3:15 p.m. with Chair Sheri Woo presiding. Notice of this meeting was posted on October 11, 2018. Present: Austin Allison, Summer Daugherty, Dwight Miller, Michael Sweeney, Frank Wilson, Vice Chair Michael Winkler (arrived 3:17 p.m.), Chair Sheri Woo. Absent: Estelle Fennell, Dean Glaser. Staff Present: Operations Director Dana Boudreau, Power Resources Director Richard Engel, Demand Side Management Director Lou Jacobson, Executive Director Matthew Marshall, Clerk of the Board Lori Taketa.

Chair Woo called the meeting to order at 3:15 p.m.

#### **REPORTS FROM MEMBER ENTITIES**

Director Daugherty introduced Chris Curran, the City of Blue Lake's alternate RCEA Director.

#### **ORAL COMMUNICATIONS**

Chair Woo invited public comment.

Member of the public Jim Zoellick commended the Board and staff for a well-done Energy Action Month insert in the North Coast Journal that listed RCEA's accomplishments and implementation of the RePower Humboldt Strategic Plan. Mr. Zoellick shared the insert with a California Energy Commission executive who was a RePower Humboldt project manager in 2012.

Chair Woo closed public comment.

#### **CONSENT CALENDAR**

- 3.1** Approve Minutes of September 17, 2018, Board Meeting.
- 3.2** Approve Disbursements Report.
- 3.3** Accept Financial Reports.

Chair Woo invited public comment. No one came forward to speak. Chair Woo closed public comment.

**M/S: Miller, Wilson: Approve consent calendar items. Ayes: Allison, Daugherty, Miller, Sweeney, Wilson, Winkler, Woo. Noes: None. Absent: Fennell, Glaser. Abstentions: None.**

#### **OLD BUSINESS - HSU Special Projects Fund Subcontract**

Executive Director Marshall presented a staff report on the subagreement with Schatz Energy Research Center (SERC) for work funded by a California Energy Commission (CEC) grant for the airport microgrid project. As a subcontractor, Mr. Marshall stated, RCEA is procuring match funding for the solar battery system through a low-interest USDA loan.

Chair Woo spoke positively about microgrid development and invited public comment.

Schatz Energy Research Center project co-manager Jim Zoellick stated that SERC and the CEC are excited about the project, and PG&E is a good project partner. Mr. Zoellick stated that PG&E is interested in smart grids, microgrids and resiliency hubs that can support mobile generators as grid shut downs during fire threats become the norm.

Chair Woo closed public comment.

**M/S: Miller, Sweeney: Approve Humboldt State University Sponsored Programs Foundation Research Subaward Agreement and authorize the Executive Director to execute all associated documents. Ayes: Allison, Daugherty, Miller, Sweeney, Wilson, Winkler, Woo. Noes: None. Absent: Fennell, Glaser. Abstentions: None.**

## **NEW BUSINESS - PG&E Energy Watch Contract**

Executive Director Marshall reported that the contract term for the PG&E-funded Energy Watch program, historically a core RCEA activity, ends in 2018. While program administration is changing, Mr. Marshall stated, he expects the program to generally continue as it has previously through 2019.

It was clarified that the Directors were being asked to approve the contract's 2019 general terms and conditions contingent on RCEA Counsel Diamond's approval of any future changes by PG&E. Counsel Diamond explained that her proposed changes focus on clearly defining PG&E and RCEA as separate entities. Counsel Diamond further clarified that if any difficulties arise, the contract will be presented to the Board again at November's meeting.

Chair Woo invited public comment. No one came forward to speak. Chair Woo closed public comment.

**M/S: Miller, Allison: Approve PG&E Energy Watch Contract Master Service Agreement General Conditions and authorize Executive Director to execute any associated documents contingent on final review and approval of any revisions by RCEA legal counsel. Ayes: Allison, Daugherty, Miller, Sweeney, Wilson, Winkler, Woo. Noes: None. Absent: Fennell, Glaser. Abstentions: None.**

## **COMMUNITY CHOICE ENERGY (CCE) BUSINESS**

Chair Woo determined that a quorum did not exist to conduct CCE business. It was agreed that while general information on some of the CCE business topics could be shared, no action could be taken.

### **NEW CCE BUSINESS** (No action was taken on these business items.)

- 8.1 Energy Risk Management Quarterly Report
- 8.2 Local Renewable Power Solicitation
- 8.3 Feed-In Tariff Concept Presentation

## **END OF COMMUNITY CHOICE ENERGY (CCE) BUSINESS**

## **STAFF REPORTS**

- Offshore Wind Project Update

Executive Director Marshall reported that the North Coast was well represented and there was enthusiastic interest expressed for RCEA's offshore wind project at the Bureau of Ocean Energy Management (BOEM) – California Intergovernmental Offshore Renewable Energy Task Force

meeting in Sacramento on September 17. Mr. Marshall reported that BOEM issued a draft call for information and nominations of competitive interest in an area that overlaps the area for which RCEA submitted an unsolicited lease application. Vice Chair Winkler reported that RCEA's project timeline would likely not be affected by the call process and both Mr. Winkler and Chair Woo remarked on the high level of interest in California offshore wind by regulatory agencies, government agencies including the Department of Defense, tribal governments and large energy companies. Ms. Woo also reported that a local Humboldt County fisherman and a representative of Pacific Coast Federation of Fishermen's Associations spoke well of RCEA.

Executive Director Marshall reported that wave and tidal energy were discussed more than offshore wind at the Ocean Renewable Energy Conference in Portland, Oregon. Offshore wind, he stated, is at a more mature technological stage; however, research and development continues on wave energy in Washington, and Europe.

Chair Woo invited public comment. No one came forward to speak. Chair Woo closed public comment.

- Potter Valley Project Update

Executive Director Marshall reported that, as requested by the Board after public testimony in April, RCEA received information about PG&E's Potter Valley Project after signing a non-disclosure agreement from the company that is managing the sale process. Mr. Marshall stated that he was in the process of analyzing the information received.

The Board discussed potential costs of dam decommissioning compared with improving fish passage; the effect of dam decommissioning, removal or operation changes on Eel River health; dam failure risk; RCEA's possible role in a regional ownership coalition; and PG&E's decision to sell rather than relicense the dam with the Federal Energy Regulatory Commission in 2020.

Chair Woo invited public comment. No one came forward to speak. Chair Woo closed public comment.

- October, Energy Action Month

Executive Director Marshall reported that RCEA hosted a well-attended free day at the Sequoia Park Zoo on October 6 to do community outreach and education for Energy Action Month. Other outreach activities included participation in Humboldt State University's Sustainable Futures Speaker Series on zero-emission vehicles, and an RCEA Energy Action Month insert in the North Coast Journal.

Chair Woo invited public comment. No one came forward to speak. Chair Woo closed public comment.

- PCIA Exit Fee Decision

Shehzad Wadalawala of The Energy Authority reported that the California Public Utilities Commission's power charge indifference adjustment (PCIA or "exit fee") decision last week favors investor-owned utilities and that it will create a significant financial impact on Community Choice Aggregators. Mr. Wadalawala stated that preliminary analysis indicates that RCEA's Community Choice Energy can continue to operate and provide community benefits, but likely will not be able to grow its financial reserves as quickly as recommended. Mr. Wadalawala stated he will do more analysis and provide more detailed information in a staff report at next month's Board meeting.

The Board discussed the exit fee's purpose of covering old power purchase contract costs as customers leave for CCA-provided electrical service; next year's second round of exit fee analysis;

expected, long-term exit fee decreases; difficulty in determining what will be fair for CCA and bundled (e.g. PG&E) customers; and the potential for unfairly burdening bundled customers in rural, non-affluent areas.

Chair Woo invited public comment. No one came forward to speak. Chair Woo closed public comment.

## **REPORTS FROM MEMBER ENTITIES**

Vice Chair Winkler reported receiving mail from a company selling unbundled renewable energy certificates at prices more than twice as expensive as RCEA's RePower+ electric service option. Vice Chair Winkler suggested additional publicity about opting up as a less-expensive, environmentally-friendly, 100 percent renewable energy option to counter misleading mail. Executive Director Marshall clarified that the certificates are typically from Texas or Midwest wind projects where there are neither renewable portfolio standards nor markets for the certificates.

## **FUTURE AGENDA ITEMS**

The Directors requested reconsideration of RCEA's regular Board meeting times to ensure a more reliable quorum to conduct Community Choice Energy business.

Chair Woo invited public comment. No one came forward to speak. Chair Woo closed public comment.

## **ADJOURNMENT**

Chair Woo adjourned the meeting at 4:00 p.m.

Respectfully Submitted,

Lori Taketa  
Clerk of the Board



**Redwood Coast Energy Authority**  
**Warrants Report**  
**As of September 30, 2018**

Type	Date	Num	Name	Memo	Amount
Check	09/01/2018	8744	CoPower	September Premium	-312.60
Liability Check	09/10/2018	E-pay	EDD	499-0864-3 QB Tracking # 2004871918	-4,103.91
Liability Check	09/10/2018	E-pay	Internal Revenue Service	74-3104616 QB Tracking # 2004897918	-20,403.90
Liability Check	09/10/2018	E-pay	EDD	499-0864-3 QB Tracking # 2004916918	-54.93
Bill Pmt -Check	09/10/2018	8772	ABC Office Equipment	August print charges/service contract.	-435.96
Bill Pmt -Check	09/10/2018	8773	Advanced Security	Wireless door contact testing.	-139.25
Bill Pmt -Check	09/10/2018	8774	AESC	Professional Services through 05/31/18	-5,921.85
Bill Pmt -Check	09/10/2018	8775	AM Conservation	LED Stock	-346.00
Bill Pmt -Check	09/10/2018	8776	Avcolle, M.	August mileage reimbursement.	-17.44
Bill Pmt -Check	09/10/2018	8777	Bicoastal Media, LLC	Community Outreach Advertising	-495.00
Bill Pmt -Check	09/10/2018	8778	Bishop, M.	August mileage reimbursement	-19.13
Bill Pmt -Check	09/10/2018	8779	Bithell, M.	Mileage & purchase reimbursement	-40.11
Bill Pmt -Check	09/10/2018	8780	Bridgeville Elementary School	Bridgeville self-install rebate/Audit 4521.	-805.05
Bill Pmt -Check	09/10/2018	8781	Burks, K.	August mileage	-175.76
Bill Pmt -Check	09/10/2018	8782	Central Office	Miscellaneous printing services	-55.48
Bill Pmt -Check	09/10/2018	8783	Chapman, R.	Mileage reimbursement	-252.66
Bill Pmt -Check	09/10/2018	8784	Debra Little	Sponsor class - Solar Technology	-300.00
Bill Pmt -Check	09/10/2018	8785	Diamond, Nancy	Legal services	-24,111.50
Bill Pmt -Check	09/10/2018	8786	Donald Dame	Professional Services	-656.25
Bill Pmt -Check	09/10/2018	8787	Gwynn, J.	Travel reimbursement: CalCCA Customer Care Mee	-73.25
Bill Pmt -Check	09/10/2018	8788	HCOE	Business Card Printing - L. Taketa	-21.00
Bill Pmt -Check	09/10/2018	8789	Hilson, D.	August mileage reimbursement	-31.77
Bill Pmt -Check	09/10/2018	8790	Humboldt Bay Social Club	Event rental - director's meeting	-103.00
Bill Pmt -Check	09/10/2018	8791	McMahon, J.	Mileage reimbursement	-107.43
Bill Pmt -Check	09/10/2018	8792	Mission Uniform & Linen	Janitorial supplies	-211.37
Bill Pmt -Check	09/10/2018	8793	Owen, P.	Mileage reimbursement	-42.51
Bill Pmt -Check	09/10/2018	8794	PG&E CCA	July CCE Charges	-21,816.13
Bill Pmt -Check	09/10/2018	8795	PG&E EV Account	EV stations June	-352.42
Bill Pmt -Check	09/10/2018	8796	PG&E Utility Account	July utilities/lighting upgrade financing	-762.09
Bill Pmt -Check	09/10/2018	8797	Pierson's Home Ctr	Facility maintenance	-24.53
Bill Pmt -Check	09/10/2018	8798	Platt/Rexel	Bulb purchases	-5,390.61
Bill Pmt -Check	09/10/2018	8799	Ponting, W.	Mileage reimbursement	-206.06
Bill Pmt -Check	09/10/2018	8800	Scraper's Edge	Spin the Wheel Poster	-25.21
Bill Pmt -Check	09/10/2018	8801	SDRMA Medical	September Premium	-21,201.72
Bill Pmt -Check	09/10/2018	8802	Stephenson, Nancy	Purchase reimbursement	-84.43
Bill Pmt -Check	09/10/2018	8803	Times Printing Company	Mailers	-1,510.14
Paycheck	09/10/2018		Payroll	Payroll	-53,985.39
Bill Pmt -Check	09/13/2018	ACH	Renewenergy	Lease application fee	-12,009.50
Bill Pmt -Check	09/17/2018	EFT	Staples Charge Account	August Statement	-361.93
Bill Pmt -Check	09/17/2018	ACH	The Energy Authority	TEA Invoice #20180917	-2,118,354.90
Bill Pmt -Check	09/18/2018	ACH	VISA	August Statement 07/20/18-08/25/18	-15,342.73
Check	09/20/2018		Umpqua Bank	Service Charge	-125.36
Bill Pmt -Check	09/20/2018	ACH	The Energy Authority	RCEA - CAISO Invoice #20180920	-17,947.79
Check	09/24/2018	ACH	Humboldt Redwood Company	HRC August 2018 Biomass	-838,270.52
Check	09/24/2018	ACH	DG Fairhaven	DGF August 2018 Biomass	-295,164.53
Check	09/24/2018	ACH	CalPine Corporation	CalPine August 2018	-73,027.30
Liability Check	09/25/2018	E-pay	EDD	499-0864-3 QB Tracking # 352567818	-3,748.81
Liability Check	09/25/2018	E-pay	Internal Revenue Service	74-3104616 QB Tracking # 352650818	-18,884.16

Type	Date	Num	Name	Memo	Amount
Liability Check	09/25/2018	E-pay	EDD	499-0864-3 QB Tracking # 352664818	-47.07
Liability Check	09/25/2018	E-pay	Internal Revenue Service	74-3104616 QB Tracking # 352675818	-80.73
Check	09/25/2018	8805	EUC Assessment:Dave Gaddis	EUC Assessment	-500.00
Bill Pmt -Check	09/25/2018	8806	AM Conservation	LED Stock	-168.18
Bill Pmt -Check	09/25/2018	8807	Braun Blaising Smith Wynne	Legal Services - Regulatory	-4,073.50
Bill Pmt -Check	09/25/2018	8808	Cooper & Sons Electrical Services	Charging stations work	-900.01
Bill Pmt -Check	09/25/2018	8809	Cornerstone Computers	2-port USB Switch	-81.38
Bill Pmt -Check	09/25/2018	8810	David L. Moonie & Co., LLP	Contract fee- audit for 16/17	-8,775.00
Bill Pmt -Check	09/25/2018	8811	Fairway Market	Fairway Market self-install rebate/Audit 5455.	-5,424.57
Bill Pmt -Check	09/25/2018	8812	Fischer, A.	September travel reimbursement	-167.17
Bill Pmt -Check	09/25/2018	8813	Fortuna Middle School	Fortuna Middle School self-install rebate/Audit 4565.	-313.39
Bill Pmt -Check	09/25/2018	8814	Gwynn, J.	September travel reimbursement	-130.31
Bill Pmt -Check	09/25/2018	8815	HCOE	Business Card Printing - B. Chapman	-42.00
Bill Pmt -Check	09/25/2018	8816	HSU Fdn FCEV ARV-14-055	Feb contract services 000163/SP32405	-486.33
Bill Pmt -Check	09/25/2018	8817	Local Government Commission	Annual Contributing Membership dues - Sustainable	-2,600.00
Bill Pmt -Check	09/25/2018	8818	McKeever Energy & Electric, Inc.	FUHSD Lighting Inventory True-Up	-1,883.00
Bill Pmt -Check	09/25/2018	8819	Mission Uniform & Linen	Janitorial services	-67.73
Bill Pmt -Check	09/25/2018	8820	North Coast Cleaning	August Cleaning Service	-402.00
Bill Pmt -Check	09/25/2018	8821	North Coast Ophthalmology	North Coast Oph. self-install rebate/Audit 5175	-430.26
Bill Pmt -Check	09/25/2018	8822	NYLEX.net, Inc.	Onsite network support services - October	-3,200.00
Bill Pmt -Check	09/25/2018	8823	PG&E Utility Account	August utilities/lighting upgrade financing	-733.94
Bill Pmt -Check	09/25/2018	8824	Platt/Rexel	PO #1255 Bulbs	-318.12
Bill Pmt -Check	09/25/2018	8825	SDRMA Dental	September Premium	-1,354.81
Bill Pmt -Check	09/25/2018	8826	Shasta Regional Transportation Agency	3rd & 4th quarter 2017-2018	-899.77
Bill Pmt -Check	09/25/2018	8827	Shred Aware	Shredding services	-65.00
Bill Pmt -Check	09/25/2018	8828	Slackerelli, M.	September travel reimbursement	-150.99
Bill Pmt -Check	09/25/2018	8829	Sonoma County Office of Education	August 2018 Professional Services.	-156.00
Bill Pmt -Check	09/25/2018	8830	Sylvandale Gardens	Sylvandale Gardens self-install rebate/Audit 5082.	-4,176.33
Bill Pmt -Check	09/25/2018	8831	Terry, P.	August mileage reimbursement	-76.99
Bill Pmt -Check	09/25/2018	8832	Times Printing Company	Mailers	-1,631.38
Bill Pmt -Check	09/25/2018	8833	Verizon Wireless	August tablet/cell service for field staff/mobile broadt	-228.80
Bill Pmt -Check	09/25/2018	8834	Winzler, John	Office Lease - October	-4,350.00
Liability Check	09/25/2018	8835	CA State Disbursement Unit	#200000001075867	-127.00
Liability Check	09/25/2018	8836	Umpqua Bank	74-3104616	-558.36
Liability Check	09/25/2018	8837	Calvert	74-3104616	-11,455.27
Check	09/25/2018		NEM Customer Close Outs	NEM Account Close Out	-1,053.13
Paycheck	09/25/2018		Payroll	Payroll	-50,672.95
<b>TOTAL</b>					<b>-3,665,614.84</b>

**Redwood Coast Energy Authority**  
**Balance Sheet**  
As of September 30, 2018

	<u>Sep 30, 18</u>
<b>ASSETS</b>	
<b>Current Assets</b>	
<b>Checking/Savings</b>	
1010 · Petty Cash	414.35
1050 · GRANTS & DONATIONS 3840	15,204.58
1060 · Umpqua Checking-9271	105,386.79
1070 · Umpqua Deposit Cntrl Acct 1687	3,860,083.51
1075 · Umpqua Reserve Account 2300	3,000,000.00
8413 · COUNTY TREASURY 3839	<u>5,065.52</u>
<b>Total Checking/Savings</b>	6,986,154.75
<b>Total Accounts Receivable</b>	364,250.61
<b>Other Current Assets</b>	
1101 · Allowance for Doubtful Accounts	-196,021.54
1103 · Accounts Receivable-Other	6,589,697.47
1120 · Inventory Asset	21,715.00
1202 · Prepaid Expenses	-18,845.17
<b>Total 1210 · Retentions Receivable</b>	42,156.70
1499 · Undeposited Funds	<u>517.00</u>
<b>Total Other Current Assets</b>	<u>6,439,219.46</u>
<b>Total Current Assets</b>	<u>13,789,624.82</u>
<b>Total Fixed Assets</b>	151,725.39
<b>Total Other Assets</b>	<u>504,100.00</u>
<b>TOTAL ASSETS</b>	<u><u><b>14,445,450.21</b></u></u>

	<b>Sep 30, 18</b>
<b>LIABILITIES &amp; EQUITY</b>	
<b>Liabilities</b>	
<b>Current Liabilities</b>	
Total Accounts Payable	3,339,108.61
Total Credit Cards	-20,674.87
Other Current Liabilities	
2001 - Accounts Payable-Other	1,065,432.92
Total 2100 - Payroll Liabilities	120,869.79
Total 2210 - Retentions Payable	4,258.76
Total Other Current Liabilities	1,190,561.47
Total Current Liabilities	4,508,995.21
<b>Long Term Liabilities</b>	
2700 - Long-Term Debt	
2701 - Lighting Upgrade	4,612.19
2702 - Headwaters Credit Line	270,111.64
Total 2700 - Long-Term Debt	274,723.83
2703 - TEA Phase I & II	187,197.31
Total Long Term Liabilities	461,921.14
Total Liabilities	4,970,916.35
<b>Equity</b>	
2320 - Investment in Capital Assets	147,113.19
3200 - LTD - Headwaters Loan	-270,111.64
3203 - LTD - TEA Phase I & II	-187,197.31
3900 - Fund Balance	9,004,978.34
Net Income	779,751.28
Total Equity	9,474,533.86
<b>TOTAL LIABILITIES &amp; EQUITY</b>	<b>14,445,450.21</b>

**Redwood Coast Energy Authority**  
**Profit & Loss Budget vs. Actual**  
 July through September 2018

	<b>Jul - Sep 18</b>	<b>Budget</b>	<b>% of Budget</b>
<b>Ordinary Income/Expense</b>			
<b>Income</b>			
<b>5 REVENUE EARNED</b>			
Total 5000 - Revenue - government agencies	23,520.69	111,600.00	21.08%
Total 5100 - Revenue - program related sales	638.12	18,000.00	3.55%
Total 5400 - Revenue-nongovernment agencies	311,400.73	1,210,000.00	25.74%
<b>5500 - Revenue - Electricity Sales</b>			
Total 5510 - Electricity Sales	12,465,994.65	51,940,000.00	24.0%
5580 - Uncollectable Accounts	-37,414.00	-160,000.00	23.38%
Total 5500 - Revenue - Electricity Sales	12,428,580.65	51,780,000.00	24.0%
<b>Total 5 REVENUE EARNED</b>	12,764,140.19	53,119,600.00	24.03%
<b>Gross Profit</b>	12,764,140.19	53,119,600.00	24.03%
<b>Expense</b>			
Total 6 WHOLESALE POWER SUPPLY	10,042,766.57	39,880,000.00	25.18%
Total 7 PERSONNEL EXPENSES	551,894.19	2,253,700.00	24.49%
Total 8.1 FACILITIES AND OPERATIONS	66,687.73	211,400.00	31.55%
Total 8.2 COMMUNICATIONS AND OUTREACH	38,158.60	108,200.00	35.27%
Total 8.3 TRAVEL AND MEETINGS	7,445.48	48,000.00	15.51%
<b>8.4 PROFESSIONAL &amp; PROGRAM SRVS</b>			
8400 - Regulatory	0.00	94,600.00	0.0%
8410 - Contracts - Program Related Ser	38,271.91	427,200.00	8.96%
8420 - Accounting	8,775.00	55,000.00	15.96%
8430 - Legal	30,943.00	85,000.00	36.4%
8450 - Wholesale Services - TEA	145,486.47	585,000.00	24.87%
8460 - Procurement Credit - TEA	172,632.94	800,000.00	21.58%
8470 - Data Management - Calpine	455,161.63	1,100,000.00	41.38%
Total 8.4 PROFESSIONAL & PROGRAM SRVS	851,270.95	3,146,800.00	27.05%
Total 8.5 PROGRAM EXPENSES	148,047.78	1,268,000.00	11.68%
Total 8.6 INCENTIVES & REBATES	117,227.19	460,000.00	25.48%
Total 9 NON OPERATING COSTS	160,890.42	565,800.00	28.44%
<b>Total Expense</b>	11,984,388.91	47,941,900.00	25.0%
<b>Net Ordinary Income</b>	779,751.28	5,177,700.00	15.06%
<b>Reserve Contributions</b>	500,000.00	3,000,000.00	16.67%
<b>Net Income</b>	<b>279,751.28</b>	<b>2,177,700.00</b>	<b>12.85%</b>

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# REDWOOD COAST **Energy**Authority

## **STAFF REPORT Agenda Item # 6.1**

AGENDA DATE:	November 19, 2018
TO:	Board of Directors
PREPARED BY:	Lori Taketa, Clerk of the Board
SUBJECT:	2019 RCEA Board Meeting Schedule

### **SUMMARY**

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RCEA's Board of Directors typically approves a calendar of regular meetings at its January meeting each year. Due to a lack of the required weighted-voting quorum for Community Choice Energy business at three of the last five regular RCEA Board meetings and the Board's inability to conduct such business at those meetings, staff wishes to facilitate early reconsideration of the Board's 2019 regular meeting dates and times.

A quorum for Community Choice Energy business consists of a majority of CCE-participating members (five Directors, excluding the Humboldt Bay Municipal Water District Director) and a majority of the CCE total weighted vote.

### **FINANCIAL IMPACT**

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None.

### **STAFF RECOMMENDATION**

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Discuss and approve new RCEA Board meeting dates and times effective February 2019.

### **ATTACHMENTS:**

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1. Calendar of agency meetings and potential RCEA Board meetings
2. Board voting shares for CCE business from Amended and Restated Joint Powers Agreement

## Agency Meetings & Potential RCEA Board Meeting Dates

Week #	Monday	Tuesday	Wednesday	Thursday	Friday
1	<p>Any time until noon</p> <p>(1:30 p.m. – County special mtgs)</p> <p>6 p.m. – Fortuna CC</p>	<p>9 a.m. – County BoS</p> <p>5 p.m. – Eureka CC</p> <p>6:30 p.m. – Rio Dell</p>	<p>Any time until 4 p.m.</p> <p>6 p.m. - Arcata CC</p> <p>7 p.m. – Ferndale CC</p>	<p>Any time all day or evening</p>	<p>Any time during business hours</p>
2	<p>Any time until noon</p> <p>(1:30 p.m. – County special mtgs)</p> <p>(4:30 p.m. –Hazmat Response, quarterly)</p>	<p>9 a.m. – County BoS</p> <p>7 p.m. – Blue Lake CC</p>	<p>Any time until 4 p.m.</p> <p>6 p.m. – Trinidad CC</p>	<p>9 a.m. – HBMWD Board</p> <p>Afternoon</p> <p>5:30 p.m. - HWMA</p>	<p>Any time during business hours</p>
3	<p>Any time until noon</p> <p>(1:30 p.m. – County special mtgs)</p> <p>6 p.m. – Fortuna CC</p>	<p>9 a.m. – County BoS</p> <p>4 p.m. – A1AA</p> <p>5 p.m. – Eureka CC</p> <p>6:30 p.m. – Rio Dell</p>	<p>(9 a.m. – LAFCO, every other month)</p> <p>Afternoon</p> <p>6 p.m. - Arcata CC</p> <p>7 p.m. – Ferndale CC</p>	<p>Any time until 3 p.m.</p> <p>4 p.m. – HCAOG</p>	<p>Any time during business hours</p>
4	<p>Any time until noon</p> <p>(1:30 p.m. – County special mtgs)</p> <p>6:30 p.m. - RREDC</p>	<p>9 a.m. – County BoS</p> <p>7 p.m. – Blue Lake CC</p>	<p>9 a.m. - HTA</p> <p>Afternoon</p> <p>6 p.m. – Trinidad CC</p>	<p>Any time all day or evening</p>	<p>Any time during business hours</p>

Potential RCEA Board meeting times



**Exhibit A**  
**Redwood Coast Energy Authority**  
**Amended and Restated Joint Powers Agreement**

**Board Voting Shares for Community Choice Aggregation Business**

<b>Jurisdiction</b>	<b>Electric customer accounts (Dec 2014)</b>	<b>Percentage of total accounts (jurisdiction's accounts divided by total accounts)</b>	<b>Customer Base Voting Share (67 x ratio of accounts)</b>	<b>Pro Rata Voting Share (33 x [1/number of Directors])</b>	<b>Total votes, prior to rounding</b>	<b>TOTAL VOTES</b>
<b>City of Arcata</b>	8,203	12.41%	8.31	4.125	12.44	<b>12</b>
<b>City of Blue Lake</b>	664	1.00%	0.67	4.125	4.80	<b>5</b>
<b>City of Eureka</b>	13,965	21.13%	14.16	4.125	18.29	<b>18</b>
<b>City of Ferndale</b>	939	1.42%	0.95	4.125	5.08	<b>5</b>
<b>City of Fortuna</b>	5,584	8.45%	5.66	4.125	9.79	<b>10</b>
<b>City of Rio Dell</b>	1,508	2.28%	1.53	4.125	6.06	<b>6</b>
<b>City of Trinidad</b>	272	0.41%	0.27	4.125	4.40	<b>4</b>
<b>County of Humboldt (unincorporated)</b>	34,950	52.88%	35.44	4.125	39.57	<b>40</b>
<b>Total</b>	66,085	99.99%	66.99	33	100.03	<b>100</b>

- Due to rounding, totals will differ at various stages of the calculation process.
- The percentages of total accounts are rounded to two decimal places prior to calculating the Customer Base Voting Share.
- Customer Base Voting Share = 67 multiplied by the % of total accounts, rounded to two decimal places.
- Total votes are the sum of the Pro Rata Voting Share and the Customer Base Voting Share, rounded to the nearest whole number.
- The allocation of voting shares will be updated every two years, and as-needed to adjust for changes in the make-up of jurisdictions participating in the CCA.

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# REDWOOD COAST Energy Authority

## STAFF REPORT Agenda Item # 6.2

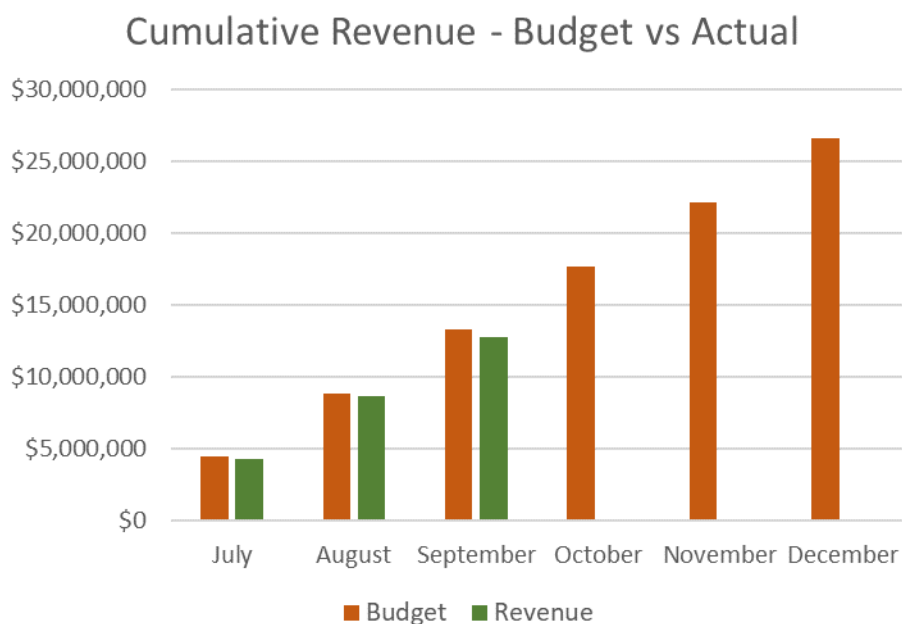
AGENDA DATE:	November 19, 2018
TO:	Board of Directors
PREPARED BY:	Matthew Marshall, Executive Director
SUBJECT:	Quarterly Budget Update

### SUMMARY

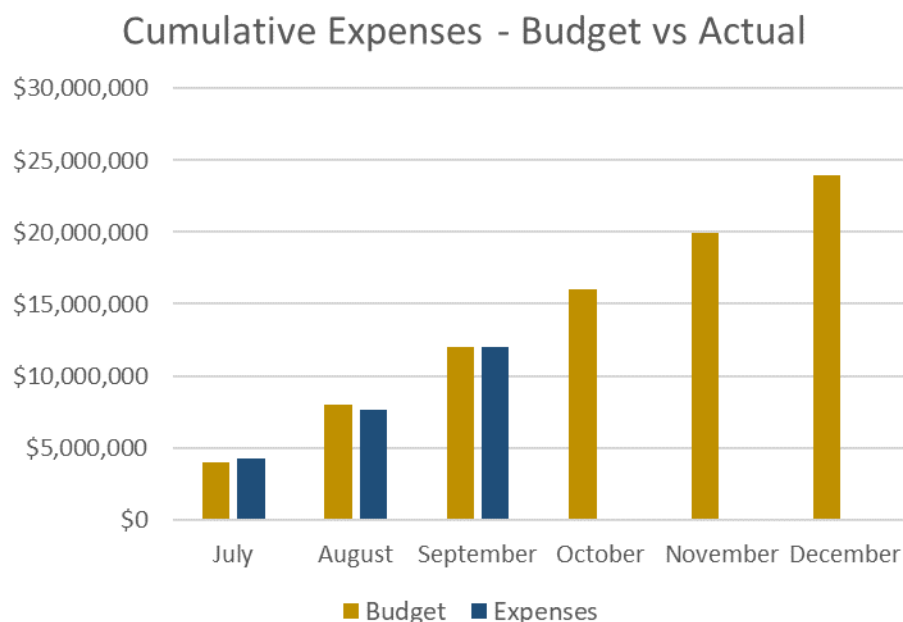
At the meeting staff will provide a brief quarterly budget report for the first quarter of the fiscal year, July through September; some budget highlights are presented below. Also, RCEA's auditors have completed the FY16-17 Fiscal Audit; staff will schedule a meeting of the Board Finance Subcommittee to review the audit in advance of it being presented by the auditors to the full Board in December.

#### July-September Quarterly Budget Overview:

As illustrated in the chart below, cumulative total revenue for the fiscal year to-date has been close to, but slightly below the budget's forecasted revenue (on a flat, monthly-average basis). The \$12.6 million in actual revenue to-date is 96% of the budget forecast, which is about \$516,000 below the forecast.



The actual cumulative expenses for the fiscal-year to-date are almost exactly equal to the budgeted forecast (on an averaged monthly basis) of about \$12 million, as shown in the cart below.



With expenses on budget and revenue under budget, cumulative net revenue for the year-to-date is at about 60% of budget forecast:

	Net Revenue	Budget, monthly average	
July	88,261	431,475	20%
August	898,788	431,475	208%
September	-207,298	431,475	-48%
<b>Total</b>	<b>779,751</b>	<b>1,294,425</b>	<b>60%</b>

It should be noted that September expenses included over \$1.1 million in zero-carbon power-purchase settlements that represent a significant share of total 2018 zero-carbon wholesale power costs for the year, not just for September's power supply. As this large bump in September expenses is not a monthly recurring cost it will be averaged out as part of the total cost of power over the course of the full year.

## STAFF RECOMMENDATION

N/A - Information only



# REDWOOD COAST Energy Authority

## STAFF REPORT

### Agenda Item # 7.1

AGENDA DATE:	November 19, 2018
TO:	Board of Directors
PREPARED BY:	Lou Jacobson, Director of Demand Side Management
SUBJECT:	PG&E Energy Watch 2019 Contract Work Authorization

### SUMMARY

The majority of RCEA's energy efficiency customer programs are funded through RCEA's Energy Watch Partnership with Pacific Gas and Electric Company (PG&E). The 2016-18 Energy Watch contract with PG&E is sunsetting, and efforts to negotiate and finalize 2019 contracts are advancing. At the October meeting the Board approved the Master Services Agreement (MSA) with PG&E, which sets the general terms and conditions of our Energy Watch contract. We are now ready to present the Contract Work Authorization (CWA) for the Board's consideration and approval.

The CWA sets the scope of services, budget and energy saving goals. Table 1 below presents the negotiated 2019 budget.

**Table 1: 2019 Energy Watch Budget**

	<b>2019 Annual Total Amount</b>
Administration	\$59,235
Marketing	\$43,520
Implementation	\$453,692
Strategic Energy Resources (SER)	\$210,000
Incentives	\$401,028
<b>TOTAL ALLOCATION BUDGET</b>	<b>\$1,167,475</b>

2019 program goals include:

- Reducing net demand by 276 kW,
- Reducing energy use by no less than 1.4 million kWh, and
- An increase in therm use by no more than 14,000 therms.

### FINANCIAL IMPACTS

The 2019 Energy Watch budget for time and materials was reduced by 27% as compared to the 2018 maximum allowable billable amount. Most Energy Watch partnerships across PG&E's service territory have already seen or will see similar cuts to their budgets. The reduction is in

part a result of the regulatory pressure on PG&E to ensure their portfolio of services are cost-effective as measured by the Total Resource Cost test.

RCEA adjusted programmatic staffing in 2018 to account for the middle-of-the-road 2019 budget projection, presented to the Board in May as agenda item #9.1. Staging for the expected 2019 budget reduction in early/mid-2018 was a critical step in minimizing overall organizational impacts.

### **RECOMMENDED ACTION**

1. Approve PG&E Energy Watch Contract Work Authorization and authorize the Executive Director to execute the agreement and any associated documents contingent on final review and approval of any revisions by RCEA legal counsel.

### **ATTACHMENTS**

7.1.1 - PG&E Energy Watch Contract Work Authorization

# Contract Work Authorization (CWA)

This Contract Work Authorization ("CWA") No. [insert CWA no. here] Issued under and pursuant to the Blanket Agreement or Master Service Agreement No4400010217 dated 12/31/2019 (the "MSA") between the below-named Contractor ("Contractor"), and Pacific Gas and Electric Company ("PG&E"), a California corporation with its headquarters located at 77 Beale Street, San Francisco, California 94105. Contractor shall perform all Work under this CWA pursuant to and in accordance with the terms and conditions of the MSA.

Contractor's Legal Name: Redwood Coast Energy Authority  
Contractor's Address: 633 3<sup>rd</sup> Street  
Eureka, CA 95501

This CWA consists of 30 pages and all Attachments and Exhibits Indicated herein.

Project Name: <Redwood Coast Energy Watch Regional Direct  
Install Program  
Program Job Location: Various PG&E Service Territories.

**WORK:** Contractor shall, at its own risk and expense, perform the Work described in this Contract Work Authorization and furnish all labor, equipment, and materials necessary to complete the Work as summarized below.

Redwood Coast Energy Authority supports implementation of Redwood Coast Energy Watch Partnership Programs, offering comprehensive energy efficiency services to municipal, and small and medium business (SMB) customers. These services may include energy efficiency audits, retrofits, retro-commissioning, rebates, education and training and the development of long-term energy reduction strategies for cities and counties. Other activities may include the support of the California Long-Term Energy Efficiency Strategic Plan, community outreach and integrated marketing efforts.

**ATTACHMENTS:** Each of the following documents is attached to this CWA and is incorporated herein by this reference:

**CWA TERM:** This CWA is effective upon signature by both parties and expires on 12/31/2019. Time is of the essence. Contractor shall commence performance hereof when directed to do so by PG&E and Work shall be completed by the completion date of 12/31/2019.

**CONSIDERATION:** As full consideration for satisfactory performance of the Work under this CWA by Contractor, PG&E's total obligation to Contractor shall not exceed the following amount. This amount is inclusive of all taxes incurred in the performance of the Work. Any change to this amount shall only be authorized in writing by a PG&E CWA Change Order, fully executed by both PG&E and Contractor.

TOTAL: \$1,167,475

THE PARTIES, BY SIGNATURE OF THEIR AUTHORIZED REPRESENTATIVES, HEREBY AGREE TO THE TERMS OF THIS CONTRACT WORK AUTHORIZATION

PACIFIC GAS AND ELECTRIC COMPANY		CONTRACTOR:	
Signature		Signature	
Name		Name	
Title		Title	
Date		Date	

ADMINISTRATION			
PG&E Negotiator		Contractor Represent	
Phone		Phone	
Email		Email	
Accounting Reference			
PG&E Work Supervisor:		Phone: 415-973-2520	
INVOICE INSTRUCTIONS: Contractor shall send Invoices for each payment when due, showing the CWA number, to: PACIFIC GAS AND ELECTRIC COMPANY	Send ORIGINAL Invoice to:	PG&E Accounts Payable PO Box 7760 San Francisco, CA 94120-7760	
	Send COPY of Invoice to:	Eva Chu 245 Market Street, Room N6G San Francisco, CA 94105	
	For information regarding Invoice status, call PG&E's Paid Help Line at (800) 756-PAID (7243) or go to AP Web Reporting site at <a href="http://www.pge.com/actpay">www.pge.com/actpay</a> .		

INTERNAL PG&E USE ONLY			
Distribution Date			
Distributions of Copies:	Document Services (Signed Original Copy)	Contractor (Signed Original Copy)	
	245 MARKET ST., SAN FRANCISCO		
	Work Supervisor	Manager	
	Invoice Approver	Supervisor	
	V.P.	Sourcing/ Purchasing	
	Director	Law	



## PROGRAM IMPLEMENTER SCOPE OF WORK

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### ATTACHMENTS TO PG&E's CWA SCOPE OF WORK:

- ATTACHMENT 1. Allowable Measures, Geographic Areas, and Program Customers
- ATTACHMENT 2. Program Policy and Procedures Manual and Quality Assurance and Quality Control Plan Specific Requirements
- ATTACHMENT 3. Program Management Plan Guidance
- ATTACHMENT 4. Program Management Plan Requirements
- ATTACHMENT 5. Contractor Certification of HVAC Permits and License Form
- ATTACHMENT 6. Incentive Recipient Certification Form
- ATTACHMENT 7. Itemization of CPUC Budget Allocation
- ATTACHMENT 8. THIS SECTION INTENTIONALLY LEFT BLANK
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- ATTACHMENT 10. Customer Program Participation Agreement

Non-Utility Energy Efficiency  
Redwood Coast Energy Watch

STATEMENT OF WORK (SOW)

**1. INTRODUCTION**

1.1 Redwood Coast Energy Authority implements Redwood Coast Energy Watch Partnership Programs, offering comprehensive energy efficiency services to local government and small and medium business (SMB). RCEW was approved by the California Public Utilities Commission through decision 05-09-043 and subsequent decisions, under which PG&E is mandated to work with local government entities or community partners acting on their behalf known as Government and Community Partners (GCP). RCEW, as a GCP program administered by PG&E and Redwood Wood Coast Energy Authority (Joint Powers Authority), aims to achieve energy savings in Humboldt County. Energy savings will be realized through services such as but not limited to: energy efficiency audits, retrofits, retro-commissioning, rebates, education and training and the development of long-term energy reduction strategies for cities and counties. Other activities may include the support of the California Long-Term Energy Efficiency Strategic Plan, community outreach and integrated marketing efforts, workforce development programs and direct collaboration with third party implementers and Humboldt County Community Choice Energy.

**2. PROGRAM REQUIREMENTS**

2.1 Program Begin and End Dates.

2.1.1 Contractor shall begin Program activities on January 1, 2019.

2.1.2 End Date for Direct Implementation Activities and Incentive Payments. Unless otherwise directed by PG&E's Program Manager (PM), all direct implementation activities, installation services and Implementer payments to Customers, shall be complete by December 31, 2019.

2.1.3 Completion of Committed Projects. Projects approved by PG&E but not completed on or before November 15, 2019 will require Contractor to provide PG&E's PM with: (a) a list of such Committed Projects and their respective kW, kWh, and therm savings;(b) a Project description, current status and estimated completion date; (c) unspent Program budget funds; and (d) funds required to complete the Projects.

2.1.4 End Date for Administrative Activities. Administrative activities must be complete and submitted to PG&E with a final invoice and Final Completion Program Report, defined below by January 25, 2020. If this CWA is terminated prior to then, these items must be submitted to PG&E forty (40) days after the termination date.

- 2.2** Over the course of this contract Contractor shall comply with current and upcoming PG&E, Statewide and CPUC Policies, Procedures, Protocols, Rules, Processes, Guidelines and required documentation, AND any modifications to content and requirements described in these documents in order to provide quality service and deliverables.

2.2.1 Program Rules. In addition to the Program rules set forth in this Contract Work Authorization, Implementer shall also comply with and provide the required documentation outlined in this Contract Work Authorization and the Direct Install Program Manual provided by PG&E (collectively referred to as the Program Rules).

2.2.2 Project Technical Review Process. Implementer shall comply with all requirements described in the Direct Install Manual found on PG&E's Energy Insight (EI) platform, as well as any other PG&E directives provided during the project review process to ensure Project eligibility.

2.2.3 Project Development Protocol for Custom Projects. Implementer shall perform due diligence in the project development phase by substantiating the key elements for each proposed project to include its eligibility, measure eligibility, program influence on the project development, appropriate assignment of measure type, and baseline in accordance with the Project Development Protocol guidelines on Exhibit 1. The project documentation for project pre-installation and review, if applicable, shall include a summary of the project justifications, and provide factual data and evidence to fully support the justifications of these key elements. Any discrepancy or deficiency with the Program Rules will require project modification or cancellation, funding claw back, and at PG&E's discretion.

2.2.4 Energy Insight. Contractor shall use PG&E's Energy Insight portal for all project transactions, reports and communications. PG&E will provide, or Contractor may request training required to use Energy Insight. Contractor shall use PG&E's Energy Insight portal for the following activities unless otherwise directed by your PG&E Program Manager, including but not limited to:

- i. Project management and documentation, including:
  1. Input of project information, as soon as customer interest is confirmed/signed, to provide pipeline visibility
  2. Input of all customer, project, measure, and comment fields as required by PG&E
  3. Periodic update of customer referrals and projects throughout the sales cycle, including but not limited to 1) naming the assigned energy auditor, 2) updating the status (i.e., "Opportunity Milestone") of customer referrals, 3) converting customer referrals to projects or closing disqualified referrals, 4) providing estimated project energy savings (kW, kWh, and Therms), and 5) providing estimated completion dates.
  4. Quarterly updates of KPI input form at end of each quarter

5. Request to withdraw project as soon as project is confirmed no longer viable
- ii. Transfer of any confidential or customer information through private Chatter group:
  1. Invoices, monthly reports, and KPIs to PG&E
  2. Customer data that includes PII (Personally Identifiable Information, any two or more data points identifying a customer)
  3. Any other ad-hoc requests by PG&E PM (data requests, accruals reports, program pipelines, etc.)
- iii. Other EI Implementer requirements:
  1. Attend all EI trainings as appropriate or requested by PG&E's PM
  2. Follow the current EI procedures as made available through trainings, communications, and postings in EI groups
  3. Follow EI Chatter protocol for all project-related and reportable communication among project stakeholders, excluding the customer
  4. Join appropriate EI Chatter groups for training and procedural materials
  5. Promptly notify PG&E's PM of any anomaly or issue affecting project management in EI
  6. Confirm monthly all Implementer's active and inactive EI users
  7. Keep current all active user contact info in EI

2.2.5 Implementation of Custom Projects. All platforms in custom projects are subject to PG&E's sole discretion in determining whether such project is considered custom. If Implementer discovers or anticipates any part of a custom project may or does deviate from any of the Program Rules, Implementer shall immediately notify the PG&E's PM. All such custom projects deviations require PG&E's written authorization. Implementer will need to produce such written authorization for any 3<sup>rd</sup> party data requests.

2.2.6 Evaluation, Measurement and Verification (EM&V). In addition to the EM&V requirements set forth in the Contract Work Authorization, Implementer's EM&V responsibilities shall also include, but is not limited to, estimating program savings, providing feedback and recommendations to improve program design and implementation. Implementers shall collect, report, verify, and deliver accurate data necessary to enable process and impact EM&V evaluations, and for conducting internal performance analysis. Implementer's EM&V activities may include responding to Program administrator's, CPUC and other 3<sup>rd</sup> party data requests facilitating interviews with program staff and program participants, enabling verification of measure installation at customer sites, providing access to Implementer's program related data and information, participating in embedded evaluation activities, and responding to evaluation recommendations.

2.2.7 Contractor shall develop a Program Management Plan (PMP) for Program activities in the Customer geographic areas served by the Contractor on Attachment 1. The PMP shall include the Program's overview, activities, tasks to be performed, itemized costs and budget totals as more fully described on Attachment 4, The Program Management Plan Requirements.

2.2.8 Program Training. Attend training, workshops, webinars and other training events as requested by PG&E to use PG&E's data reporting systems, update information on regulatory and environmental activities, codes and standards, energy efficiency and demand response products and other information pertinent to Program implementation.

### 3. TASK 1 - DEVELOP PROGRAM MATERIALS AND PROGRAM LAUNCH

3.1 Program Policies and Procedures Manual (P&P Manual). Contractor shall develop and submit a P&P Manual for PG&E's review within 30 days of the execution of this CWA or by February 28, 2019 (whichever is later). The P&P Manual shall describe the Program policies, procedures, eligibility and participation requirements (further outlined in Attachment 2). Contractor agrees to:

3.1.1 Provide details on Program compliance with the statewide policy manuals.

3.1.2 To update the P&P Manual when relevant to ensure conformance with current CPUC policy updates.

3.1.3 Certify the P&P Manual review has been completed in conjunction with monthly reporting and invoicing.

3.1.4 Provide a change history addendum to the P&P Manual documenting the "list of affected pages" with each update.

3.2 Attend Program Meetings. Contractor shall attend Program meetings with the PG&E Program Manager and other PG&E staff, as requested, to discuss Program logistics, marketing coordination, evaluation, monitoring and verification coordination, invoicing requirements, scope of work, and any contractual issues.

3.3 Training. The following Program Training is required:

3.3.1. Program and Technical Training. Implementer shall attend technical in-person training, workshops, web based and other training events to use PG&E's data reporting systems, update information on regulatory and environmental activities, codes and standards, energy efficiency and demand response products and other information pertinent to Program implementation. PG&E will provide mandatory technical,

policy, procedures and custom project development training seminars. Implementer's personnel that do not attend and complete all mandatory technical training shall not develop any scope or technical characteristics for a Project and submit it to PG&E for review.

- 3.4 When relevant, provide training for PG&E staff and Customer field representatives either via PG&E-established Webcasts or in person at PG&E facilities. Contractor shall develop and submit to PG&E PM for review and approval an agenda of the Program training events. Contractor shall conduct additional discussions and training on an as-needed basis.
- 3.5 Program Forms. When applicable, Contractor must develop and/or customize the following required Program forms: Contractor Certification of HVAC Permits and License Form Attachment 5 and the Incentive Recipient Certification Form Attachment 6 described in 6.0 - Project Permits and Verification statements.

### **3.6 Task 1 - Schedule of Deliverables**

Deliverable	Draft Due Date	Final Due Date
Program Management Plan	15 calendar days following contract execution	Two weeks after receipt of PG&E PM comments
Policy and Procedures Manual	Within 30 days of the execution of this CWA or by February 28, 2019 (whichever is later)	Two weeks after receipt of PG&E PM comments, Reviewed and updated monthly
Marketing Materials	Ongoing	Two weeks after receipt of PG&E PM comments
Training Materials, where relevant	Within 45 days of the execution of this CWA or by February 28, 2019 (whichever is later)	One week after receipt of PG&E PM comments

## **4. TASK 2 - SOLICIT CUSTOMER PARTICIPATION IN THE PROGRAM**

The following activities may take place as a part of the solicitation process for enrolling customers in PG&E energy efficiency programs.

- 4.1 Attend Program Meetings. Contractor shall attend Program meetings with the PG&E's PM and other PG&E staff, as requested, to discuss Program logistics, marketing coordination, evaluation, invoicing requirements, scope of work, and any contractual issues.

- 4.2 Contractor shall evaluate potential Customers to ensure energy efficiency opportunities are identified, and the Customer has the eligibility and intent to meet the Program requirements to achieve long-term energy savings. Contractor is responsible to determine the Customer meets all Program eligibility criteria and sign required Program Forms.
- 4.3 After the Customer executes the Access Agreement in accordance with the MSA, Contractor shall determine which Program services best serve the Customer and align with the Program goals. Contractor shall keep PG&E assigned representative(s) engaged and informed the status of Program activities. These shall include, but are not limited to:
- 4.3.1 Initial Walkthrough I Facility Assessment. A facility walkthrough to discuss the facility operation and equipment to understand the systems to be evaluated for efficiency opportunities. Systems may include, but are not limited to, air conditioning, process cooling and refrigeration equipment, compressed air systems, ventilation and fan systems, pumping systems, lighting, and associated controls and control systems.
  - 4.3.2 Energy Audits. A simple energy audit to identifying potential Measures and to determine whether there are opportunities for cost-effective energy efficiency upgrades.
  - 4.3.3 Identify Measures. Based on the audit findings, Contractor shall discuss the cost-effective capital investment Measures. Contractor should identify which Measures have the most potential of generating energy savings. Contractor should also discuss other possible benefits of implementing equipment modifications such as water conservation, safety and environmental benefits and productivity improvements.
  - 4.3.4 Other Programs. Contractor, PG&E PM, and the Customer field representative shall coordinate to explain other applicable Program offerings and how to receive them with the Customer.
  - 4.3.5 Customer Target List. Contractor, PG&E PM and Customer field representative shall coordinate to ensure a consistent and non-overlapping marketing approach by reviewing the initial Customer target list and identifying the best methodology to pursue each Customer segment.

## 5. TASK 3 - ENROLL CUSTOMERS AND PG&E'S PROJECT APPROVAL

- 5.1 Enroll Customers. Contractor shall enroll qualified Customers in the Program by having them sign a Customer Program Participant Agreement (Attachment 10). Contractor will also assist Customer in obtaining all supporting documentation for PG&E to evaluate and approve Customer's Project. Contractor may provide the Customer other program materials in accordance with the approved P&P Manual and consistent with the Custom Policies and Regional Direct Install Program Policies, as provided by PG&E PM.

- 5.2 Design and/or Technical Assistance. When relevant, Contractor shall provide design and/or technical assistance to identify energy efficiency opportunities and to facilitate Customer's analysis and project implementation.

## 6. TASK 4 –PROJECT IMPLEMENTATION

### 6.1 Project Permits and Verification Statements

- 6.1.1 If applicable, Contractors that perform services involving the installation or replacement of HVAC units must obtain a Contractor Certification of HVAC Permits and License Form and keep it per the MSA record retention policy. CPUC Decision D.12-05-015 states: a post-installation verification statement is required for all new and replacement HVAC installations to include a space for a contractor certification that appropriate permits have been obtained and include a space for the permit number, permitting agency, contractor name, signature and date. See an example of PG&E's Attachment 5 Contractor Certification of HVAC Permits and License Form that Contractor can customize or develop their own form that is required to be approved by PG&E's PM.
- 6.1.2 Contractor must abide by all record retention policies as outlined in the Parties MSA, particularly in the case of a rebate or Incentive delivered directly to the customer.
- 6.1.3 In accordance with Public Utilities Code Section 399.4 (b) (1), recipients of a rebate must certify they have used a licensed contractor, as appropriate, and have complied with applicable permitting requirements for the installation to receive a rebate or incentive (money, products or services). Contractor shall include space on a post-installation verification forms for recipient certification that appropriate permits have been obtained, if applicable, for any rebates or Incentives offered by PG&E for an energy efficiency improvement or installation of energy efficient components, equipment, or appliances in buildings. Rebates or Incentives shall be provided only: 1) if the recipient of the rebate or Incentive certifies that the improvement or installation has complied with applicable permitting requirements and, 2) if a contractor performed the installation or improvement, that the contractor holds the appropriate license for the work performed. See an example of PG&E's Attachment 6 Incentive Recipient Certification Form that Contractor can customize or develop their own form that is required to be approved by PG&E's PM.

### 6.2 Energy Efficient Hardware Installation Projects.

- 6.2.1 Project Installation. Contractor shall assist Customer and any installation vendors, to ensure Measures are installed according to the Project timeline. Upon Customer's request, Contractor shall provide assistance,



including but not limited to, bids, reviewing purchase orders, and securing financing. As a Project is being installed, Contractor shall provide periodic oversight at the Customer facility to ensure all equipment installation meets the design specification and all other Program requirements are being implemented.

6.2.2 Remedy Installation Issues. Contractor may assist in remedying all installation problems promptly. After the Measure is installed, any discrepancies between the installation documentation and the onsite verification shall be documented in the Field Verification Report. If these discrepancies involve a number of units installed or differing efficiency ratings the Project may still qualify for an Incentive, but the final Incentive shall be recalculated using the values of the installation.

6.2.3 Improper Installation. Installed equipment not meeting Program standards, improperly installed, or is otherwise not functional, such equipment will be disqualified for an Incentive and Performance Payment, where relevant. Contractor shall provide Customer a written notice explaining these discrepancies and Customer shall have 30 calendar days to resolve any issues and reschedule an inspection. If further inspections of the equipment reveal non-compliance, such equipment will no longer be eligible for an Incentive(s).

6.3 Per, PG&E's Energy Efficiency Business Plan Portfolio and Sector-Level Metrics, PG&E reserves the right to request additional project and/or customer data to be collected by the implementer, including but not limited to, square footage of customer facilities where the implementer has completed an energy audit or energy efficiency project, disadvantaged community information, hard-to-reach community information, customer satisfaction, annual water/wastewater flow information and building type designation.

## 7. TASK 5 - PROGRAM BUDGET AND REPORTING

### 7.1 Program Budget, CPUC Budget Allocations

7.1.1 Unspent funds from a prior year's Budget will not rollover into the current or future year Budgets. PG&E will work with Contractor to review and set the Budget annually. The annual Budget will be based on several factors including, but not limited to, prior year Program performance and its Budget spend, the Program scope of work requirements for the following year, and other relevant issues that affect the Program implementation. The Budget will be updated annually and memorialized in the Contractor's PMP

- 7.1.2 Program Budget. The aggregate total of PG&E payments for all Work approved under this Contract Work Authorization shall be the Program budget (Budget). The Budget is the maximum amount of funding allocated for this Program. If Implementer depletes funding prior to the Contract Term, Implementer must terminate the Program. The total Budget amounts are:

Time and Materials (if applicable):	\$766,447
Performance Based Payments:	\$
Customer Incentive Reimbursements:	\$401,028
Direct Install Reimbursements:	\$
<b>Total Program Budget:</b>	<b>\$1,167,475</b>

<b>2019 Net Savings Goals</b>	
kW	276
kWh	1,428,313
Therms	(14,001)

- 7.1.3 CPUC Budget Allocation. Contractor may be required to provide an annual Program budget allocation in the CPUC-specified categories which includes Administration, Marketing and Direct Implementation Non-Incentive Costs as itemized on Attachment 7. Contractor will notify PG&E if at any time during the year there is significant change that may impact this CPUC Budget Allocation.

7.1.4 CPUC Budget Allocation Summary Table

<b>CPUC Budget Allocation Summary (Refer to Attachment 7 for itemization).</b>	<b>Annual Total Amounts</b>	<b>% of total Program Budget</b>
Administration	\$59,235	5%
Marketing	\$43,520	4%
Direct Implementation Non-Incentive (DINI) Costs	\$453,692	39%
Strategic Energy Resources (SER)	\$210,000	18%
Incentives	\$401,028	34%
<b>TOTAL ALLOCATION BUDGET</b>	<b>\$1,167,475</b>	<b>100.0%</b>

## 8. TASK 6 - PROGRAM REPORTS AND INVOICE REQUIREMENTS

- 8.1 Monthly Progress Report documenting Program accomplishments, savings and budget tracking, Project installations performed in the preceding calendar month, Customer Feedback Survey results and Customer Service log. Contractor will work with PG&E PM on the format and content of the Monthly Progress Report but may include the following:
- Program performance
  - Customer Feedback Survey Results
  - Customer Service Log
- 8.1.2 Cost Effectiveness. It is the implementer's responsibility to manage their projects and pipeline to ensure they are delivering cost effective savings in accordance with their annual ABAL filing and CPUC mandates around cost-effectiveness. In order to manage this successfully, it is the implementer's responsibility to provide a quarterly CET run to their program manager by the 20<sup>th</sup> day of the month following quarter end, and /or more frequently as requested by the PG&E PM. This CET run shall include data from projects paid to date and will also incorporate the pipeline of future projects through end of year. PG&E will provide an appropriate report template that will provide correct CET input aggregate data for completed projects. If such template is not provided, implementer will not be required to complete the CET run. If the CET run is not feasible, PG&E will provide a template that allows implementer to report cost-effectiveness quarterly.
- 8.2 Monthly Program Forecast and Accruals. Contractor will provide PG&E with a monthly forecast of expenditures and Accruals, in a format provided by PG&E. This forecast/accrual determines the energy savings Contractor seeks to achieve during the Program. PG&E relies upon the representations in the forecast and accrual to enter into this CWA. The Contractor and PG&E PM will revisit the forecast/accruals on a monthly basis to ensure that any changes in program delivery are reflected. Material changes in this forecast/accrual will impact PG&E's decision to terminate the CWA, impact the payment of Customer Incentives and Budget allocations. Monthly savings forecasts and financial accruals shall include:
- Net Energy Savings (kW, kWh, Therms)
  - Forecasted Expenditures and Accruals
  - Committed and Installed Projects
- 8.3 Monthly Invoice(s) totals are required to be broken down by CPUC budget allocation categories. The invoice shall show the monthly, year to date, and

percentage of the total budget allocation as set forth in Attachment 7. PG&E may request proof of cancelled Incentive check.

- 8.4 This section intentionally left blank
- 8.5 Project Pipeline Report. Contractor shall provide monthly Project Pipeline Reports if applicable.
- 8.6 Monthly Key Performance Indicators (KPI) Reporting. Data. Contractor shall report cumulative monthly data around quarterly forecasted energy savings and forecasted Incentive and Non-incentive spend in a format similar to that provided in Section 8.2. Data will be collected monthly and reviewed together with the PG&E PM on a quarterly basis. Final KPIs, including annual energy savings goals, will be documented in the PMP.
- 8.7 Ad Hoc Reports and Additional Data. PG&E may require Contractor to provide other reports or documentation ("Ad Hoc Reports"). Additional information may be required by the CPUC.
- 8.8 CPUC Regulatory Reporting. Contractor shall comply with all CPUC regulatory reporting requirements. PG&E may request such data be provided in a format suitable for submittal to the CPUC.
- 8.9 Monthly Direct Costs/Activities (applicable to Time and Materials invoices). Contractor shall provide a list of individuals and total hours worked by each individual per month.
- 8.10 Annual Forecast. Implementer shall provide an annual updated forecast for administrative, marketing, direct implementation non-incentive and Customer Incentive costs consistent with the CPUC Budget Allocation budget format specified in this CWA.
- 8.11 Contractor shall deliver a Final Program Report upon Program completion and shall include, but is not limited to, the following topics:
- Program Overview
  - Summary of Program Accomplishments
  - Description of Best Practices or Program Improvement Recommendations
  - Description of Challenges or Other Issues
  - Other items as agreed to by the PG&E PM and Contractor

#### Task 6 Invoicing and Reporting Schedule of Deliverables

Deliverable (Per Project)	Due Date
Monthly Progress Report	20th calendar day of the month
Monthly Invoice with breakdown of administration, marketing, direct implementation costs and actual monthly Customer Incentive payments	20th calendar day of the month
Monthly Forecast and Accrual Report	20th calendar day of the month
Pipeline Report	20th calendar day of the month
Annual Forecast	Per PM request
KPI Reporting Data	Monthly, as relevant for Program
Ad-Hoc Reports	As needed
CPUC Reports	As needed
Final Program Report	30 days after Program Completion

9. Task 7 PROJECT COMPLETION AND PROGRAM PAYMENT TERMS

- 9.1 Time and Materials-Based (T&M) Payments (if applicable). Contractor shall bill PG&E for that portion of the Budget which PG&E has agreed to pay on a time-and-materials, not-to-exceed basis for each of the Tasks and Deliverables indicated as "T&M Payments" according to the labor rates contained in the MSA.
- 9.2 This section intentionally left blank
- 9.3 Customer Incentive Payments and Direct Installation Reimbursements. The "Gross Participant Cost", is a Customer co-payment which should not be billed to PG&E which PG&E will not pay.
- 9.4 Budget Adjustments/Measure Disallowance/Termination.
  - 9.4.1 PG&E reserves the right to: (a) reduce or increase the Budget and its associated savings, (b) shift program funds, or (c) cancel or terminate the CWA.
  - 9.4.2 PG&E reserves the right to modify any Program requirements that include, but are not limited to, CPUC directives, Program portfolio reviews, Measure energy savings, net-to-gross ratios, energy costs, Measure effective useful life and adjustments to Incentives. Contractor shall make these modifications upon notice from PG&E accordingly.
  - 9.4.3 If PG&E reduces funding, terminates the CWA, or the Program is discontinued, Contractor shall provide a Project(s) status report.

## 10. Task 8 - RAMP-DOWN PROGRAM

- 10.1 Program Ramp-Down. Unless otherwise agreed, Contractor shall provide a plan to ramp down the Program (Ramp Down Plan) by December 1, 2019. The Ramp-Down Plan must take into consideration that all Projects should be complete and Incentives paid by December 15, 2019.
- 10.2 Program Shut-Down Notification. Contractor shall develop for PG&E PM approval a shut-down notification as part of the Ramp Down Plan. The notification shall be sent to Customers no later than 14 days after notification to Contractor to ramp down the Program. Contractor shall develop the Notification to be approved by the PG&E PM. The Notification will provide Program shut down information, identify a specified representative for warranty issues and to contact PG&E to pursue other PG&E energy efficiency programs.
- 10.3 If Program funding is no longer available, Contractor must immediately notify Customers in writing the Program is being shut down.
- 10.4 Ramp-Down Schedule of Deliverables.

Deliverable (Per Project)	Due Date
Program Ramp-Down Plan	No later than December 1, 2019, or as requested by PG&E PM
Shut-Down Notification	No later than December 15, 2019, or as requested by PG&E PM

- 10.5 In addition to the above, Implementer shall deliver a Final Program Report upon Program completion and shall include, but is not limited to, the following topics:
- Program Overview
  - Summary of Program Accomplishments
  - Description of Best Practices or Program Improvement Recommendations
  - Description of Challenges or Other Issues
  - Other items as requested by the PG&E PM
- 10.6 Program Transition. Within 30 days of Notification of Transition, Implementer shall provide a Transition Plan to ramp down and transition the program. The Transition Plan must provide PG&E with a list of projects and necessary steps to secure successful transition to the designated new program. At a minimum, the list must include all in-flight opportunities that have not yet reached stage 7A – New.
- 10.7 Savings Claimed and Incentives. Implementer shall take into consideration that all Projects past Stage 7A – New should be complete, and Incentives paid, within 60 days of Notification of Transition. Any project not Paid by Day 60 will automatically transition to the new Implementer workflow.

- 10.8 Program Transition Notification. Implementer shall develop for PG&E PM approval a transition notification for Customers as part of the Transition Plan. The notification shall be sent to Customers no later than 14 days after PG&E has informed Implementer of transition.

## **11. NOTICES**

- 11.1 Contractor designates, Lou Jacobson, 633 3<sup>rd</sup> Street, Eureka, CA 95501, 707-269-1700, ext 304, ljacobson@redwoodenergy.org as Contractor's Contract Representative for all matters relating to this CWA.
- 11.2 PG&E designates Eva Chu 245 Market Street, Mail Code N6G, 415-973-2520, eva.chu@pge.com as PG&E's PM for all matters relating to CWA.
- 11.3 The Parties may modify their designated contact representatives at any time by providing the other Party with a written update notification with the new contact information.

## **12. CPUC AUTHORITY**

- 12.1 This CWA and SOW can be modified at any time in accordance with any directive of the CPUC and regulation of PG&E. Any information, results and reports regarding this CWA and SOW shall be made available to the CPUC.

## **Attachment 1**

### **Allowable Measures, Geographic Areas, and Customers to be Served by this Program**

This Attachment describes the Measures that Contractor may install and the Customers and geographic areas (within the Service Territory). Contractor may serve any other non-residential Customers under this Program as long as at least 75% of net energy savings achieved comes from the eligible customers and/or geographies outlined here in attachment 1 and they have requested permission to serve the customer from their PG&E program manager.

Contractor understands there are other Contractors, including PG&E, local governments, other affiliates and similar third-party Contractors that may include the same Measures, Customers, and geographic locations.

PG&E reserves the right in its sole discretion to amend these assignments during the course of the Program. No deviation from these assignments is permitted without the prior written consent by the PG&E PM.

#### Eligible Customers:

Contractor may serve the following Customers:

- Municipal customers, including but not limited to cities, counties, special districts, wastewater treatment facilities (NAICS 22132x) and K-12 public schools.
- Small and Medium Businesses (SMB) - including non-profit organizations. SMB customers are defined as non-residential customers with an annual maximum peak demand of less than 200 kW.
- Large Businesses – Large businesses are defined as non-residential customers with an annual maximum peak demand of 200-500 kW. Large businesses are not eligible for Direct Install program delivery but are eligible for Downstream program delivery. PG&E will provide Contractor with a detailed definition of Direct Install prior to execution of this Contract. No more than 25% of net energy savings achievements may come from Large businesses.
- Any exceptions to this list of eligible customers must be approved in writing by the PG&E PM.

#### Eligible Geographic Area:

At least 75% of net energy savings achievements must come from the above eligible customers in the following counties within PG&E's service territory: Humboldt County Up to 25% of net energy savings may come from eligible customers outside of said counties.

Allowable Measures: All eligible Core Deemed, Core Calculated and Direct Install measures must be consistent with the Regional Direct Install Program Policies, and approved for program inclusion by PG&E PM.



## Attachment 2

### Program Policy and Procedures Manual and Quality Assurance and Quality Control Plan Specific Requirements

**Contractor agrees to review and comply with the following Statewide Program policy manuals found and updated on these sites which contain and outline the requirements below:**

- Customized retrofit (CR): <http://www.pge.com/en/mybusiness/save/rebates/ief/index.page>
  - Retro-commissioning (RCX): <http://www.pge.com/en/mybusiness/save/rebates/retrocommissioning/index.page>
  - Customized new construction (CNC) & Savings by design (SBD):  
<http://www.pge.com/en/mybusiness/save/rebates/inc/index.page>
- Energy Efficiency Policy Manual: <http://www.cpuc.ca.gov/nr/rdonlyres/7e3a4773-6d35-4d21-a7a2-9895c1e04a01/0/eeppolicymanualv5forpdf.pdf>

Minimum Requirements	Program P&P	Quality Assurance and Quality Control Plan	Post-Installation Permit Compliance Form
<b>Program Process</b>  Must include Contractor and Customer responsibilities, sufficient that Customer can read and understand how to participate in program.	<b>X</b>		
<b>Program Begin &amp; End Dates</b>  • Program Begin and End Dates	<b>X</b>		
<b>Customer Eligibility Requirements</b>  • Must include that Customer must be a PG&E Customer paying the Public Purpose Program Charge • Must be consistent with this Contract Work Authorization or with subsequent modifications approved in writing by the PG&E Program Manager.	<b>X</b>		
<b>Incentive Payment Process</b>  • Discuss process and requirements for Incentive payment to Customer. <ul style="list-style-type: none"> <li>○ Are original receipts needed or is a copy okay?</li> <li>○ What happens if the Incentive application is rejected?</li> </ul> • Is the Customer required to reserve funding prior to Measure installation?	<b>X</b>		
<b>IRS 1099 Reporting procedures</b>  ○ Per PPA	<b>X</b>		
<b>Dispute Resolution Procedures</b>  • Must apply to both subcontractors and Customers. • Per Parties MSA	<b>X</b>	<b>X</b>	
<b>Eligible Product Specifications</b>	<b>X</b>		
<b>Limited funding</b>  First-come, first served, while funding lasts.	<b>X</b>		

<b>Minimum Requirements</b>	<b>Program P&amp;P</b>	<b>Quality Assurance and Quality Control Plan</b>	<b>Post- Installation Permit Compliance Form</b>
<p>Program Process</p> <p>Must include Contractor and Customer responsibilities, sufficient that Customer can read and understand how to participate in program.</p>	<b>X</b>		
<p>Disclosure and auspices line in both English and Spanish</p> <ul style="list-style-type: none"> <li>Per Parties MSA</li> </ul>	<b>X</b>		
<p>Access Agreement</p> <ul style="list-style-type: none"> <li>Per Parties MSA</li> </ul>	<b>X</b>		
<p>Prevention of Double Dipping</p> <ul style="list-style-type: none"> <li>Per Parties MSA</li> </ul>	<b>X</b>		
<p>Installation Agreement</p>	<b>X</b>		
<p>Limitation of liability, per Parties MSA</p> <ul style="list-style-type: none"> <li>Must limit PG&amp;E's liability.</li> </ul> <p>Contractors generally also limit their own.</p>	<b>X</b>		
<p>Installation Standards</p> <ul style="list-style-type: none"> <li>As applicable</li> </ul>		<b>X</b>	
<p>Installation Schedule</p> <ul style="list-style-type: none"> <li>As applicable</li> </ul>		<b>X</b>	
<p>Product specifications for eligible measures/hardware</p> <ul style="list-style-type: none"> <li>Contractor's standards must meet or exceed PG&amp;E's specifications.</li> </ul>		<b>X</b>	
<p>Verification Plan</p> <ul style="list-style-type: none"> <li>Must describe, at a minimum the percentage of inspections to be conducted, the inspection agent and who will pay inspection costs.</li> </ul>		<b>X</b>	
<p>NGAT (Natural Gas Appliance Testing)</p> <ul style="list-style-type: none"> <li>Must describe how the Contractor will comply with PG&amp;E NGAT requirements.</li> </ul>		<b>X</b>	
<p>Customer Feedback Survey</p> <ul style="list-style-type: none"> <li>Must describe surveying process and methodology.</li> <li>Must address the following topics, at a minimum: Customer's perceived convenience of the Program, notification of other energy efficiency programs available, and Customer's overall satisfaction with the Program providers.</li> </ul>	<b>X</b>		
<ul style="list-style-type: none"> <li>Any other Q/A procedures relevant to Contractor's Program</li> </ul>		<b>X</b>	
<p>Technical Reports</p>		<b>X</b>	

Minimum Requirements	Program P&P	Quality Assurance and Quality Control Plan	Post- Installation Permit Compliance Form
<p>Program Process</p> <p>Must include Contractor and Customer responsibilities, sufficient that Customer can read and understand how to participate in program.</p>	X		
<p>Disclosure for programs that develop technical reports</p>			
<p>• Any Other Documents</p>	X	X	
<p>Insert language, if applicable:</p> <p>THIS INFORMATION MUST BE <u>PROVIDED BY THE CONTRACTOR</u> TO COMPLY WITH CPUC DECISION D.12-05-015 FOR ALL HVAC INSTALLATIONS.</p> <p>I certify I am a licensed contractor and have complied with applicable permitting requirements, as appropriate, for this HVAC installation or replacement.</p> <p>Permit # _____ Agency _____</p> <p>Signature _____ Date _____</p> <p>Name (Print) _____</p>			X
<p>Insert language:</p> <p>THIS SECTION MUST BE COMPLETED FOR ALL ENERGY EFFICIENCY PROJECTS FOR WHICH INCENTIVES ARE ISSUED TO COMPLY WITH PUBLIC UTILITIES CCODE SECTION 399.4 (b) (1).</p> <p><input type="checkbox"/> By checking this box, I certify I have used a licensed contractor, as appropriate, and have complied with applicable permitting requirements for this installation.</p> <p>Signature _____ Date _____</p> <p>Name (Print) _____</p> <p>Note: The PG&amp;E Customer must sign this section when an incentive check is issued to the Customer. If the incentive check is issued to the Third-Party Contractor or contractor/installer, the Third Party Contractor must provide this certification.</p>			X

## **Program Policy and Procedures Manual**

The Program Policy and Procedures manual shall be developed and delivered to PG&E within 30 days of contract award and updated subject to the following requirements:

- Contractor shall review the P&P manual monthly to ensure conformance with current CPUC policy updates
- Contractor shall certify that the P&P manual review has been completed in conjunction with monthly reporting and invoicing
- Contractor shall provide a change history addendum to the P&P manual documenting the “list of affected pages” with each update.
- Contractor shall provide an electronic copy of the updated manual and change history addendum to the PG&E PM with each update.

## **Marketing Plan**

Contractor shall develop and/or modify all Program forms, marketing materials, brochure's, fact sheets, advertisements, presentations, Web site content, and other materials required to implement and promote the Program for PG&E's review and approval. Contractor shall also participate in all training events required to develop and launch the Program. Marketing Plan shall include, but is not limited to, a description of:

- All Program marketing materials
- Program Marketing objectives, tasks and timelines
- Program Web site structure and content (as applicable)
- Identify PG&E involvement and other resources to promote the Program
- Program Marketing plans to create and use at least one Program marketing piece that uses the PG&E trademark and brand.
- Develop requirements to notify PG&E in writing prior to implementation and coordinate Program marketing activities.

## **Quality Assurance and Quality Control Plan (QA/QC Plan)**

The Quality Assurance and Quality Control Plan (QA/QC Plan) shall include, but is not limited to:

- Description of product specifications, inspection procedures and requirements, and all other QA procedures regarding the Program.
- A procedure for Customer issues ("Dispute Resolution Plan") starting with Contractor's staff and escalating to the PG&E PM.

## Attachment 3

### Program Management Plan Guidance

This outline is to provide guidance in preparing an Implementer's Program Management Plan.

1. Introduction: Summarize objectives and the major components of the Implementer
  - a. Program Overview
  - b. Goals: List energy saving and non-energy saving goals
  - c. Targeted Customer Segments, Eligibility Requirements
  - d. Program Dates
  - e. Staff and Subcontractor Responsibilities
    - i. Team Org Chart - departments, subcontractors, and reporting structure
    - ii. Key staff names, titles, and responsibilities
  - f. Local Hiring
  - g. Work Scheduling Methodology
  - h. Implementation Timetable (template provided by PG&E)
  - i. Coordination Plan: Indicate how Implementer will coordinate other programs offered by PG&E
  - j. Process for providing Incentives: Discuss process and requirements for incentive payment to customer
  - k. IRS 1099 reporting procedures
2. Program Elements: Describe activities in the following areas:
  - a. Energy Efficient Retrofits (as applicable)
    - i. Implementation Process
    - ii. Eligible product specification or standards
  - b. Direct Install (as applicable)
    - i. Eligible product specification or standards
    - ii. Single Family and Multifamily Direct Install
    - iii. Implementation Process
  - c. Downstream (as applicable)
    - i. Implementation Process
    - ii. Eligible product specification or standards
  - d. Retro-Commissioning (as applicable)
    - i. Implementation Process
    - ii. Eligible product specification or standards
  - e. Technical Assistance (as applicable)
    - i. Energy Assessment Reports
    - ii. Audit Services
  - f. Policy Assistance (as applicable)
    - i. Policy development and implementation
    - ii. Codes and standards
3. Management Activities
  - a. Meetings
  - b. Communications
  - c. Data Collection and Management
  - d. Reporting
  - e. Customer Satisfaction Surveys
4. Outreach, Coordination and Marketing Plan
  - a. Objectives
  - b. Target Audience
  - c. Outreach Activities
  - d. Coordination with other stakeholders
  - e. Marketing Material and Collateral
    - i. Web site structure (as applicable)

- ii. Co-Branding
  - f. Marketing Message
    - i. Outline the major components of the message
    - ii. Customer disclosure text and partnership agreement
  - g. Marketing Schedule
  - h. Distribution Channels
- 5. Training and Education Plan
  - a. Objectives
  - b. Target Audience
  - c. Classes
    - i. Schedule
    - ii. Curriculum
  - d. Workshops
    - i. Schedule
    - ii. Curriculum
- 6. Strategic Energy Resources
  - a. Description of activities that promote the CA Energy Efficiency Strategic Plan
  - b. Metrics for activities
  - c. Expenditures associated with these activities
  - d. Description of Expansion activities
  - e. Expenditures associated with these activities
- 7. Quality Assurance and Quality Control Plan
  - a. Verification: Describe at a minimum the percentage of inspections to be conducted, the inspection agent and who will pay inspection costs
  - b. Tracking customer complaints
  - c. Resolving customer complaints
  - d. Avoiding double dipping
  - e. Dispute resolution procedures (applies to subcontractors and customers)
  - f. Appendix (include appropriate program documents such as applications and agreement)

## Attachment 4

### Program Management Plan Requirements

The Contractor's Program Management Plan shall address the following:

8. **Introduction:** Summarize objectives and the major components of the Program
  - a. Program Overview
  - b. Staff
    - i. Team Org Chart - departments, subcontractors, and reporting structure
    - ii. Key staff names, titles, and responsibilities
  - c. Coordination Efforts: Contractor's plan to coordinate with other PG&E programs
9. **Program Activities, Deliverables and Itemized Cost Budget:** Provide Program implementation activities and their respective itemized costs and budgets, such as:

#### Name of Program

##### ***Task 1 – Education and Training***

Estimated labor costs \$ \_\_\_\_\_ Estimated material costs \$ \_\_\_\_\_ Total budget \$ \_\_\_\_\_

##### Task 1 Deliverables:

- Determine training needs for Public Sector
- Classes
  - What classes and schedule
- Organize advertising campaign to promote classes.

##### ***Task 2 – Best Practices Development***

Estimated labor costs \$ \_\_\_\_\_ Estimated material costs \$ \_\_\_\_\_ Total budget \$ \_\_\_\_\_

##### Task 2 Deliverables:

- Prepare selected case stories, blog posts, articles, and/or video clips in conjunction with annual awards to illustrate and share energy, climate and sustainability best practice activities of Beacon communities.

##### ***Task 3 – Develop policy for revolving energy efficiency fund for city/county facilities***

Estimated labor costs \$ \_\_\_\_\_ Estimated material costs \$ \_\_\_\_\_ Total budget \$ \_\_\_\_\_

##### Task 3 Deliverables:

- Successfully launch one revolving energy efficiency fund in a city/muni
  - Find key stakeholders and decision-makers
  - Contact other municipalities for best practices

##### ***Task 4 – Program Administration***

Estimated labor costs \$ \_\_\_\_\_ Estimated material costs \$ \_\_\_\_\_ Total budget \$ \_\_\_\_\_

##### Task 4 Deliverables:

- Monthly invoices, reports, and billing projections

- Set up meeting with Program Manager and PG&E customer field representatives as appropriate.
- Provide the following reports on date(s) due
  - Monthly report – 15<sup>th</sup> of every month

**3. Program Budget Totals:** Provide a summarized list of the Program Budget Categories as related to the Program activities, such as:

***Program Activity Budget Totals***

<b>Task</b>	<b>Budget</b>
Task 1- Adopt Reach Codes	\$
Task 2- Best Practices Development	\$
Task 3- Revolving Energy Efficiency Fund	\$
Task 4- Program Administrative	\$
<b>Total</b>	<b>\$</b>

- i.
- ii. Curriculum



## Attachment 5

### Contractor Certification of HVAC Permits and License Form

CPUC Decision D.12-05-015 states: a post-installation verification statement is required [from the Contractor who did the installation or replacement of the HVAC work] for all new and replacement HVAC installations. Contractor must develop a Contractor Certification of HVAC Permits and License Form, modeled after this PG&E form. Contractor may integrate the collection of this information in their existing processes. Contractor's Form must be approved by the PG&E PM.



#### Contractor Certification of HVAC Permits and License for Pacific Gas and Electric Company (PG&E) Customized Incentive Projects

To be completed by the  
licensed contractor for the  
following programs:

- ☐ Non Residential Retrofit
- ☐ Retrocommissioning
- ☐ Savings by Design
- ☐ Customized New Construction
- ☐ Commercial Whole Building

#### Important Details:

- This form must be signed and dated by a licensed contractor and then submitted, along with project invoices, after completion of your project.
- Please refer to the email cover letter sent with this form for full project incentive process and final payment instructions.
- Questions about this form or process? Contact your PG&E Project/Implementation Manager. Your Project/Implementation Manager is:

Name

Email

Phone Number

In accordance with California Public Utilities Commission (CPUC) Decision 12-05-015, contractors installing HVAC measures are required to certify that they are licensed and that appropriate permits have been obtained.

This form must be completed and signed by the licensed contractor installing or overseeing the installation of the HVAC measures and returned to PG&E by the incentive recipient (PG&E customer or Third Party Implementer or Project Sponsor) before an incentive check can be issued.

#### Instructions:

This form must be filled out by the licensed contractor installing or overseeing the installation of HVAC measures and returned to the Project Office Implementation Manager along with the project invoices after installation of the project.

#### STEP 1 PROJECT APPLICATION NUMBER

--	--	--	--	--	--	--	--	--	--

#### STEP 2 PERMIT INFORMATION

This information must be provided by the contractor to comply with CPUC decision 12-05-015.

As an authorized agent of my company, I certify I am a licensed contractor and have followed applicable permitting requirements for this HVAC installation or replacement.

--	--	--	--	--	--	--	--	--	--

Permit Number

Permitting Agency

Contractor Company Name

Company Representative (Name & Title)

Signature

Date

#### STEP 3 RETURN (along with project invoices) TO

Name

Phone

Email

Fax

## Attachment 6

### Incentive Recipient Certification Form

Contractor must develop an Incentive Recipient Certification Form, modeled after this PG&E form. Contractor may integrate the collection of this information in their existing processes. Contractor's form must be approved by the PG&E PM.



#### Incentive Recipient Certification of Contractor License and Permits for Pacific Gas and Electric Company (PG&E) Customized Incentive Projects

**To be completed by the incentive recipient for the following programs:**

- ☐ Non Residential Retrofit
- ☐ Retrocommissioning
- ☐ Savings by Design
- ☐ Customized New Construction
- ☐ Automatic Demand Response
- ☐ Commercial Whole Building

**Important Details:**

- Sign, date, and submit this form, along with project invoices, after completion of your project.
- Please refer to the email cover letter sent with this form for full project incentive process and final payment instructions.
- Questions about this form or process? Contact your PG&E Project/Implementation Manager. **Your Project/Implementation Manager is:**

Name

Email

Phone Number

In accordance with Public Utilities Code Section 399.4 (b) (1), recipients of incentives must certify that they have used a licensed contractor, as appropriate, and have complied with applicable permitting requirements for the installation to receive a rebate or incentive from PG&E.

This form must be signed and returned by the PG&E incentive recipient (PG&E customer or Third Party Implementer or Project Sponsor) before an incentive check can be issued.

**Instructions:**

This form must be filled out by the **incentive recipient** and returned to your PG&E Project/Implementation Manager along with the project invoices **after installation of the project**.

**STEP 1 PROJECT APPLICATION NUMBER**

--	--	--	--	--	--	--	--	--	--

**STEP 2 CERTIFICATION OF COMPLIANCE**

As an authorized agent representing this project, by signing below, I certify that the improvement or installation complies with any applicable permitting requirements and, if a contractor performed the installation or improvement, the contractor holds the appropriate license for the work performed.

Signature

Name (Print)

Account Holder/Customer Name

Title

Date

**STEP 3 RETURN TO**

Name

Phone

Email

Fax

## **Attachment 7**

### **Itemization of CPUC Budget Allocation**

Upon PG&E PM request, Contractor may be asked to complete a cost allocation budget exercise resembling the attached worksheet.



## **Attachment 8**

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**Nee**

**Attachment 9**

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## Attachment 10

### Customer Program Participation Agreement

As used throughout this document, the term "Party" means Contractor and Customer, collectively the "Parties."

#### Customer Project Specific Terms and Conditions

1. Project Eligibility and Approval. PG&E in its sole discretion will determine the eligibility and approval of the energy efficiency of Measures at the Customer's site (Project). Eligibility requirements include and are not limited to, 1) Project site must be receive gas and/or electric service from PG&E; 2) Customer must be non-residential; 3) whether Measures to be installed satisfy incentive amounts; 4) inspections of the Project site before and after the installation of Measures; 5) and any additional information or requirements requested by PG&E to implement and approve the Customers Project.

2. Feasibility: If applicable, PG&E's and/or its consultant's may review the design, construction, operation or maintenance of the Project, Measures, Project documentation to determine eligibility, incentives and approval. PG&E's review does not constitute any representation as to the economic or technical feasibility, operational capability, or reliability of the Project or its Measures. Contractor is solely responsible for the economic, technical feasibility, operational capability and reliability of the Project and its Measures.

3. Savings: Contractor is implementing the Project on Customer's behalf and is solely responsible for ensuring Project savings are calculated using the appropriate baseline, installed according to Customer's specifications and is delivering the estimated savings. Customer understands Incentives will be paid only for energy savings that exceed California Title 20 and Title 24 standards, or industry standards in the absence of applicable local, state or federal standards.

4. Program Dates: All Incentives and installations must be paid and complete by 12/31/2019. Applications must be postmarked by 11/\_/30\_\_\_\_/2019 in order for Incentive to be processed and paid.

5. Project Commitment Process: The step-by-step commitment process is: **Note:** *Contractor please describe per Project* \_\_\_\_\_.

6. Qualifying Equipment: **Note:** *Contractor please describe per Project* \_\_\_\_\_.

7. Project Operations. Customer is responsible for checking the product/equipment specification to make sure that all requirements are met.

8. New Products. New products ordered, purchased and installed prior to 1/1/2019 or after 12/15/2019 do not qualify for an Incentive. Resale products, products leased, rebuilt, rented, received from warranty or insurance claims, exchanged, won as a prize, or new parts installed in existing products do not qualify.

9. Documentation Submittal Requirement: The documentation which must be submitted is: *Contractor please describe per Project* \_\_\_\_\_.

10. Measure or Site Details: Measures eligible to be installed are: **NOTE: Contractor please describe per Project** \_\_\_\_\_

11. Eligibility: Customer must be an electric or natural gas Customer of PG&E with an active meter serviced by PG&E. Customers throughout PG&E's Service Territory with the following NAICS codes are eligible: **NOTE: Contractor please list:** \_\_\_\_\_.

12. Incentive Payment:

Eligible Measures and associated energy savings are: **NOTE: Contractor please list or include as an attachment** \_\_\_\_\_

Energy savings calculation methodology, including baseline calculation for calculated Projects and/or minimum efficiency standards as applicable is **NOTE: Contractor please attached or is as follows:** \_\_\_\_\_

Expected Incentive payment and payment calculation methodology is: **NOTE: Contractor please attached or is as follows:** \_\_\_\_\_

**Customer Project General Terms and Conditions - Note: If Contractor wants to modify the Customer Project General terms and conditions must be approved in writing by the PG&E PM.**

1. Funding: Contractor is receiving funds from PG&E, under the auspices of the California Public Utilities Commission (CPUC) for this Project, but the Parties agree PG&E is not liable to either Party for any losses or damages, including incidental or consequential damages, arising from this Agreement. PG&E makes no representation or warranty, and assumes no liability with respect to quality, safety, performance, or other aspect of any design, system or equipment installed pursuant to this Agreement, and expressly disclaims any such representation, warranty or liability.

2. Incidental and Consequential Damages: CONTRACTOR OR CUSTOMER SHALL NOT BE LIABLE TO THE OTHER FOR ANY INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES THAT ARISING FROM THIS AGREEMENT.

3. Life of Product: Customer understands Incentive payments are based on related energy benefits over the life of the product. Customer agrees if 1) Customer does not provide PG&E with 100% of the related benefits for the life of the product or a period of 5 years, whichever is less, or 2) Customer ceases to be a distribution Customer of PG&E during said time period, Customer shall refund a prorated amount of Incentive payment(s) to PG&E based on the actual period of time for which Customer provided the related energy benefits as an electric Customer of PG&E.

4. Customers with self-generation capabilities: If Customer has existing onsite cogeneration or self-generation, Contractor shall not pay Incentives for energy savings that exceed Customer's annual energy

usage from PG&E. KW, kWh and therm savings are limited to the previous 12 months quantity of kW, kWh, and/or therms purchased from or delivered by the utility on the meter(s), serving the equipment to be installed, for which the utility collects as directed by the CPUC. The previous 12 months are defined as the year prior to the date the Customer signed this Agreement (including usage from Standby Service and less savings associated with pending energy efficiency applications). This policy is subject to change with 30 day written notice to Customer.

5. Incentives. Incentives, energy savings, and installation costs in this Agreement are ESTIMATES only and may vary upon verification and completion of the Project approval process.

6. Incentive may not exceed Project cost: Customer must submit Project invoice(s) which include: vendor name/address/phone, itemized listing of product(s) including quantity, product description(s), manufacturer, model#, and other identifying information as appropriate, Project cost, date invoice paid or payment terms, and installation date.

7. If Tenant: If Customer is a tenant, Customer represents they have obtained the property owner's permission to install the Measure(s) for which Customer is applying for an Incentive payment.

8. Access and Verification Inspection: PG&E requires Project inspections and performance measurements to verify the incentive. These inspections are not to determine any safety issues. Customer will allow, if requested, a representative from PG&E, the CPUC, Contractor, or any authorized subcontractor reasonable access to Facility to verify the installed product.

9. Compliance with Laws: Contractor shall comply with all federal, state, and municipal laws, ordinances, rules, orders, and regulations, which apply to the implementation of this Project.

10. Advertising: Contractor and Customer agree not to use the names or identifying characteristics of the Customer's Facility, Customer's name or Contractors name for published Project reports (except to fulfill reporting requirements to PG&E and/or the CPUC), advertising, sales promotion or other publicity without written approval.

11. No Double-Dipping: Customer understands they cannot receive Incentives for the same product, equipment or service from more than one California investor-owned utility or third-party Energy Efficiency program offering Incentives for the same product, equipment, or service funded by the CPUC. This prohibition applies three years prior to and three years after receiving Incentives for the same product, equipment or service.

12. No Obligation: California consumers are not obligated to purchase any full fee service or other service not funded by this Program. This Program is funded by California utility ratepayers under the auspices of the CPUC. Los consumidores en California no están obligados a comprar servicios completos o adicionales que no estén cubiertos. Bajo este programa. Este program a está financiado por los usuarios de servicios públicos en California bajo la jurisdicción de la Comisión de Servicios Públicos de California (CPUC).

13. Availability of Funds: This program is available on a first-come, first served until allocated funds are depleted. This Program may be modified or terminated without notice.



13. Project Permits: After energy-saving measures are installed and operable and before incentive or rebates are paid, recipients of the incentive, the Customer, will be required to provide a written certification after installation that Contractor shall provide and states:

13.1 For all rebates or incentives offered by PG&E for an energy efficiency improvement or installation of energy efficient components, equipment, or appliances, the recipient must certify that appropriate permits have been obtained and, if a contractor performed the installation or improvement, that the contractor holds the appropriate license for the work performed. In the case of HVAC installations and replacements, the permit number, permitting agency, contractor who did the installation must be named and sign and date the certification. In the case of Direct Install measures in which the Contractor or contractor/installer is the recipient of the rebate or incentive, the Contractor shall certify that permitting requirements have been met.

I have read and understand these Terms and Condition and certify the information I have provided to implement this Project is true and correct.

AGREED AND ACCEPTED:

**CUSTOMER**

Signed: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

Email: \_\_\_\_\_

Phone: \_\_\_\_\_

Date: \_\_\_\_\_

PG&E Service Agreement ID #c. \_\_\_\_\_ {Electric)

PG&E Service Agreement ID # \_\_\_\_\_ {Gas)

Tax Status: (circle one) Corporation      Partnership      Individual/Sole Proprietor Exempt (Tax exempt, non-profit)

Taxpayer ID #: (circle one and fill in)      EIN      Federal Tax ID SSN \_\_\_\_\_

The value of Incentives and direct installations is taxable. Contractor will report Incentives and direct installations greater than \$600 to the IRS on Form 1099, unless you are exempt. Please consult your tax advisor concerning the taxability of Incentives. Customer, not Contractor, is responsible for any taxes imposed as a result of your receipt of Incentives from this Program. 1099 will be issued for the Customer, regardless of who the payee is, because the Customer receives the benefits of the Incentives.

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# REDWOOD COAST Energy Authority

## STAFF REPORT Agenda Item # 7.2

AGENDA DATE:	November 19, 2018
TO:	Board of Directors
PREPARED BY:	Lori Biondini, Director of Business Development and Planning
SUBJECT:	Schweitzer Engineering Laboratories Proposal and Agreement

### SUMMARY

In September 2017 the Board authorized participating in a grant response to the California Energy Commission which proposed a microgrid project that would serve the California Redwood Coast – Humboldt County Airport and other County of Humboldt facilities, as well as the nearby Coast Guard station and others. The prime applicant, the Schatz Energy Research Center / HSU Sponsored Programs Foundation (SERC) has a signed agreement with the California Energy Commission accepting a grant award for the project, and recently entered into a sub-agreement with RCEA who will own and operate the microgrid in coordination with Pacific Gas & Electric Company.

Schweitzer Engineering Laboratories (SEL) is the vendor that has been selected to design and manufacture the control system for the microgrid. Staff and legal counsel Nancy Diamond have reviewed the proposal, including the terms and conditions, and are content with the current version.

### FINANCIAL IMPACTS

The total contract amount of \$596,805 is to be entirely paid from California Energy Commission funds as part of the grant award. RCEA's labor costs to engage with SEL are expected to be minimal since SERC is acting as RCEA's owners engineer to execute the project.

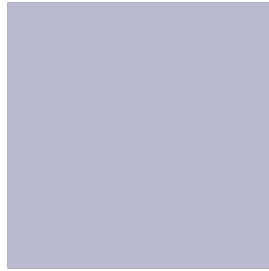
### RECOMMENDED ACTION

Accept the Schweitzer Engineering Laboratories Proposal for Redwood Coast Energy Authority Arcata-Eureka Airport – Microgrid Project Rev. 1a and authorize the Executive Director to execute the agreement and all associated documents.

### ATTACHMENTS

- Airport Microgrid Proposal for Redwood Coast Energy Authority Arcata-Eureka Airport – Microgrid, SEL ES Project #:017883.000.00 Rev. 1a

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# Proposal for Redwood Coast Energy Authority

*Arcata-Eureka Airport – Microgrid*

SEL ES Project #: 017883.000.00 Rev.1a

Submitted: November 5, 2018

## Redwood Coast Energy Authority Contact Information

**Matthew Marshall**

**Executive Director**

Redwood Coast Energy Authority  
633 3rd Street  
Eureka, CA 95501  
Office: 707.269.1700 x302  
www.RedwoodEnergy.org

## SEL ES Contact Information

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**Niraj Shah**

**SPS Branch Manager**

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**Project Manager**

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**Joe Kastenholz**

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Cell: 509.553.3031  
Email: joe\_kastenholz@selinc.com

## Sales Representative Contact Information

**Josh Barklow, PE**

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Document Revision Table

Rev.	Issue Date	Notes
0	06/27/2018	Initial submittal.
1	10/30/2018	Revised for T&Cs and reverted to previous SEL project number
1a	11/5/2018	Corrections to clarify customer and end user names.

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# 1 Scope of Services

This proposal is provided by SEL Engineering Services, Inc. (SEL ES) in response to a request to provide engineering services for the Arcata-Eureka Airport microgrid project, dated 19 September 2017, by David Carter of Humboldt State University (HSU). SEL products referred to in the proposal are manufactured by Schweitzer Engineering Laboratories, Inc. (SEL).

Service Description	Price
<ol style="list-style-type: none"> <li>1. Configure Microgrid Controller panel with HMI interface to perform the following tasks:               <ol style="list-style-type: none"> <li>a. Dispatch battery system through the Tesla Site Master Controller (SMC) when grid connected per csv file generated by a third-party system</li> <li>b. Switch mode of batteries to VF mode though Tesla SMC when islanded to maintain voltage and frequency at nominal values</li> <li>c. Modbus/TCP or DNP3 interface to Tesla TSM</li> <li>d. Modbus/TCP or DNP3 interface to demand response capable EV chargers via Modbus/TCP or DNP3</li> <li>e. Modbus/TCP or DNP3 interface to wholesale generation output meter</li> <li>f. Modbus/TCP or DNP3 interface to net-metered PV system output meter</li> <li>g. Modbus/TCP or DNP3 interfaces to PG&amp;E recloser #1 and #2</li> <li>h. Auto-synchronization to reconnect to local utility for two (2) circuit breakers</li> </ol> </li> <li>2. Review of high-level control logic for microgrid controller with SERC and PG&amp;E.</li> <li>3. Review design and provide feedback on protection scheme and settings for two (2) SEL-351R recloser relays.</li> <li>4. Review design and provide feedback on cybersecurity</li> <li>5. Configuration of four (4) SEL-3620 Ethernet Security Gateways to support secure communication across different sites.</li> <li>6. Creation of two (2) SEL-351R relays configuration files from settings provided by customer.</li> <li>7. Kick-off meeting for two (2) SEL engineers at customer premises</li> <li>8. Design review meeting for two (2) SEL engineers at customer premises</li> <li>9. Two (2) days of commissioning support for pre-energization for the reclosers by one (1) SEL engineer.</li> <li>10. Two (2) days of commissioning support for pre-parallel inspection for the reclosers by one (1) SEL engineer.</li> <li>11. Five (5) days of Factory Acceptance Tests (FAT) at SEL headquarters in Pullman, WA using RTDS.</li> <li>12. Twelve (12) days of commissioning support by one (1) SEL engineer.</li> </ol>	<div>\$ [REDACTED]</div>



13. Three (3) days of training by one (1) SEL engineer at customer premises. 14. Basic Real Time Digital Simulation (RTDS) Model for hardware in loop testing – the model will be based on standard IEEE components for batteries, PV inverters and all equipment 15. Documentation: <ul style="list-style-type: none"> <li>a. Functional Design Specification (FDS)</li> <li>b. I/O list</li> <li>c. Communication Architecture</li> <li>d. Data Flow Diagram</li> <li>e. Factory Acceptance Test (FAT) Procedure and Report</li> <li>f. Site Acceptance Test (SAT) Procedure</li> <li>g. User Manual</li> <li>h. Drawings (panel layout, panel wiring diagram, BOM)</li> </ul>	
<b>Equipment</b> As listed in Section 1.1.1. Equipment/Software	\$ [REDACTED]
<b>Optional Service #1:</b> Advance RTDS Model with Validation Report (this model is built using customized model components to match field data)	\$ [REDACTED]
<b>Optional Service #2 (requires Optional Service #1):</b> Decoupling Study Report based on the advanced RTDS model Programming of a decoupling scheme for two (2) SEL-351R relays	\$ [REDACTED]
<b>Total Price</b>	<b>\$596,805</b>

All quoted prices are exclusive of any sales, use, value-added, or similar taxes, which will be added, if applicable, at the statutory rate(s) at the time of invoicing.

## 1.1 Deliverables to Customer

### 1.1.1 Equipment/Software

SEL ES will provide the following equipment to Redwood Coast Energy Authority (“Customer”):

- One (1) Microgrid Controller Panel with the following equipment:
  - SEL-3355 Rack-Mount Rugged Computer, Qty: 1
  - SEL-3555 Real-time Automation Controller (RTAC), Qty: 1
  - SEL-2488 Satellite-Synchronized Network Clock, Qty:1
  - SEL-3620 Ethernet Security Gateway, Qty:1
  - SEL-2730M Managed Ethernet Switch, Qty:1
  - Copa Data Zenon HMI/SCADA software
  - 19" Touch Screen Monitor
  - Keyboard & Mouse

- Loose equipment to HSU
  - SEL-351R, Qty: 2
  - SEL-2730M Managed Ethernet Switch, Qty: 9
- Loose equipment to RCEA and TEA
  - SEL-3355 Rack-Mount Rugged Computer, Qty: 2
  - Additional Zenon Runtime Licenses, Qty: 2
  - SEL-3620 Ethernet Security Gateway, Qty:3

Note: All drawings will be provided in AutoCAD format (.dwg) version 2010 unless otherwise noted.

### 1.1.2 Documentation

SEL ES will provide the following documentation to the Customer:

- An initial set of drawings for the customer to review, comment, and approve consisting of the following
  - Panel structural drawings
  - Wiring drawings
  - Bill of material (BOM), including revised part numbers, quantities, etc.
  - Panel layout drawings, including revised placement, numbers, etc.
  - Nameplate list, including revised device numbers, etc.
  - A final set of the above drawings that have been approved by the customer
- A Functional Design Specification
- An I/O list
- A Communication Architecture
- A Data Flow Diagram
- A Factory Acceptance Test Plan
- A Factory Acceptance Test Report
- A Site Acceptance Test Plan
- A User Manual

## 1.2 Deliverables to SEL ES

The Customer will provide the following items to SEL ES:

Failure to supply the following information in a timely manner will affect the schedule.

- An approved one-line drawing for the project
- Drawing templates, standards, and numbers. If not supplied, then the project will use SEL ES drawing templates, standards, and numbers.
- IEDs I/O list

- A review and approval of the initial drawing package
- A review and approval of the FDS
- A review and approval of the I/O List
- A review and approval of the Communication Architecture
- A review and approval of the Data Flow Diagram
- A review and approval of the FAT Plan
- A review and approval of the FAT Report
- A review and approval of the SAT Plan
- A review and approval of the User Manual

### **1.3 Change in Scope**

The party identifying a potential change in scope will request the change of scope to the other in writing (fax, email, or letter). SEL ES will identify any budget or schedule impact and submit it for approval. SEL ES will proceed with the work as soon as SEL ES receives written approval, in accordance with established contract provisions.

## 2 Payment and Work Schedule

---

Milestone Activity	Price
1. Kick Off Meeting	\$94,395
2. Panel Design Approved	\$100,000
3. Functional Design Specification Approved	\$100,000
4. Factory Acceptance Test Report	\$130,382
5. Equipment Delivered	\$122,999
6. Commissioning Completed	\$49,029
<b>Total</b>	<b>\$596,805</b>

All quoted prices are exclusive of any sales, use, value-added, or similar taxes, which will be added, if applicable, at the statutory rate(s) at the time of invoicing.

The price does not include freight or brokerage duties. Panels will be packaged for overseas shipping. It is the Customer's responsibility to arrange for transportation of the panels to the job site. If the Customer prefers that SEL ES ship the panels, actual freight costs will be determined at the time of shipment and added to our invoice.

Unless indicated otherwise in this proposal, the price does not include the cost of any payment, performance, and/or warranty security instrument.

This proposal is valid for 60 days. SEL ES reserves the right to withdraw this offer if mutually accepted credit terms cannot be agreed upon.

### 2.1 Payment and Credit Terms

If your company does not have established credit terms sufficient to cover this purchase, SEL ES reserves the right to require any of the following: credit information, prepayment, letter of credit, or progress payments prior to acceptance. If customer does not meet credit requirements, we will require a letter of credit, a bank guaranty, a bond in the amount of the project value or prepayments for each milestone. This Guaranty or Bond will be at the customer's expense and shall be valid for the life of the project. In the event an unpaid or past due amount exists at 30 days before the expiration of the Guaranty or bond, then Company shall provide a replacement Guaranty or bond prior to the expiration of the original.

Work cannot be initiated until adequate credit terms have been established.

Payment Terms: Net 30 days after date of invoice.

### 2.2 Schedule

Delivery of panel design drawings is 8 weeks after kick off meeting.

Delivery of equipment shall be 14 to 16 weeks after approval of panel design drawing(s).

The panel fabrication schedule is based on the following:

- Customer approval of the panel structural and panel layout drawings
- Customer approval of the panel BOMs

- A one-time review of drawings, BOMs, and nameplate lists

Drawings will be transmitted electronically by email to expedite approval turnaround time.

SEL ES will furnish a schedule for engineering, drawings for approval, manufacture, test, and shipment within two weeks after receipt of a purchase order and agreed upon terms.

Failure to supply requested information in a timely manner will affect the schedule.

Proposed schedules are based on present workloads and, if applicable, material and equipment deliveries. The schedule may change depending upon the start date and the impact of work that may be awarded to SEL ES between the date of this proposal and the date of the award.

Schedule is subject to acceptable payment and credit terms.

## 3 Clarifications and Exceptions

SEL ES developed the scope of work, schedule, and price based on the information provided to us as listed in this proposal. Should additional or changed work be required, including such work resulting from unusual conditions or for any other reasons that are not evident from the information provided, changes to the price or schedule may result.

SEL ES will assign a project manager to the project. The project manager will oversee and maintain the schedule within SEL ES. The project manager will also be the point of contact with the Customer in order to maintain a smooth flow of information.

### 3.1 Clarifications

The signed and approved Functional Design Specification (FDS) supersedes any proposal, specification, or other preliminary design documents.

SEL ES assumes during decoupling event, inverters, PVs and batteries will not trip by themselves.

SEL ES assumes during island operation, battery plus PV capacity can handle all loads in the system without any load shedding action. Otherwise a contingency based load shedding functionality would be required in the Microgrid controller which currently is not included in the proposal.

SEL's products and services are commercial items under the federal acquisition regulations. This proposal is contingent on SEL ownership of its intellectual property and data. To that end, SEL respectfully requests that any flow-through terms applied to this project ONLY reference these terms to reflect the understanding of intellectual property and data rights.

### 3.2 Exceptions

- Supplying and installing any kind of cabling, or wiring is not within the scope of this proposal.
- Physical installation of SEL supplied panel, equipment and wiring is not within the scope of this proposal.
- Configuration or setting of any protection relay is not within the scope of this proposal.

### 3.3 Per Diem

SEL ES will perform additional onsite work on a per diem basis, unless the Customer and SEL ES agree on other arrangements. The party identifying a potential change in scope will request the change of scope to the other in writing (fax, email, or letter). SEL ES will identify any budget or schedule impact and submit it for approval. SEL ES will proceed with the work as soon as SEL ES receives written approval, in accordance with established contract provisions. Refer to Table 1 for the per diem rates.

Table 1 Per Diem Rate Table (U.S.)

Item	Description	Price (USD)
1	Mobilization fee per U.S. personnel	Distant (requires air travel) = <span style="background-color: black; color: black;">[REDACTED]</span> Local (within 200 miles) = \$ <span style="background-color: black; color: black;">[REDACTED]</span>
2	Daily rate per U.S. personnel	Weekday rate = \$ <span style="background-color: black; color: black;">[REDACTED]</span> /day Saturday rate = \$ <span style="background-color: black; color: black;">[REDACTED]</span> /day Sunday and holiday rate = \$ <span style="background-color: black; color: black;">[REDACTED]</span> /day

All quoted prices are exclusive of any sales, use, value-added, or similar taxes, which will be added, if applicable, at the statutory rate(s) at the time of invoicing.

The following details apply to Table 1:

- No receipts will be provided as part of the per diem rates.
- The mobilization fee is defined to include the labor and travel costs associated with transporting one person roundtrip to and from the Customer site.
- The daily rate is the charge per person, per day. Typical working hours are 8 a.m. to 6 p.m., Monday through Friday. Lunch shall be up to 60 minutes with two 15-minute breaks each day. If all the onsite work cannot be performed during typical working hours, then the daily per diem rate will be billed at 1.5 times the above rate for work performed Monday through Friday. Onsite work performed on Saturday or Sunday shall be agreed upon between the Customer and SEL ES in advance and be subject to additional charges.
- For safety reasons, SEL ES service personnel will not plan to work more than 10 hours per day. Should job requirements dictate work hours in excess of 10 hours per day, SEL ES and the Customer must review the requirements and agree on an appropriate plan that addresses safety concerns and the reasonableness of the hardship that the excessive hours place on SEL ES personnel.
- Time spent by SEL ES personnel on site while waiting standby, training, or traveling to and from the site will be considered billable time.
- Per diem rates are valid for work performed within one year of the proposal date.
- Holidays observed for U.S. Offices include: New Year's Day (observed), Memorial Day, Independence Day (observed), Labor Day, Thanksgiving Day, Thanksgiving Friday, and Christmas Day (observed).

### **3.4 Onsite Commissioning Support**

Onsite commissioning support is provided as part of this proposal. For this support, the SEL ES engineer will work under the direction of the Customer's engineer in charge and will assist with technical issues that arise during commissioning regarding SEL devices. The engineer in charge will be responsible for providing and operating required test equipment. The SEL ES engineer will follow operational and safety procedures governing the work site but will not be responsible for enforcing operations and safety procedures, the direct supervision of personnel, or taking or releasing system clearances.

Delays in project completion, or noncompletion of the onsite commissioning support, due to troubleshooting, finding, and correcting problems created by the Customer's installation shall not be the responsibility of SEL ES.

SEL ES engineers will bring hard hat, safety-toe protective footwear, safety glasses, ear plugs, and cotton or fire-rated shirt. Customer will provide any other special clothing or safety equipment required to enter site. Also, Customer will provide any special safety training to enter site (training time shall apply to onsite support time).

In addition to offered support, the SEL engineer can be available to provide final commissioning support and training to the operator based on Per Diem pricing. SEL needs 4 weeks of advance notice to depute engineer onsite for such request.

### 3.5 Factory Acceptance Testing

SEL ES performs complete factory assembly and testing of integrated systems, contributing to easier, faster, and error-free commissioning.

The checkout procedures, specifically for relays and automation FAT activities, typically include the following activities:

- Prefunctional test checkout (general workmanship, wire continuity, isolation, etc.)
- Settings loaded into the relays and communications processors
- Data cable connection checkout
- Communications status checkout
- DC control circuit functional tests (battery bank and charger)
- AC sensing circuit functional tests

There is no charge for the Customer being present during factory acceptance testing. The Customer will be notified at least two weeks prior to the FAT.

### 3.6 Relay Setting Service

Relay settings and supporting documentation are provided by electronic means. The documents include relay settings, supporting calculations, pertinent fault study results, and overcurrent coordination curves, as required in Microsoft Word or Adobe Acrobat format. In addition, these documents will also include settings for all SEL relays in an ACSELERATOR QuickSet® SEL-5030 Software database to facilitate setting the relays.

### 3.7 Closed-Loop Testing Services

Highly qualified SEL ES personnel will create a transient system model of the power system on a Real Time Digital Simulator (RTDS). The model will have sufficient detail to study areas of interest identified by the Customer. The RTDS locates and solves issues on a transient network in real time in conjunction with protective devices and/or automation controllers, thus creating a closed-loop testing environment. This method allows the devices to be tested under realistic system conditions.

SEL ES will provide a test rack with relays, perform the tests, and provide a test report. Although SEL ES attempts to use the exact model numbers, the test relays may not exactly match the relays used in the field. SEL ES will provide and retain ownership of the SEL test subject relays. The Customer will provide and retain ownership of the non-SEL test subject relays.

The Customer is encouraged to participate in and witness the testing in the Solution Delivery Center in Pullman, Washington. There is no better environment for studying and understanding the behavior of protection and automation systems. Power system models can be subjected to tens of thousands of internal and external faults under different system conditions in a short time. The extensive amount of data generated during the test can be imported into Microsoft Excel and easily analyzed.

A typical testing period takes approximately five days, which allows the Customer and SEL ES to fully explore relay and system performance. Examples of closed-loop testing include automatic transfer schemes, high-voltage transient testing, remedial action schemes, and power management solutions.



## **3.8 Onsite Training**

Onsite training from SEL ES is provided as part of this proposal. Training can be formal classroom format for a medium-to-large group; informal, job-site instruction for a small group of engineers and technicians; or a combination of both. The scope and format of the training will be created with input from the Customer's project manager.

Training charges include the instructor's preparation time, delivery time, and expenses for one instructor on site, a course syllabus, and training materials for a set number of students. SEL ES requires a four-week notification to adequately prepare for this training. The Customer is typically responsible for the training facility, PC projector, overhead projector, whiteboard with markers, relay test set (optional), and break and lunch services. Optionally, SEL ES may be able to provide additional loan relays and relay instruction manuals for use during the course.

## **3.9 Cybersecurity – Project Passwords**

To maintain security during the processes of engineering, fabrication, factory tests, shipment, delivery, onsite testing, and commissioning, the electronic devices in this system are assigned project passwords. They are specific to this project and are controlled at SEL ES on a strict need-to-know basis.

As part of the final deliverables from SEL ES, the Customer will receive documentation identifying the project passwords in each of the delivered products. SEL ES recommends that the Customer change the project passwords to Customer-defined passwords upon receipt of their products.

SEL ES policy is to change passwords; however, SEL ES will follow the Customer policy regarding passwords as advised.

## **3.10 Expense Overhead**

### **3.10.1 Power System Simulation**

The Real Time Digital Simulator (RTDS) used in this project will be billed at the rate of \$4,000 per day. The RTDS testing shall be limited to two buses beyond each end of the test area unless stated otherwise in this proposal.

## 4 Project Quality Plan

SEL maintains a documented quality system that meets the requirements of ISO 9001.

SEL ES strives to design, develop, and deliver dependable, quality solutions that exceed Customer expectations by applying the SEL ES Project Procedure illustrated in Figure 1. The procedure and subordinate work instructions encompass a sequential, phase-gate design process. The primary goal is to design in quality from the beginning of the project. Time spent early on to ensure that customer project requirements and the design basis are correct saves time and effort in later phases for the customer, the project team, and others involved.

The SEL ES Project Procedure has phases for planning, definition, development, testing/validation, commissioning, and close out. Detailed design reviews of requirements and deliverables by competent technical reviewers from SEL ES authorized reviewer lists ensure the quality of deliverables. Testing and validation processes prove the performance of the solution for the customer's application.

The customer has an important role in the process. Throughout the project, SEL ES will communicate project status and provide opportunities to define requirements, review deliverables, and provide feedback on SEL ES performance. Additionally, when customers define hold/witness points or approval requirements, SEL ES will include the requirements in its detailed project plans to guarantee compliance.

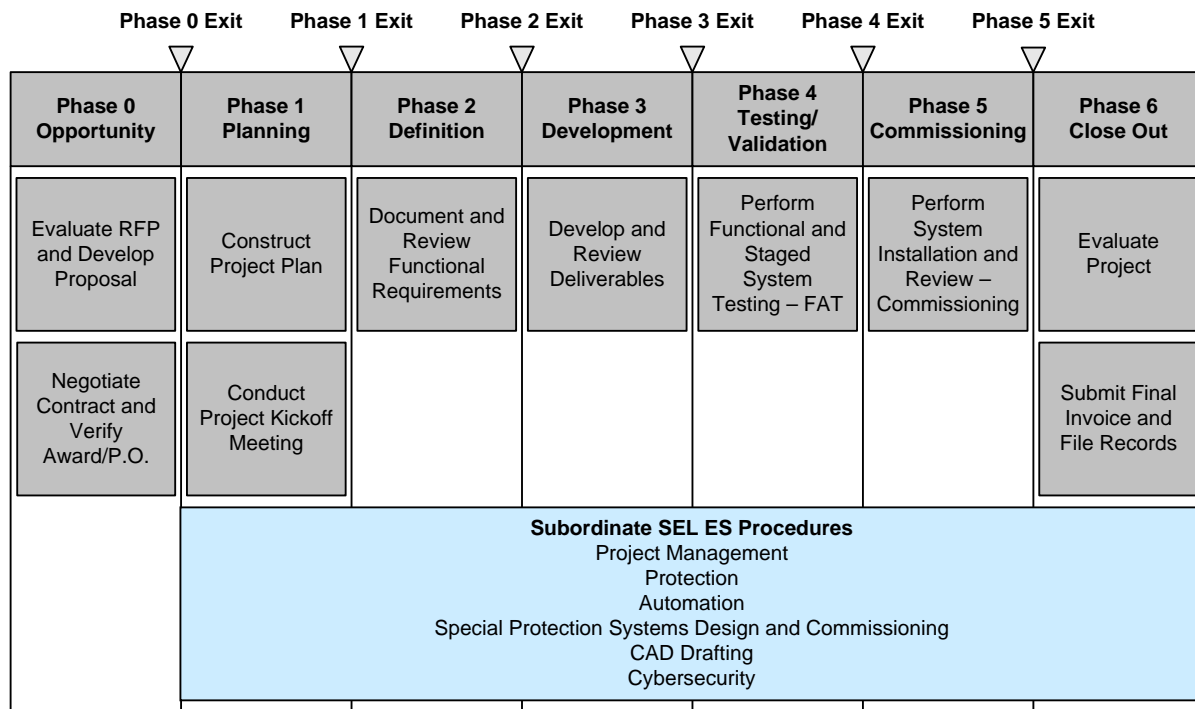


Figure 1: SEL ES Project Procedure Diagram

## 5 SEL ES Terms and Conditions

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To accept this proposal and attached terms, please return this sheet, signed and dated.

Redwood Coast Energy Authority (“Customer”)  
633 Third Street  
Eureka, CA 95501

SEL Engineering Services, Inc. (“SEL ES”)  
2350 NE Hopkins Court  
Pullman, WA 99163 USA

Signature: \_\_\_\_\_

Signature: \_\_\_\_\_

Print Name: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Contract Information (to be completed by client):

Contract Amount: \$ \_\_\_\_\_

Client PO/  
Reference/Contract#: \_\_\_\_\_

Ship To Address: \_\_\_\_\_

Bill To Street Address: \_\_\_\_\_

Bill To Email Address: \_\_\_\_\_

**1. Applicable Terms and Conditions.** These terms and conditions (“Terms”) constitute the entire agreement between Customer and SEL Engineering Services, Inc. (“SEL ES”) with respect to the subject matter hereof. These Terms supersede any prior or contemporaneous, verbal or written, agreements, negotiations, commitments, representations or correspondence between the parties, including any terms and conditions on any purchase order form. SEL ES hereby rejects any representation, express or implied warranty, course of performance or dealing, trade usage or any different or additional terms and conditions not set forth herein. No variation or modification of these Terms, nor any written consent or acknowledgment, shall have any force or effect unless reduced to writing and signed by an authorized officer of SEL ES. Any Schweitzer Engineering Laboratories, Inc. (“SEL”) products purchased in conjunction with the Project shall be subject to the then current SEL product sales terms, which are available at SEL’s website at [www.selinc.com/termsandconditions/UnitedStates](http://www.selinc.com/termsandconditions/UnitedStates) and incorporated herein by reference.

**2. Project Description and Documents.** “Project” means the project described in the applicable “Scope of Services.” “Payment and Work Schedule” means the Payment and Work Schedule applicable to the Project. These Terms include the Scope of Services, as well as each future Scope of Services, the design documents prepared by SEL ES, the Payment and Work Schedule agreed to by the parties, any future Payment and Work Schedule and any Project Change Orders (to be numbered in accordance with the applicable Project or Payment and Work Schedule).

**3. SEL ES Responsibilities.** SEL ES shall furnish the necessary engineers and technicians to provide the engineering services set forth in the Scope of Services. The professional obligations of SEL ES’s design professionals shall be undertaken and performed in the interest and on behalf of SEL ES in accordance with applicable laws and regulations governing such design professionals and generally accepted engineering practices prevailing in the state where the Project is located. Nothing contained in these Terms shall create any professional obligation or contractual relationship between the individual professionals and Customer. SEL ES shall assist Customer in obtaining any necessary approvals of professionally-sealed drawings, and shall assist Customer in obtaining necessary approvals from governmental authorities having jurisdiction over the Project.

**4. Customer Responsibilities.** Customer shall provide SEL ES with full information regarding the requirements for the Project, and SEL ES shall be entitled to rely on such information. Any tests, data of any kind or reports of Customer’s other consultants or independent contractors shall be furnished with reasonable promptness and SEL ES shall be entitled to rely upon their sufficiency, accuracy and completeness without further inquiry. Customer shall provide all information requested by SEL ES relating to the Project expeditiously and shall render decisions pertaining thereto in order to avoid delay in the orderly progress of the design and construction of the Project. Any corrections or changes to the Project resulting from deficiencies or changes by Customer or others shall be at Customer’s expense. Customer must meet the then current SEL ES credit requirements. Customer shall pay SEL ES in accordance with the agreed upon Payment and Work Schedule. Prices are exclusive of any taxes. Amounts due SEL ES under these Terms that are not paid when due shall bear interest from the date due at a rate of 1.5% per month or the highest applicable rate allowed by law.

**5. Intellectual Property.** SEL ES retains all its intellectual property rights. All documents, designs, drawings, plans, specifications and other work product (collectively “Work Product”) prepared by SEL ES in performing the Project shall not be deemed “works made for hire” for Customer. To the

extent that any such Work Product prepared by SEL ES while performing the Project is integrated into the Project, SEL ES hereby grants Customer a perpetual, worldwide, non-exclusive, non-transferable, personal, revocable, limited license to use, copy and modify such Work Product for internal business purposes only. SEL ES's Work Product and/or designs for other projects shall not be used for any purpose except the applicable Project without first obtaining SEL ES's written consent. Customer agrees to indemnify, defend and hold harmless SEL ES and all related parties from and against any unauthorized use or reuse of Work Product furnished by SEL ES, and any changes made by Customer or others relating to design documents produced by SEL ES.

**6. Use of Confidential Information.** In the performance of the Project and/or these Terms, a party may receive documents, materials, data and other confidential information of the other party or its affiliates. The receiving party shall use confidential information solely in performance of the Project and any resulting business transaction between the parties. The receiving party shall use at least the same degree of care (and, in any event, not less than a reasonable degree of care) in protecting the disclosing party's confidential information as it exercises in protecting its own similar confidential information. Confidential information shall be subject to these Terms for three (3) years following receipt of such confidential information. Confidentiality obligations shall survive the termination of these Terms.

**7. Warranties and Limitation of Liability.** SEL ES shall perform the Project in a manner consistent with the degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances. SEL ES shall reperform (or, at SEL ES's option, pay a third party to reperform) any defective services at no cost upon receipt of notice detailing the defect(s) within one (1) year of performance of the original services. TO THE MAXIMUM EXTENT PERMITTED BY LAW, THIS WARRANTY SHALL BE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER STATUTORY, EXPRESS, VERBAL OR IMPLIED (INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE AND WARRANTIES ARISING FROM COURSE OF DEALING OR PERFORMANCE OR USAGE OF TRADE). In no event, whether as a result of breach of contract, indemnity, warranty, tort (including negligence), strict liability or otherwise, shall SEL ES liability to Customer or its insurers for any loss or damage exceed the price of the specific service that gave rise to the claim, and any liability shall terminate at a reasonable time, not to exceed one (1) year, after provision of services. No claim, regardless of form, arising from these Terms may be brought more than one (1) year from the date such claim accrues. Claims against SEL ES are hereby agreed to have accrued not later than the completion of the Project, notwithstanding any laws to the contrary. In no event, whether as a result of breach of contract, indemnity, warranty, tort (including negligence), strict liability or otherwise, shall SEL ES be liable for any special, incidental, consequential or punitive damages, including without limitation any loss of profit or revenues, loss of use of associated equipment, damage to associated equipment, cost of capital, cost of substitute products, facilities, services or replacement power, downtime costs or claims of Customer's customers for such damages. Customer shall indemnify, defend and hold harmless SEL ES and all related parties from and against any claims, demands, causes of action, losses, costs and expenses, including without limitation legal fees and other costs, arising directly or indirectly from, as a result of or in connection with the acts or omissions of Customer, its officers, employees, agents or representatives, relating to the Project and/or these Terms, including without limitation any defect or failure or alleged defect or failure in or of any Customer product or operation. Remedies are limited to those set forth in these Terms.

**8. Termination.** Customer may terminate these Terms upon ten (10) business days written notice to SEL ES in the event the Project is abandoned or otherwise terminated prior to completion. If such termination occurs, Customer shall pay SEL ES for the services completed through the date of termination, and Customer shall pay for any obligations, commitments and unsettled claims that SEL ES has undertaken or incurred in connection with the Project. Customer may terminate the Project if SEL ES defaults or persistently fails or neglects to perform services in accordance with these Terms. However, such termination is permitted only if Customer provides written notice setting forth the default and SEL ES fails to begin to correct the default within ten (10) business days after receipt of such notice. If Customer fails to make payment when due or fails to meet the then current SEL ES credit requirements, SEL ES may give written notice of its intention to terminate the Project. If Customer fails to make payment or correct its credit status within ten (10) business days of such notice, SEL ES may suspend work and terminate the Project. SEL ES shall recover from Customer for services rendered, including reasonable profit and interest.

**9. Dispute Resolution.** The laws of the State of Washington, United States of America, excluding conflict of laws principles, shall govern these Terms. Any controversy or claim arising out of or relating to these Terms or the breach thereof shall be settled through good faith mediation using a mutually agreeable mediator. If mediation reaches impasse, then any such controversy shall be settled by binding arbitration administered by the American Arbitration Association in accordance with the Procedures for Large, Complex Commercial Disputes under the Commercial Arbitration Rules, and judgment on the award rendered by the arbitrator may be entered in any court having jurisdiction thereof. The place of arbitration shall be Seattle, Washington, United States or another location agreed upon by the parties. The language of the arbitration shall be English. The prevailing party to any dispute shall be entitled to recover legal fees and other costs (including without limitation disbursements, collection costs and the allocated cost of in house counsel).

**10. Miscellaneous.** Any notice pursuant to these Terms shall be deemed given when sent by registered or certified mail (return receipt requested), overnight delivery or fax (confirmed receipt and sent by mail) to an authorized officer at the address or fax number provided on the cover sheet of this proposal or, if no such address or fax number is provided, at the registered headquarters of the other party. All rights and duties hereunder shall be for the sole and exclusive benefit of Customer and SEL ES and not for the benefit of any other party. The assignment or transfer by Customer of any rights or duties hereunder without prior written consent of an authorized officer of SEL ES shall not relieve Customer of any obligations to SEL ES. SEL ES may perform its obligations hereunder personally or through one or more of its affiliates, although SEL ES shall nonetheless be solely responsible for the performance of its affiliates. No failure or delay by either party in exercising any right or remedy, or insisting upon strict compliance by the other party with any obligation in these Terms, shall constitute a waiver of any right thereafter to demand exact compliance with these Terms. The invalidity, in whole or in part, of any provision in these Terms shall not affect the remainder of such provision or any other provision and, where possible, shall be replaced by a valid provision that effects as close as possible the intent of the invalid provision. No party shall be liable for failure to perform or delay in performance of any obligation under these Terms (except payments of amounts already due and owing) where such failure or delay results from any events beyond its reasonable control.

## Attachment 1 Technical Description

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The Arcata-Eureka Airport Microgrid System will be based on an SEL-3555 Real Time Automation Controller that will acquire data from SEL and third party equipment. Communication will occur over an Ethernet network and standard substation automation protocols such as IEC61850, DNP3 and Modbus/TCP might be used.

### Hardware Features

#### GPS Clock

All SEL IEDs will be time synchronized using an SEL-2488 Satellite Synchronized Network Clock. The SEL-2488 Satellite-Synchronized Network Clock receives Global Navigation Satellite System (GNSS) time signals and distributes precise time via multiple output protocols, including IRIG-B and Network Time Protocol (NTP). The SEL-2488 raises the bar for satellite-synchronized clocks by providing higher levels of accuracy, flexibility, dependability, and ease of use. The advanced capabilities of the SEL-2488 make it well suited for demanding applications, like synchrophasors, event recording, and larger substations with multiple time synchronization requirements.

Advanced Time Synchronization



#### Managed Ethernet Switch

The Ethernet backbone of the system is the SEL-2730M Managed Ethernet Switch. The SEL-2730M Managed 24-Port Ethernet Switch is designed for the harsh conditions found in the energy and industrial environments. The switch supports communications infrastructure built for engineering access, supervisory control and data acquisition (SCADA), and real-time data communications, while offering the same reliability found in SEL protective relays. The SEL-2730M meets or exceeds the IEEE 1613 (Class 2), IEC 61850-3, and IEC 60255 industry standards for vibration, electrical surges, fast transients, extreme temperatures, and electrostatic discharge for communications devices in electrical substations.



## Security gateway

A router, virtual private network (VPN) endpoint, and firewall device, the SEL-3620 Ethernet Security Gateway can perform secure and proxy user access for serial-and Ethernet-based intelligent electronic devices (IEDs). The SEL-3620 helps create a user audit trail through strong, centralized, user-based authentication and authorization to modern and legacy IEDs. The SEL-3620 secures your control system communications with a stateful deny-by-default firewall, strong cryptographic protocols, and logs for system awareness. The SEL-3620 also manages protected IED passwords, ensuring that passwords are changed regularly and conform to complexity rules.



## HMI Computer

Designed as a server-class computer, the tough SEL-3355 Computer is built to withstand harsh environments in utility substations and industrial control and automation systems. By eliminating all moving parts, including rotating hard drives and fans, and using error-correcting code (ECC) memory technology, SEL computers have over ten times the mean time between failures (MTBF) of typical industrial computers. Designed, manufactured, and tested to the same standards as our protective relays, every SEL-3355 comes with an unprecedented ten-year, worldwide SEL warranty.



## Microgrid Controller

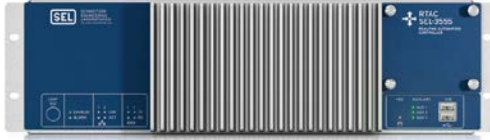
Suitable for use in utility substations or industrial control and automation systems, the SEL-3555 Real-Time Automation Controller (RTAC) provides complete and flexible system control with integrated security, seamless configuration, unified logic, and reliability. The RTAC converts data between multiple protocols, communicates with any configured and connected device, and comes with an embedded IEC 61131 logic engine.

During grid connected operation, Microgrid controller will be able to read a CSV file which contain hourly real power generation dispatch values generated by an external optimization run at the Redwood Coast Energy Authority's Scheduling Coordinator (The Energy Authority). The Microgrid Controller will use the values in this file to dispatch the generation on an hourly basis. If the real power command from the CSV file would cause a real time constraint to be violated the microgrid controller will dispatch the generation as close to the requested value as possible.

During transition to island mode, Microgrid controller will switch mode of batteries to VF mode though Tesla SMC.

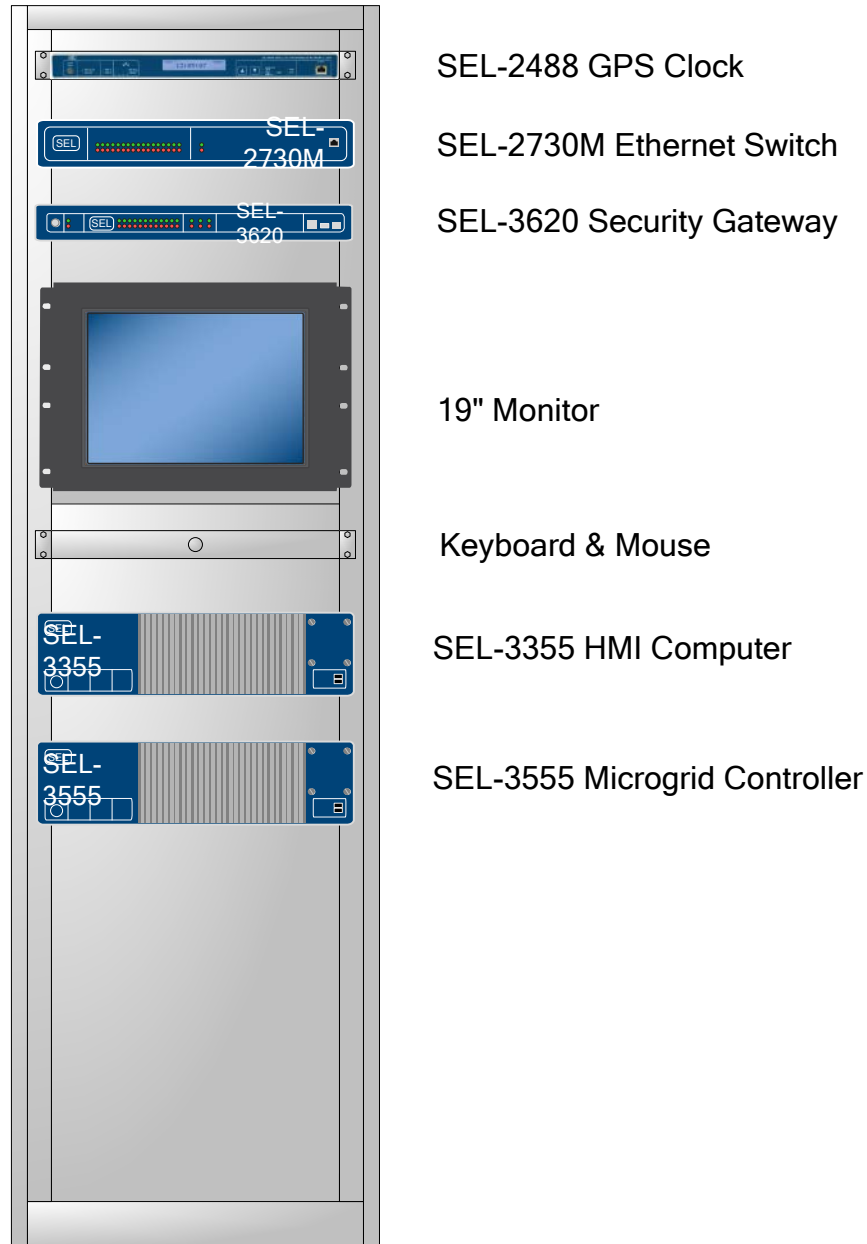
During islanded operation, Microgrid controller will interface with Tesla SMC to dispatch the batteries to make sure during islanded operation voltage and frequency will be maintained at nominal values.

When the wider grid has been restored with good power quality, Microgrid controller will receive an autosync permissive command from PG&E recloser and start initiate the autosynchronization between microgrid and wider grid. Once the synchronization is successful, Microgrid controller will notify RCEA staff and PG&E Distribution system operators that the microgrid had retransferred and islanded operations have ceased.



## Microgrid Controller Panel

The figure below shows a preliminary configuration and the equipment for the supplied Microgrid Controller Panel.

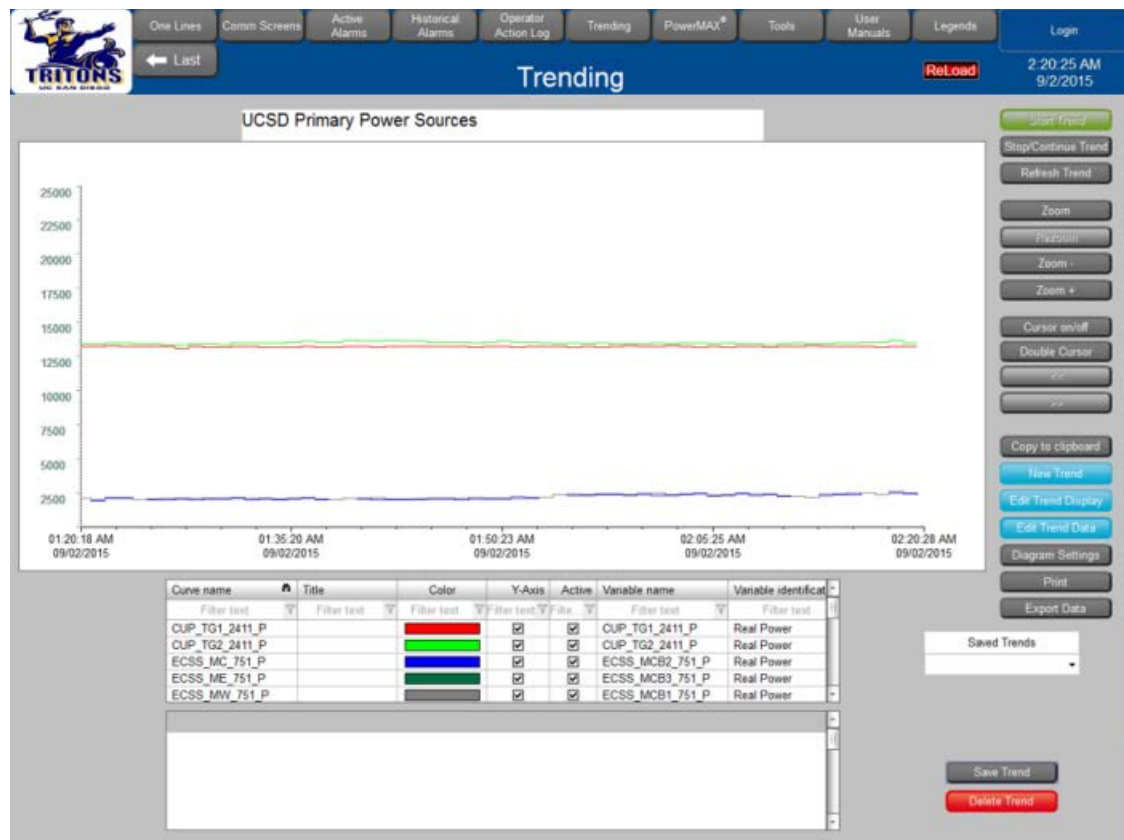


Here are the typical trending screen, historian function and user access level function from HMI:

The Trending screen allows the user to display how selected values are changing as a function of time. Users can view the minimum, maximum, and average values of selected historized variables from this screen. The X-axis is the time axis and advances as long as the **Start Trend** button has been clicked.



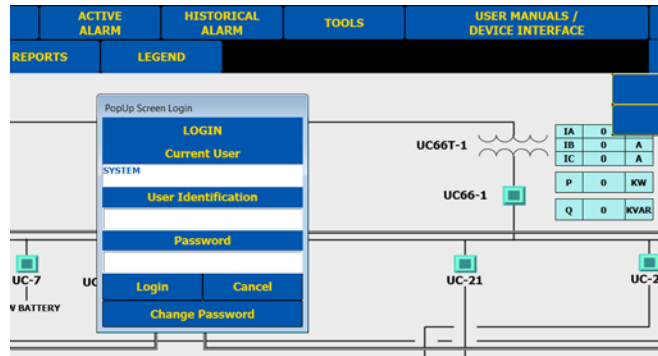
The Cursor function allows the user to analyze the trending data. To activate the cursor, click the **Cursor on/off** button at the right of the trending display. A vertical line will appear and is movable to allow the user to position the cursor to a specific point in time. Below the trending display is the cursor data region with tabular data for; Date, Curve, Value, Measuring unit, Status text, and Status.



To clear current trending data and add new data click the **New Trend** button to the right of the trending graphical display. This will clear the current points. Click **Edit Trend Data** to add points and make changes denoted by the following tabs at the top of the screen; **Data, Representation, X-Axis, Time, Lots, Column settings, Printer settings**. Click the **Add...** button at the bottom of the filter screen to add desired data points for trending.

The historian function consists of an intuitive interface allowing users to access to tag names, and dictate collection intervals. The historian software will provide secure, long-term storage of data in a local database. Data can be historised by event based or time based per configuration.

The user credential screen will allow users to input their proper credentials in order enable certain rights based off their corresponding access level. Different access levels are available a user to log in. Each access level contains different privileges that would allow the user to perform different system functionalities. The 'User Credentials' button on the navigation bar is the login/logout button. The user can login to the HMI by entering a username and password. Please refer to for the user access levels. The system will automatically logout after five minutes of inactivity. Typical HMI functions and their corresponding access levels.



HMI Functions	Guest	Operators	Supervisors	Administrator
View Screens	X	X	X	X
Start Runtime		X	X	X
Shutdown Runtime		X	X	X
Acknowledge Alarms		X	X	X
Operate Breakers			X	X
Other Control Functions				X

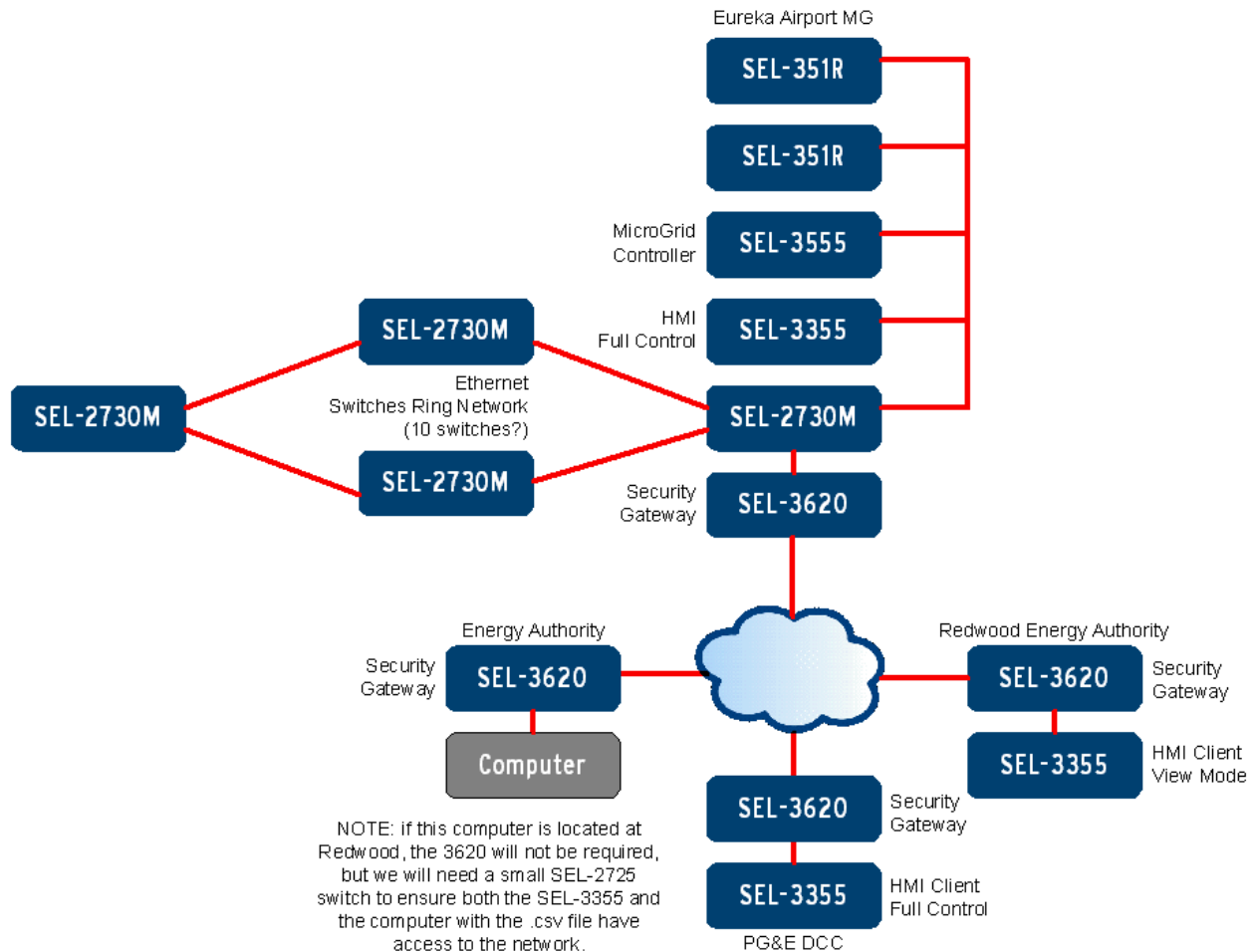
## Attachment 2 Reference Documents and Emails

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Document
170919_ACVMG-DraftSOW-SEL.pdf
170921-3 ONE LINE DIAGRAM.pdf
SEL SignedNDA (2018) skarp.pdf
Email Received from David J Carter at 09/28/2017 07:30 PM
Email Received from David J Carter at 09/26/2017 11:27 AM

## Attachment 3 High-level System Architecture

High-level architecture preliminary architecture based on SEL understanding of the project scope.





**STAFF REPORT**  
**Agenda Item # 7.3**

AGENDA DATE:	November 19, 2018
TO:	Board of Directors
PREPARED BY:	Matthew Marshall, Executive Director
SUBJECT:	Manager of Human Resources & Workforce Development

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**SUMMARY**

Staff requests that the board approve the creation of a new staff position of Manager of Human Resources and Workforce Development, which will report directly to the Executive Director. RCEA's human resource (HR) functions have typically been addressed by finance and administrative staff, along with outside consultants. RCEA's HR needs have increased as the organization has grown, and it is no longer practical or effective to combine HR functions with other unrelated staff duties.

While RCEA's HR needs have grown, the ongoing workload for HR functions is not expected to on-average require a full 40-hours or staff time per week. Accordingly, staff proposes this position also include some duties associated with RCEA's ongoing efforts around energy-sector workforce development, which align well with core HR responsibilities. RCEA's energy-sector workforce develop activities have included: offering training and certification programs, contractor business development support, internship programs, and on-the-job training partnerships with local economic development organizations.

The new position is a proposed first step in an overall evaluation and update to RCEA's staffing plan. In December of 2016 the Board approved a significant staffing reorganization to provide the capacity to manage the Community Choice Aggregation (CCA) program along with RCEA's other ongoing programs. While that reorganization has been generally effective, after a year and a half of CCA operation there is a much better understanding of the specific staffing needs of the CCA program and other RCEA efforts, and staff anticipates proposing additional updates to the organization chart and associated position descriptions in December and/or January.

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**FINANCIAL IMPACT**

The fully-loaded cost of the proposed manger-level position is about \$86,000 per year. Staff intends to partly or fully counterbalance the cost of the position with other staffing adjustments that are expected to be proposed in December or January. In particular, RCEA currently has one Director-level position for every 3 non-director full-time staff positions; this is a fairly "top-heavy" structure, and staff anticipates proposing that one or more Director positions be eliminated/consolidated with associated duties reassigned to other positions.

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**STAFF RECOMMENDATION**

Approve creation of a Manager of Human Resources and Workforce Development position.

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**ATTACHMENTS:**

1. Draft Position Description for Manager of Human Resources and Workforce Development.

## **Manager/Senior Manager:**

### **Human Resources & Workforce Development**

**General Class Description:** Under general direction of a Director, a program or project Manager assists in planning, organizing, coordinating, and managing programs or activities of their associated department; provides professional assistance to staff; performs related work as assigned. This class has lead responsibility for planning and implementation for one or more programs or functional areas. A Manager is responsible for accomplishing program goals and objectives and directs the day-to-day operations and activities of their designated program or functional area within a department. A Manager works with their Director to ensure consistent and efficient implementation of agency operational policies and long-term operational excellence. This position class is distinguished by complex and widely-scoped duties related to program and project management, subject-matter expertise, and may include supervisory responsibility. This position exercises considerable discretion and independent judgment in the coordination and prioritization of duties and responsibilities assigned, and in acting on behalf of the department Director.

#### **Summary**

The Human Resources (HR) and Workforce Development Manager works under the general direction of the Executive Director and has responsibility for a wide range of matters to support RCEA's human resources programs. The HR Manager performs a variety of complex confidential and technical activities including recruitment and selection, classification, compensation, employee relations, performance appraisal, benefits administration, supervisor-employee development, training, and development of new personnel policies. The HR Manager also, under general supervision, plans, coordinates, monitors, and provides for the implementation of RCEA's workforce development programs and activities, including analysis related to the coordination of public and private economic development resources leading to the enhancement of employment opportunities related to RCEA's mission. This position requires knowledge of general operations for an organization of approximately 35 people, with an emphasis on human resource/employment laws and best practices, public agency governance, supervision best practices, and workforce development.

#### **Essential Functions and Responsibilities**

Duties are illustrative only and may vary. Other duties may be assigned.

- Manages, administers, and maintains RCEA's HR information system, including personnel records and confidential files.
- Administers the RCEA compensation and benefits program. Conducts studies and analysis of class and position descriptions, compensation structure and benefits programs, and recommends changes as needed; prepares new or modified descriptions.
- Review and evaluate ongoing employment developments and compliance with local, state and federal human resource laws; recommend policy amendments where necessary or beneficial.
- Participates in the employee/employer relations process, including developing recommendations and advising supervisors regarding employee relations procedures and human resources policies, and issues such as grievances and disciplinary actions.

- Consults with employees to identify and resolve employee/employer-related problems and issues and provides support to the disciplinary process, the resolution of disputes, and assists outside counsel in representing RCEA during litigation.
- Investigates allegations of policy violations including discrimination and harassment.
- Develops and updates policies and delivers training programs and workshops on a variety of human resource management policies and topics on a scheduled and as-needed basis. Provides guidance and training to managers and supervisors on positive employee relations practices.
- Responsible for coordinating posting, recruitment and selection of personnel, including preparing job announcements, advertisements and other recruitment material; screening applicants for qualifications; designing and administering job-related selection procedures such as written and performance testing, interviews, background and reference checks; ensures all phases of hiring comply with applicable laws, regulations, and guidelines.
- Audits incumbent classification and compensation and recommends changes. Coordinate the evaluation and tracking of staff performance and staff development needs; research and implement short and long-term staff development plans.
- Establish and maintain relationships with appropriate agencies, consultants, professional groups and programs associated with RCEA human resources and workforce development.
- Assist with strategic leadership on workforce development issues and administer any resulting workforce development initiatives and programs.
- Work as part of a management team to establish inter-departmental processes to support efficient office and business functions.

## Minimum Qualifications

### Experience/Education:

Any combination of training and experience that would provide the required knowledge, skills, and abilities is qualifying. A typical way to obtain the required qualifications would be:

- Education or experience equal to a bachelor's degree or greater in business or public administration, human resources, organizational development, or a closely related field.
- A minimum 5 years (7 years for Senior Manager designation) of progressively responsible experience in human resources (preferably in the public sector).
- In addition, this position may require obtaining any of the following certifications within twelve months from date of hire: PHR, SPHR, SHRM-CP or SHRM-SCP.

### Knowledge of:

- Theory, principles, practices, and techniques of human resource management and compliance, and general program management.
- Employee recruitment, selection, and training processes.
- Compensation and benefits administration.
- Employee development, and performance planning and appraisal.
- Management techniques to train and supervise employees and implement employment policies.
- Public agency governance procedures, including RCEA functions and associated human resource management issues.
- Current trends in the field of economic development and workforce development.
- Above average working knowledge of current business software programs, including Microsoft Office.

### Ability to:

- Analyze and make sound recommendations on complex human resources management issues.

- Understand, interpret, explain, and apply RCEA, state, and federal policy, law, regulation, and court decisions governing RCEA's human resource program.
- Exercise tact, discretion, and diplomacy in dealing with sensitive, complex, and confidential personnel issues and employee situations.
- Establish and maintain a safe, comfortable, and dynamic work environment for employees.
- Promote effective and positive working relationships amongst employees.
- Develop and deliver effective training sessions and workshops to employees.
- Represent RCEA effectively in meetings with other agencies, community groups, and the public.
- Perform data entry, maintain organized and accurate filing systems, and prepare reports and other business communications.
- Manage multiple priorities, meet deadlines, and quickly adapt to changing priorities in a fast-paced dynamic environment.
- Work well under pressure.
- Be thorough and detail-oriented.
- Demonstrate patience, tact, teamwork and commitment to superior service and performance.
- Communicate effectively verbally, in writing, and through presentations.

## **Working Conditions and Essential Requirements**

The physical demands described here are representative of those required for the position. Position requires sitting, walking, standing, bending, and twisting in the performance of daily activities. The position requires hand manipulation and repetitive hand movement and fine coordination in using a computer keyboard and other office equipment. The position requires near and far vision in reading reports and use of a computer. Acute hearing is required in supporting meetings and providing phone and in-person customer service. The position occasionally requires lifting and/or moving objects. RCEA will make reasonable accommodation of the known physical or mental limitations of a qualified applicant with a disability upon request. Possession and continued maintenance of a valid class C California driver's license or the ability to provide alternate transportation and a safe driving record is required.

## **Preferred Qualifications**

- Master's degree or professional certification in a related field.
- Knowledge of RCEA programs.
- Prior experience working with public agencies and/or public utilities.
- Experience working with organizations involved with projects and programs in the areas of environmental and economic development.
- Experience working in an entrepreneurial context.

THE REDWOOD COAST ENERGY AUTHORITY IS COMMITTED TO A DIVERSE WORKFORCE AND IS AN EQUAL OPPORTUNITY EMPLOYER. RCEA MAINTAINS AND PROMOTES A POLICY OF NONDISCRIMINATION AND NONHARASSMENT ON THE BASIS OF RACE, RELIGION, COLOR, SEX, AGE, HANDICAP, MARITAL STATUS, SEXUAL ORIENTATION, AND NATIONAL ORIGIN OR GENETIC CHARACTERISTIC.





# REDWOOD COAST EnergyAuthority

## STAFF REPORT

### Agenda Item # 8.1

AGENDA DATE:	November 19, 2018
TO:	Board of Directors
PREPARED BY:	Lou Jacobson, Director of Demand Side Management
SUBJECT:	CCE Funded Customer Program Process

### SUMMARY

Staff met with the Community Advisory Committee's Customer Programs Subcommittee in September to discuss and explore a high-level program identification process and associated timeline. The Subcommittee presented the results of this effort to the Community Advisory Committee (CAC) during their regularly scheduled October meeting. The CAC accepted the subcommittee's recommendations.

The subcommittee also identified a number of details that still need to be addressed. Staff are working with the subcommittee to address these additional items.

Find the subcommittee's full recommendation attached.

### FINANCIAL IMPACTS

None.

### RECOMMENDED ACTION

Adopt the CAC's recommended proposed timeline and high-level two step solicitation process for fiscal year 2019-2020 and 2020-2021 CCE funded customer programs as defined in attachments 8.1.1 and 8.1.2.

### ATTACHMENTS

8.1.1 - CCE-Funded Customer Programs Subcommittee Report

8.1.2 - CAC Timeline



**COMMUNITY ADVISORY COMMITTEE  
SUBCOMMITTEE REPORT  
Agenda Item # 5**

AGENDA DATE:	October 9, 2018
TO:	RCEA Community Advisory Committee
PREPARED BY:	Jerome Carman for CAC Subcommittee
SUBJECT:	Community Choice Energy-Funded Customer Programs Timelines and Selection

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**SUMMARY**

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During the Board's February 2018 meeting, staff were directed to develop and present a process for selecting new customer programs to be supported with Community Choice Energy (CCE) revenues. The Board's expressed intent was that the process includes public input while conforming to the CCE program's guidelines. Attachment 5.2 page 4 presents current program guidelines. Staff proposed a program identification and approval process to the Board. That process was adopted during the April 16, 2018 meeting. The staff report presenting the adopted process is attached to this report as 5.1.

In collaboration with the Community Advisory Committee (CAC), staff-initiated Phase 2 of the process outlined in 5.1. During the August 2018 special meeting, the CAC created a programs subcommittee tasked with coordinating with staff. The subcommittee met with staff to develop:

- A program identification and selection timeline and,
- A high-level process incorporating lessons from the staff driven phase 1 process.

Staff and CAC subcommittee members agreed that a full request for proposals with a selection process was not an appropriate next step. Aligned with the state's process for market driven energy efficiency solicitations, the subcommittee identified a two-step process for the public to submit project ideas. It is recommended that we pursue an initial request for abstract process. Abstracts should be 1 - 2 pages. Those abstracts that are not-filtered out will be reviewed and advanced. Those remaining will then be developed and made actionable through a secondary proposal process.

The proposed timeline is built around this two-step process. From the public's perspective, the proposed process consists of the following:

1. Abstract submission and review phase
  - a. Staff accepts and catalogs abstract submissions at any time throughout the year.
  - b. Staff integrates education on how to complete abstracts into outreach activities.
  - c. Abstracts submitted before a proposed deadline will be eligible for review for the funding cycle under consideration. Abstracts submitted after the proposed deadline will be considered for the following funding cycle.

- d. CAC subcommittee and staff select abstracts for consideration in step two.
2. Request for proposals phase
  - a. All who submitted abstracts will be notified of acceptance or decline.
  - b. Authors of abstracts selected in Step 1 will be invited to respond to an RFP if additional development is needed to make the idea actionable.
  - c. Staff will make final selection with recommendations from the CAC subcommittee if needed.

The subcommittee successfully identified an acceptable timeline for 2019 program identification and selection. The proposed 2019 timeline is compressed, and some steps limited in breadth, to meet time constraints and to facilitate a pilot implementation approach. Attachment 5.3 provides a task driven draft implementation timeline for the CAC's consideration. The following bulleted list provides a high-level overview of the recommended 2019 timeline:

- October 2018: CAC makes recommendation to Board to approve the Timeline and high-level process
- November 2018: Board puts timeline and high-level process to vote
- December 2018: Pending Board approval, the abstract process is finalized
  - Staff will consider what outreach efforts may be possible for educating a limited audience about the abstract process and first submission deadline
- January 2019: Program budget identified and abstract solicitation begins
  - Note that staff are recommending a limited audience for the initial abstract solicitation, followed by a scaled solicitation for 2020 programs
- February/March 2019: Abstract deadline for 2019 consideration. Any abstracts submitted after the finalized date will be taken into consideration for 2020 funding.
- March/April 2019: CAC and staff review, filter and recommend abstracts for consideration
- May 2019: Selected abstracts are expanded through a subsequent process which will also set initial budgets
- June 2019: Final budgets are proposed to the RCEA board

In addition, the subcommittee recommended that a timeline for 2020 programs be incorporated into the planning process. Staff agreed. A proposed full timeline (i.e. not compressed) that supports 2020 efforts is also shown in Attachment 5.3. The intent is to continue to develop and test the tools and processes necessary for successful solicitations before scaling in 2020.

The following details still need to be ironed out, much of which will happen during the 2019 rollout of this timeline:

- Define the target audience. Who is eligible to submit concepts?
- Design of the abstract
- Design of the RFP
- Staff and CAC subcommittee selection criteria / guidelines
- Define outreach and education campaign to ensure equitable access

The subcommittee recommends the following be kept in mind during the development and implementation of this process:

- Support a simplified solicitation that increases the likelihood that RCEA will receive a variety of market driven solutions
- Strive for equitable access to the abstract submission process
- Ensure review of submitted ideas is possible within a reasonable timeline
- Solutions should support and advance the 2030 CAPE vision statement
- Solutions should align with board approved program categories
- Solutions should be considered a public reinvestment
- Support program continuity when appropriate
- Reduce the likelihood that we will duplicate existing programs; leveraging and adding value is ideal

### **SUBCOMMITTEE RECOMMENDATION**

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The CAC should recommend the proposed timeline and high-level two (2) step solicitation process for Board approval.

### **ATTACHMENTS:**

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5.1: Staff Report CCE Customer Programs Approval Process

5.2: Community Energy Program Guidelines Update

5.3: FY 19-20, 20-21 Timeline

Color Key
Implementation
In Process
Completed
Reach Goal

			Fiscal Year											
Fiscal Year Activities	Activity Group	Activity	July	August	September	October	November	December	January	February	March	April	May	June
2018-19	Implementation	Continue to implement and launch phase 1 2018-19 CCE programs												
	Process design and approval	CAC Approves Program Timeline and request for abstract process												
		Staff present updated timeline and process to the RCEA board												
		Define ongoing outreach process that is broadly accessible but appropriate												
		Finalize abstract process												
	Outreach	Launch reasonable outreach and education effort to limited audience												
	Program identification and selection	Evaluate existing programs and funding needs for service continuity												
		Launch ongoing abstract solicitation												
		2019 abstract deadline												
		Abstracts accepted on an on-going basis for future cycles												
		Calendar year rates program budgets set												
		CAC program subcommittee abstract review and filter												
		CAC subcommittee presents selected abstracts to CAC for approval												
		All respondents notified on status of abstracts												
		Selected abstracts fleshed out, expanded and made actionable by staff												
		Program Budgets finalized												
		Fiscal Year 2019-20 budget finalized and presented to the RCEA Board												
2019-20	Implementation	Continue to implement applicable 2018-19 programs												
		Begin program development/implementation of selected 2019-20 programs												
	Outreach	Launch outreach for 2020-21 programs												
	Program identification and selection	Abstracts accepted on an on-going basis for future cycles												
		2020 abstract deadline												
		Abstracts accepted on an on-going basis for future cycles												
		Evaluate existing programs and funding needs for service continuity												
		CAC program subcommittee abstract review and filter												
		CAC subcommittee presents selected abstracts to CAC for approval												
		All respondents notified on status of abstracts												
		Invitation for RFP made for selected abstracts												
		Selected abstracts fleshed out, expanded and made actionable by staff												
		Program Budgets finalized												
		Fiscal Year 2019-20 budget finalized and presented to the RCEA Board												



# REDWOOD COAST EnergyAuthority

## STAFF REPORT Agenda Item # 9.1

AGENDA DATE:	November 19, 2018
TO:	Board of Directors
PREPARED BY:	Richard Engel, Director of Power Resources
SUBJECT:	Energy Risk Management Plan Quarterly Report

### SUMMARY

Staff of The Energy Authority (TEA) and RCEA will provide a comprehensive Energy Risk Management quarterly program update for July through September. This presentation was originally scheduled for the October Board meeting and has been rescheduled due to lack of a quorum at that meeting.

### RECOMMENDED ACTION

Accept Energy Risk Management Plan quarterly report.

### ATTACHMENTS

Risk Management Plan Quarterly Report slide presentation.



# Redwood Coast Energy Authority

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Quarterly Risk Update

Presented to RCEA Board of Directors

November 19, 2018

# Rates Update

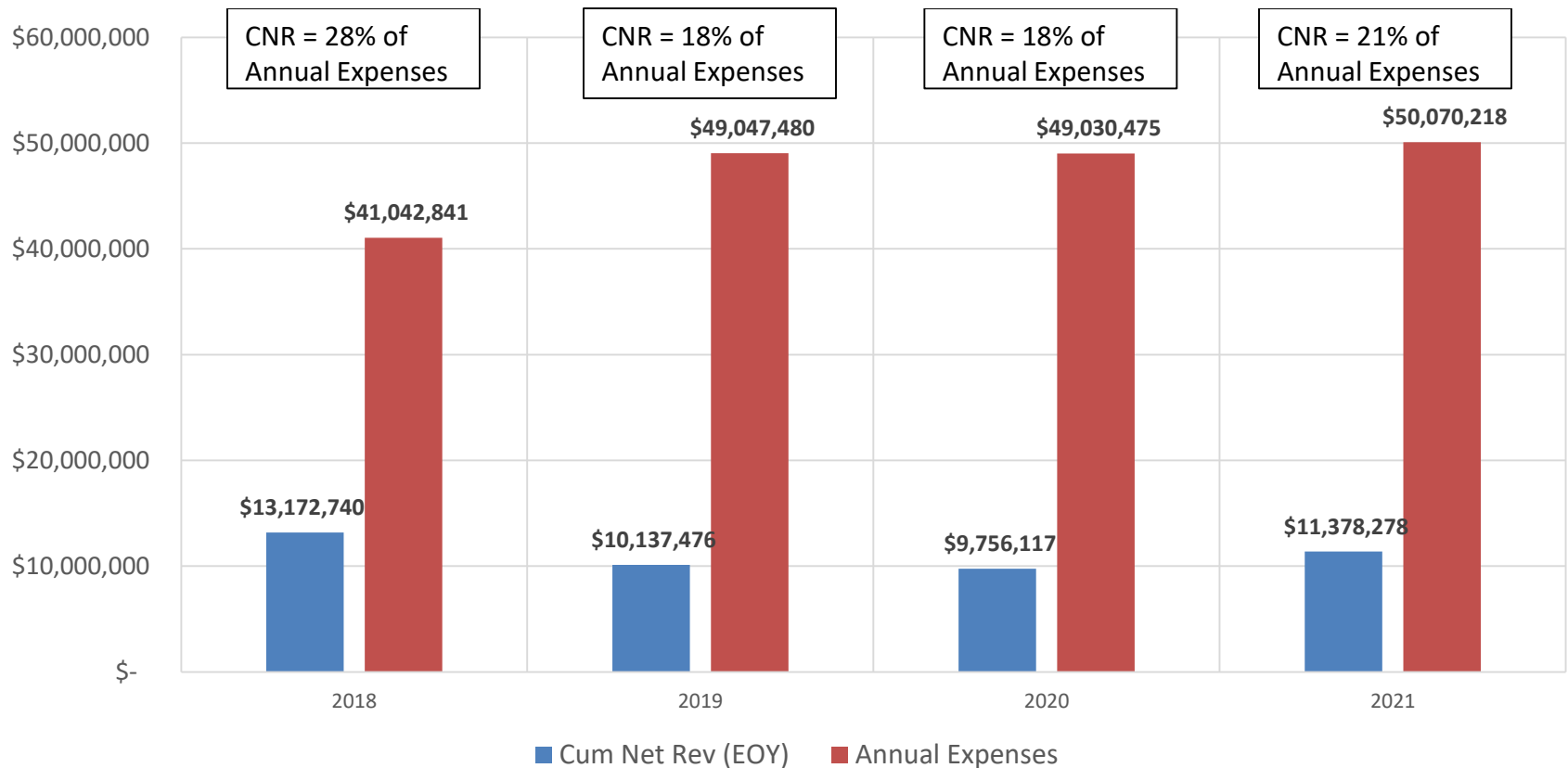
- Rates updated with PG&E's 2019 ERRR November Update and MRW's 11/15/2018 PG&E rates forecast
- Results in higher RCEA net revenues in 2019 relative to the October Presentation

## 2019 Load Weighted Rates (\$/MWh)

October Forecast			November Forecast		
Generation	PCIA	Net	Generation	PCIA	Net
\$98.92	\$33.21	\$65.71	\$101.81	\$32.34	\$69.47

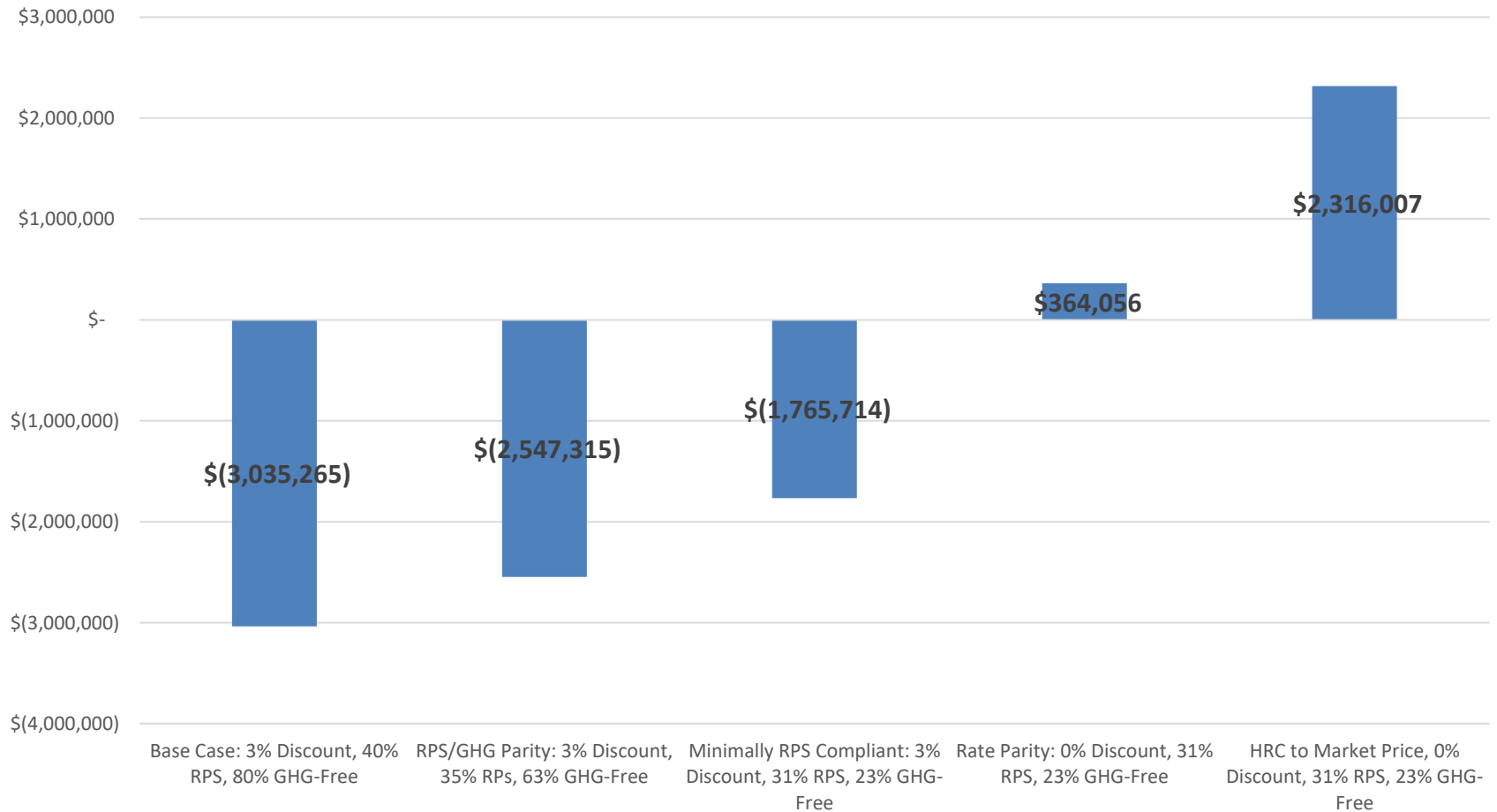


# Cumulative Net Revenues vs. Annual Expenses

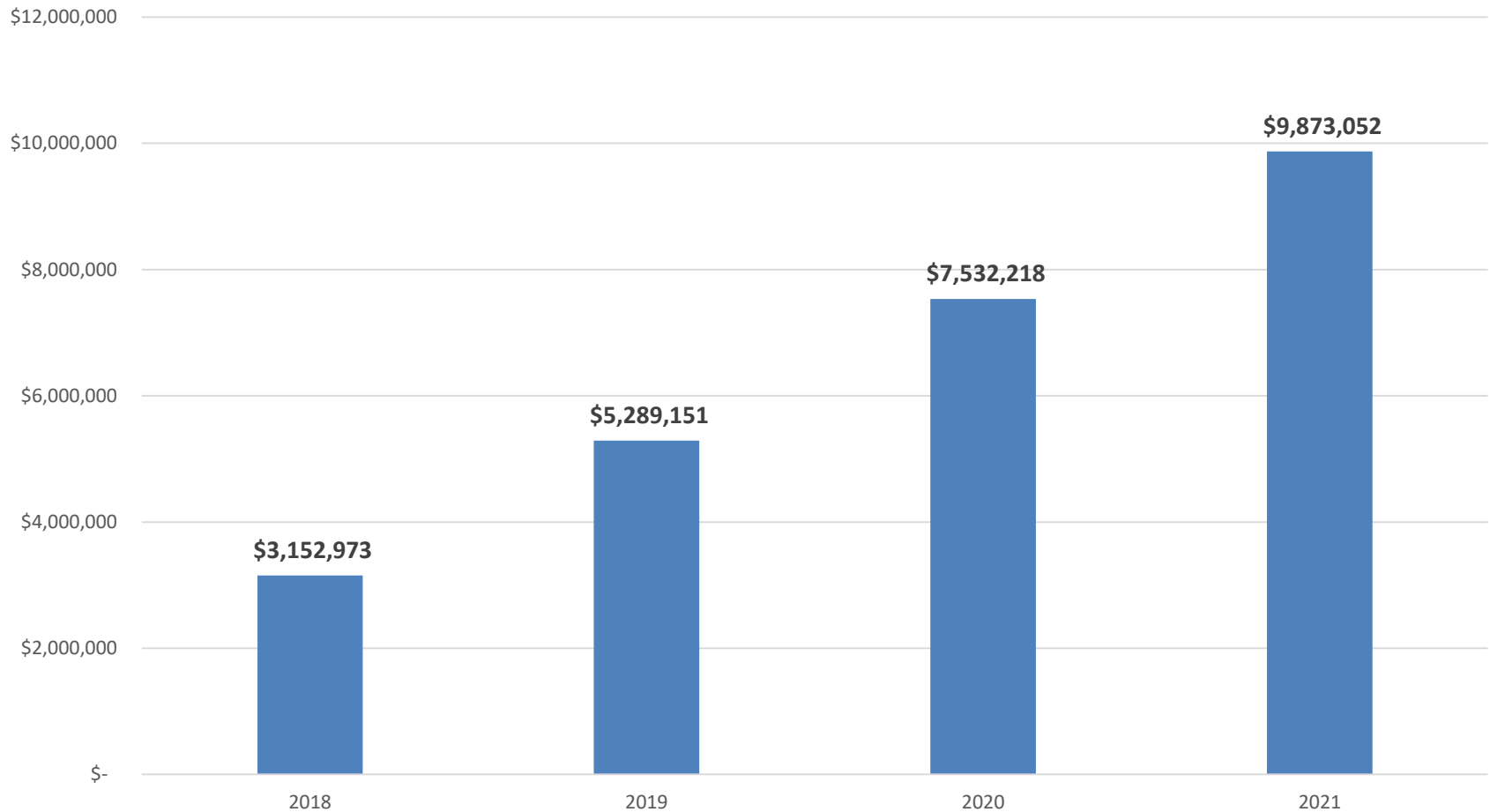


- **Target: cumulative net revenue of 40%-50% of annual operating expenses**
- **Results shown on an accrual basis - cash basis is approximately \$4 million lower**

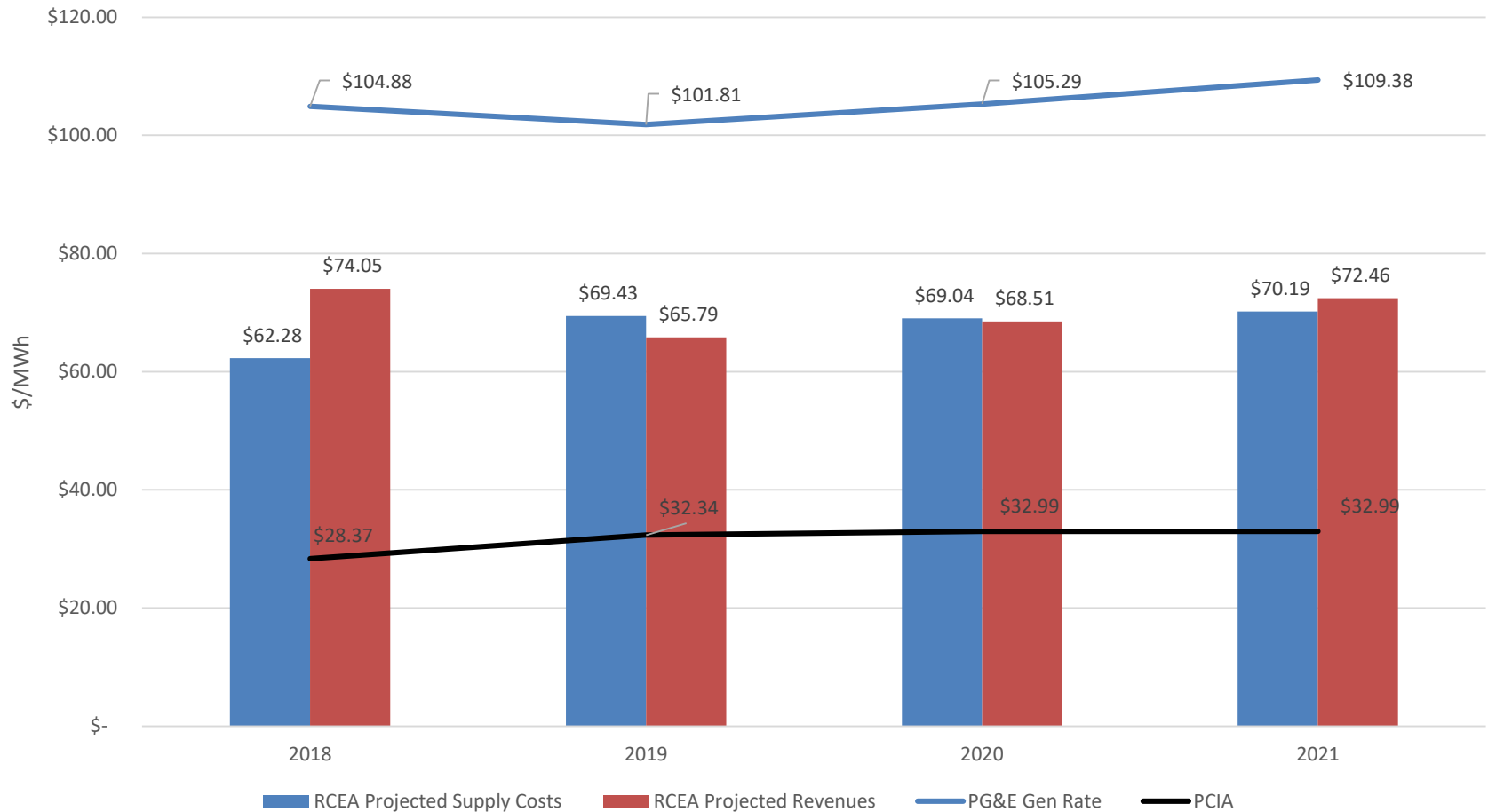
# 2019 Net Revenue Forecast



# Current Outlook for Rate Savings



# Forecasted Rates



Materials Received  
After Packet  
Publication

## 2019 Program Adjustment Scenarios

Scenario	Description	Projected 2019 added net revenue (target = +\$2M/yr)
Per current Board guidelines	HRC contract above market rate, 3% rate savings, RPS 5% above PG&E, GHG 5% below PG&E	(\$2,320,096)
HRC cost adjustment	HRC @ market rate, portfolio as above	\$408,709
Portfolio adjustment	HRC above market rate, RPS 1% above PG&E, GHG 1% below PG&E	(\$693,618)
HRC + Portfolio adjustments	Combines both above adjustments	\$2,035,188

DG Fairhaven biomass contract expires 2/28/2019. If it is renewed at a negotiated market rate, this is revenue-neutral compared to no-renewal scenario; however there would be ~\$550,000 additional savings compared with scenario of renewing at current above-market rate.

## 2019 Program Adjustment Scenarios

Scenario	Description	Projected 2019 added net revenue (target = +\$2M/yr)
Per current Board guidelines	HRC contract above market rate, 3% rate savings, RPS 5% above PG&E, GHG 5% below PG&E	(\$2,855,997)
HRC cost adjustment	HRC @ market rate, portfolio and rates as above	(\$127,192)
Portfolio and rate adjustment	HRC above market rate, 1% rate savings, RPS 1% above PG&E, GHG 1% below PG&E	(\$1,189,205)
HRC + Portfolio adjustments	Combines all above adjustments	\$1,539,601

DG Fairhaven biomass contract expires 2/28/2019. If it is renewed at a negotiated market rate, this is revenue-neutral compared to no-renewal scenario; however there would be ~\$550,000 additional savings compared with scenario of renewing at current above-market rate.

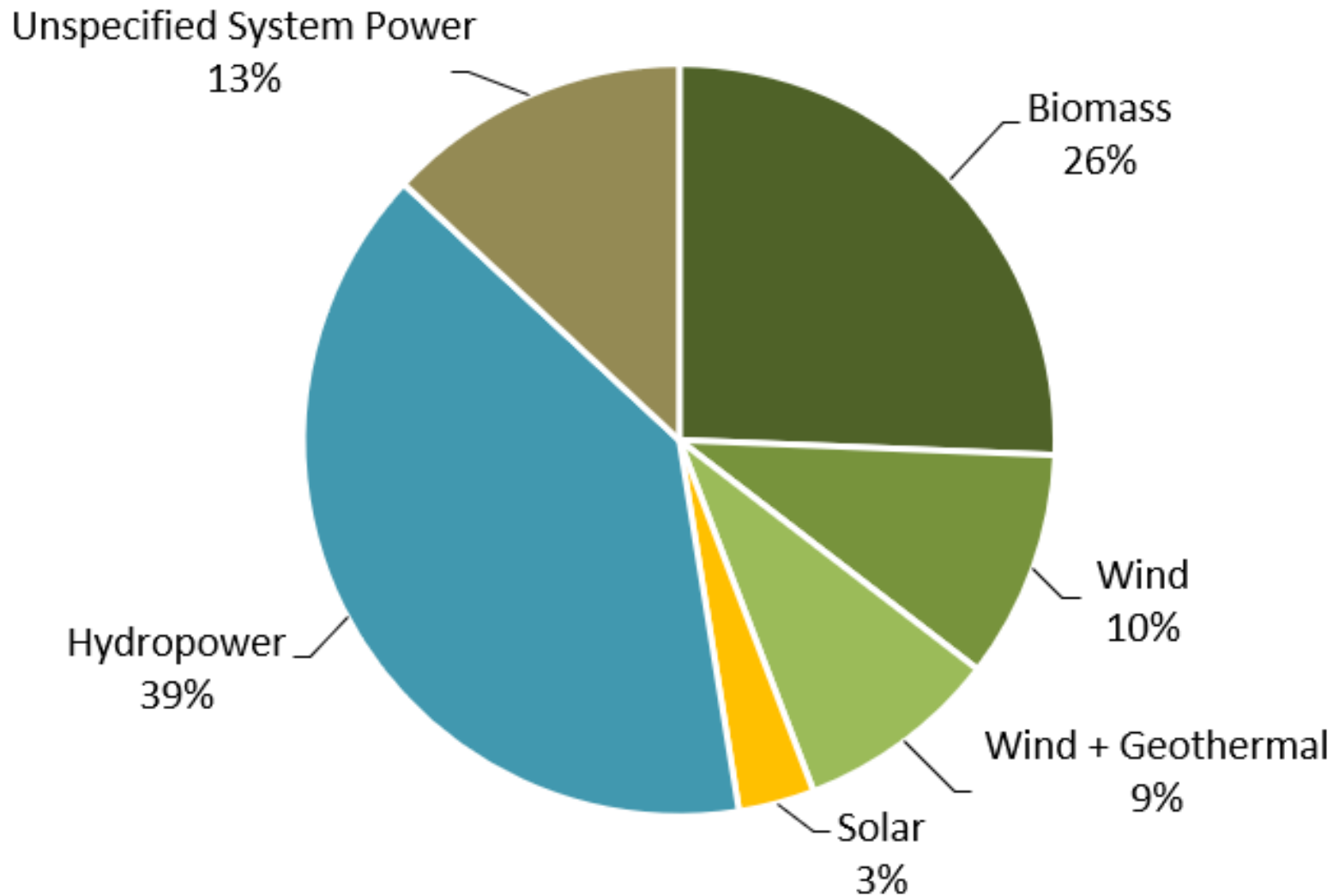
# Questions?



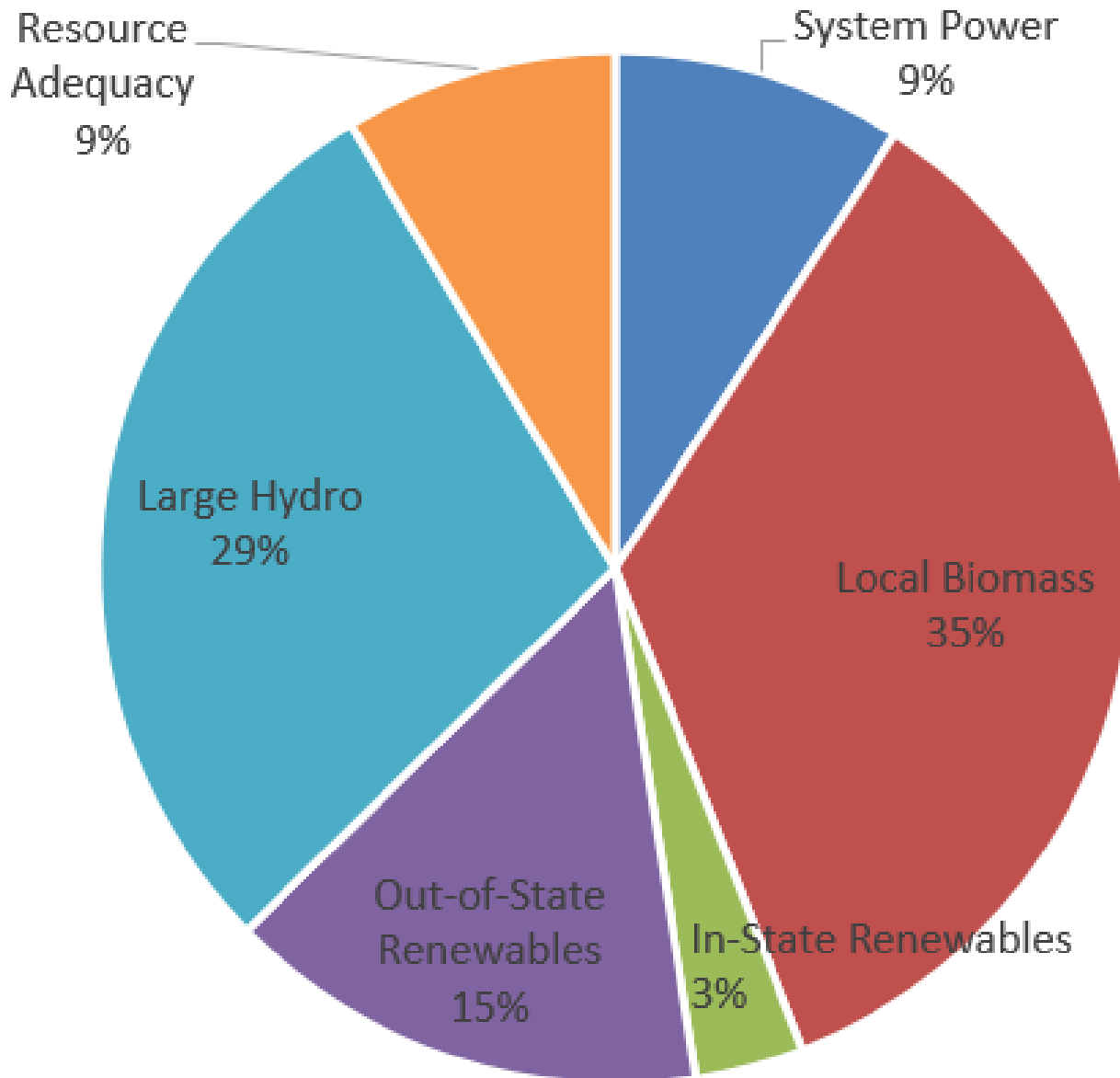
# Staff's Current Risk Management Activities

- Staff are working with TEA on the second annual update to RCEA's Risk Management Policy. We will bring the updated policy to the Board for review and approval in December.
- Renewable power procurement initiatives – to be presented to Board today in conceptual form
  - Renewable power solicitation
  - Feed-in tariff
- Staff will develop a comprehensive integrated resource plan in the coming months, broader in scope than the CPUC-compliant IRP delivered earlier this year.
- The following slides provide information on our 2018 portfolio and procurement costs, in response to recent inquiries from Board members and the public.

## RCEA 2018 Power Projected Power Mix



# RCEA 2018 Projected Energy Product Costs



# Comparative Costs of Energy Resources

## Based on U.S. and international data

Resource	Cost Range (\$/MWh)
Solar Photovoltaic – utility scale	\$43-\$53
Solar Photovoltaic – rooftop commercial/industrial	\$85-\$194
Solar Photovoltaic – rooftop residential	\$187-\$319
Wind	\$30-\$60
Biomass	\$55-\$114*
Natural Gas – combined cycle	\$42-\$78

\* For comparison, RCEA's publicly disclosed contract prices from biomass power are \$65 and \$83/MWh. Other RCEA power prices are proprietary.

*Source: Lazard's Levelized Cost of Energy Analysis – Version 11.0*

*<https://www.lazard.com/media/450337/lazard-levelized-cost-of-energy-version-110.pdf>*<sup>105</sup>



# REDWOOD COAST Energy Authority

## STAFF REPORT Agenda Item # 9.2

AGENDA DATE:	November 19, 2018
TO:	Board of Directors
PREPARED BY:	Richard Engel, Director of Power Resources
SUBJECT:	CCE Program Launch Period Guidelines Review and Discussion

### SUMMARY

In September 2016, the Board adopted *Guidelines for the Redwood Coast Energy Authority Community Energy Program Launch-Period Strategy and Targets*. This brief document (attached, with revisions adopted in May 2018) laid out targets and goals that have guided staff in developing and operating the Community Choice Energy (CCE) program ever since.

At this time, the CCE program is facing its first real financial challenge with the anticipated increase in the Power Charge Indifference Adjustment (PCIA) exit fee PG&E assesses to CCE participants, as well as a substantial expected cut in PG&E's generation rates in 2019 that RCEA will need to respond to in order to remain cost-competitive.

Based on our current program forecast, and given a goal of adding at least \$2 million to reserves each year, if we make no changes to the program, we would face a \$3.765 million shortfall in 2019.

A review of the program guidelines highlights some of the "levers" RCEA can pull to address our changing financial circumstances. Among them:

- \$2 million in annual rate savings program-wide. At program launch, a 2.7% rate discount relative to PG&E generation rates was applied to achieve this savings level. In 2018, the discount was increased to 3%. Each 1% discount against PG&E rates costs RCEA approximately \$700,000 annually.
- Building reserves. Guidelines call for a fund of \$35 million to be built by the end of year five under "projected market conditions," or at least \$10 million under "adverse market conditions." Current reserves after 18 months of program operation are at \$4 million, somewhat below the adverse conditions trajectory. See the attached graph showing how reserve accumulation has performed relative to the above program targets.
- Providing at least 5% more renewable energy than PG&E's power mix. RCEA is currently over-achieving substantially on this goal, with a 2017 mix of 42% renewables and an expected 2018 mix of 48%. PG&E in 2017 provided 33% renewable energy. Each additional % of market rate renewable energy in RCEA's 2019 mix would add approximately \$50,000 to annual program costs, based on the current mix of

renewable resources. The state's minimum renewable power requirement for 2019 is 31%.

- Offering at least 5% lower greenhouse gas emission rate than PG&E. Here again RCEA is over-delivering, with our 2018 mix approximately 87% carbon-free resources. For 2017, their most recent reporting year, PG&E offered 78% carbon-free power (with 27% of their power from nuclear resources, which are not included in RCEA's energy mix).
- Contract for approximately 20 MW of local biomass energy. RCEA currently has 23.25 MW of local biomass power under contracts with two suppliers. We are paying substantially above market renewable power prices for this resource, a choice the Board has accepted in return for the community benefits this resource provides. As will be discussed in a separate Board item, one contract representing 10 MW of biomass power is currently set to expire at the end of February 2019. If that contract is renewed and no changes are made to the existing contract terms for either vendor, RCEA will incur more than \$3 million in above market power costs for local biomass in 2019.
- Establish a feed-in tariff (FIT) for small to medium size local renewable power projects, with a goal of 6 MW of capacity. Staff will present a FIT design for Board review today. If implemented, this tariff would add approximately \$186,000 to \$340,000 to total procurement costs over the life of an assumed 20-year contract (depending where in the proposed FIT cost range the contracts end up falling), when compared with market rate renewable power contracts for larger scale, non-local resources. The FIT is not proposed to launch until some time in 2019, and renewable energy projects typically require a year or more to be developed, so it is unlikely the FIT will impact 2019 program finances.
- Pursue development of new local utility-scale renewable power. Staff will also present a proposal today for a solicitation for new utility-scale renewable energy projects. Per-MWh cost impacts of such projects are not known, but are likely to be somewhat higher than the market rates RCEA pays for non-local, utility-scale renewable power from existing projects. Again, these projects will take a year or more to develop and are not expected to impact 2019 program finances.
- Customer programs funded by CCE revenues. The guidelines call for "up to \$1,000,000 per year" for customer programs, including solar and energy storage technical assistance; electric vehicle and charging infrastructure; energy efficiency, fuel switching, and conservation; and matching funds for state, federal, and foundation energy grants. In 2018, RCEA allocated \$400,000 to CCE-funded customer programs. A 2019 budget for CCE-funded customer programs has not yet been established, but staff and the Community Advisory Committee have developed a proposed process to identify and fund new programs, as discussed in a separate item for this meeting.

Staff ask the Board to consider these objectives and their cost impacts as we discuss the remaining CCE topics to be presented in this meeting.

(continued next page)

**RECOMMENDED ACTION**

Discussion only – no action required.

**ATTACHMENTS**

*Guidelines for the Redwood Coast Energy Authority Community Energy Program Launch-Period Strategy and Targets (Adopted 9/19/16, revised 5/21/18)*

Graph: Reserve Targets and Account Accumulation

# GUIDELINES FOR THE REDWOOD COAST ENERGY AUTHORITY COMMUNITY ENERGY PROGRAM LAUNCH-PERIOD STRATEGY AND TARGETS



*Adopted September 19, 2016  
Revised May 21, 2018, Resolution 2018-6*

## OVERVIEW & GOALS

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The Redwood Coast Energy Authority (RCEA) is proceeding with the launch of a community choice energy program scheduled to commence service to customers in May of 2017. Based on the groundwork established by the RePower Humboldt strategic plan for developing local renewable energy, in June of 2015 the RCEA Board of Directors voted to proceed with developing a community choice energy program for Humboldt County with the following core goal:

***Maximize the use of local renewable energy while providing competitive rates to customers.***

In addition to this over-arching goal, the program will be designed to pursue the following aspirations and community benefits:

- Environmental Quality
- Local Control and the Ability to Pursue Local Priorities
- Economic Development
- Energy Independence
- Customer Rate-savings, Choice, and Community Programs

Implementing a community choice energy (CCE) program that furthers these goals will be an ongoing and evolving process. Outlined below are targets and objectives for the initial launch phase of the program during years 1-5 of operation. These targets and objectives will have to be adaptively managed based on market conditions and local considerations, but will be used as a guiding framework for the development of RCEA's CCE Program Implementation Plan, power procurement strategy, and the development of local generation projects and programs.



## **FINANCIAL TARGETS**

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- A target of approximately 5% of the available program annual budget will be allocated to customer rate savings (based on parity with PG&E generation rates and with PG&E PCIA fees factored in). This equates to a total customer rate savings that averages at least \$2 million per year over the first 5 years, for a targeted total cumulative customer rate savings of at least \$10 million over the first 5 years of operation.
- The program will target building a rate-stabilization/reserve/contingency fund of \$35 million by the end of year five under projected market conditions. The program will be designed to target a minimum reserve of at least \$10 million even under adverse market conditions.
- Over the first 5 years, the program will aim to retain and/or redirect \$100 million dollars or more of rate-payer dollars back into Humboldt County when taking into consideration local power-procurement, customer rate-savings, local-program spending, and allocations toward building the reserve/contingency fund.

## **POWER OBJECTIVES**

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- At least 5% more renewable energy (as defined by state law) than PG&E's power mix.
- At least 5% lower greenhouse gas emission rate than PG&E mix.
- Maximize the use of local renewable energy to the extent technically and economically feasible and prudent.
- Strongly support energy efficiency and conservation as core strategies toward achieving the program's environmental, economic, and community goals.

## **GENERATION PORTFOLIO TARGETS**

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### **Existing Local Biomass**

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- Issue a Request for Offers targeting power purchase agreements with 1-2 existing facilities.
- Structure overall biomass procurement strategy around local waste-management and forest restoration priorities and needs.
- Include environmental, community, and economic considerations in selection process.
- Contingent on price and market conditions, contract for a target of around 20MW of local biomass energy (about 15% of the total RCEA power portfolio).

### **Existing Local Small Hydroelectric**

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- Pursue contracting with a target of 2MW of existing local small hydro.
- Ensure that any contracts are structured to support and prioritize the operators' water-management and environmental quality objectives.

## **New Local Solar Power**

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- ***Feed-in-tariff power procurement program for small generators***
  - <1MW small/medium renewable generators (solar and other technologies)
  - Eligible projects are designed primarily for wholesale power production (not focused on meeting on-site energy loads).
  - Standardized, upfront purchase price, projected to be in the range of \$80-100/MWh to facilitate project financing.
  - Standardized, upfront, and straightforward contract terms and duration to facilitate project financing.
  - Initial power portfolio allocation to the feed-in-tariff program will be targeted at 6MW.
- ***Utility-scale Solar***

In parallel to the feed-in-tariff program RCEA will pursue the development of additional wholesale-generation solar projects, which could be developed by RCEA and/or third parties in pursuit of overall power portfolio solar content targets:

  - Initial target of 5MW of new local wholesale solar online before the end of 2018.
  - Launch-phase target of 15MW of utility-scale/wholesale solar online by the end of year 5 of operations.
  - Focus project development on underutilized/idle public and industrial sites to limit impacts related to other beneficial uses such as agriculture, economic development, habitat, and open space.

## **Additional Power Resources**

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To meet and balance over-arching objectives for rates, renewable energy %, and greenhouse gas emissions as well as to match power generation availability to customer loads demands, the launch-period portfolio will incorporate the following additional power sources:

- Renewable generation projects--wind, solar, geothermal, etc--located outside the County.
- California and/or Pacific Northwest hydroelectric power (which is renewable and emissions-free, but cannot be counted toward CA state renewable portfolio standard requirements). This will not include any power from the Klamath River dams.
- Unspecified "system power" from the CAISO power market pool (while power from the pool is not traceable to any specific generator, in northern CA this power is predominantly generation from natural gas and large hydro power facilities).

## **Future/Long-term Generation**

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- ***New Local On-shore Wind Generation***
  - Assess the possibility for up to 50MW of local on-shore wind energy generation.
    - The most viable site for local on-shore wind is Bear River Ridge west of Rio Dell and South of Ferndale.
    - While there are other possible sites in the area, Bear River Ridge has the best wind resource in the County (it is one of the top wind resource areas in the state), Bear River Ridge property owners are willing and interested in developing a wind project, and there was considerable environmental and technical study and evaluation previously conducted which, if utilized, would reduce the development costs and timelines of a potential project.
- ***New Local Small-scale Hydroelectric***
  - Evaluate options for the development of new small-scale hydroelectric that would be compatible with environmental and cultural priorities.

- **Offshore Wind Energy**
  - While not yet deployed in California, offshore wind energy generation is an established technology. The wind resource off of the Samoa Peninsula coastline is one of the best in North America, and the on-shore infrastructure on the peninsula appears well-suited to accommodate offshore wind development.
  - During the initial 5-year launch-phase of Program, RCEA will allocate resources to moving forward with community and stakeholder engagement, site selection, environmental review, and project scoping.
- **Wave Energy**
  - Wave energy technology is in an early stage of development. During the program launch phase, RCEA will build on the previous WaveConnent and CalWave projects to explore and evaluate opportunities for local wave-energy research, development, and pilot-deployment.

## PROGRAMS

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### Enhanced Solar Net-Energy-Metering (rate-based program)

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- Self-generation power credited to customer's bill at retail rate plus \$0.01/kWh (+5-10% above base retail generation rate).
- Excess generation credits roll-over from year to year and never expire.
- Excess generation credits can be cashed-out for full retail value.

### 100% Renewable Energy Option (rate-based program)

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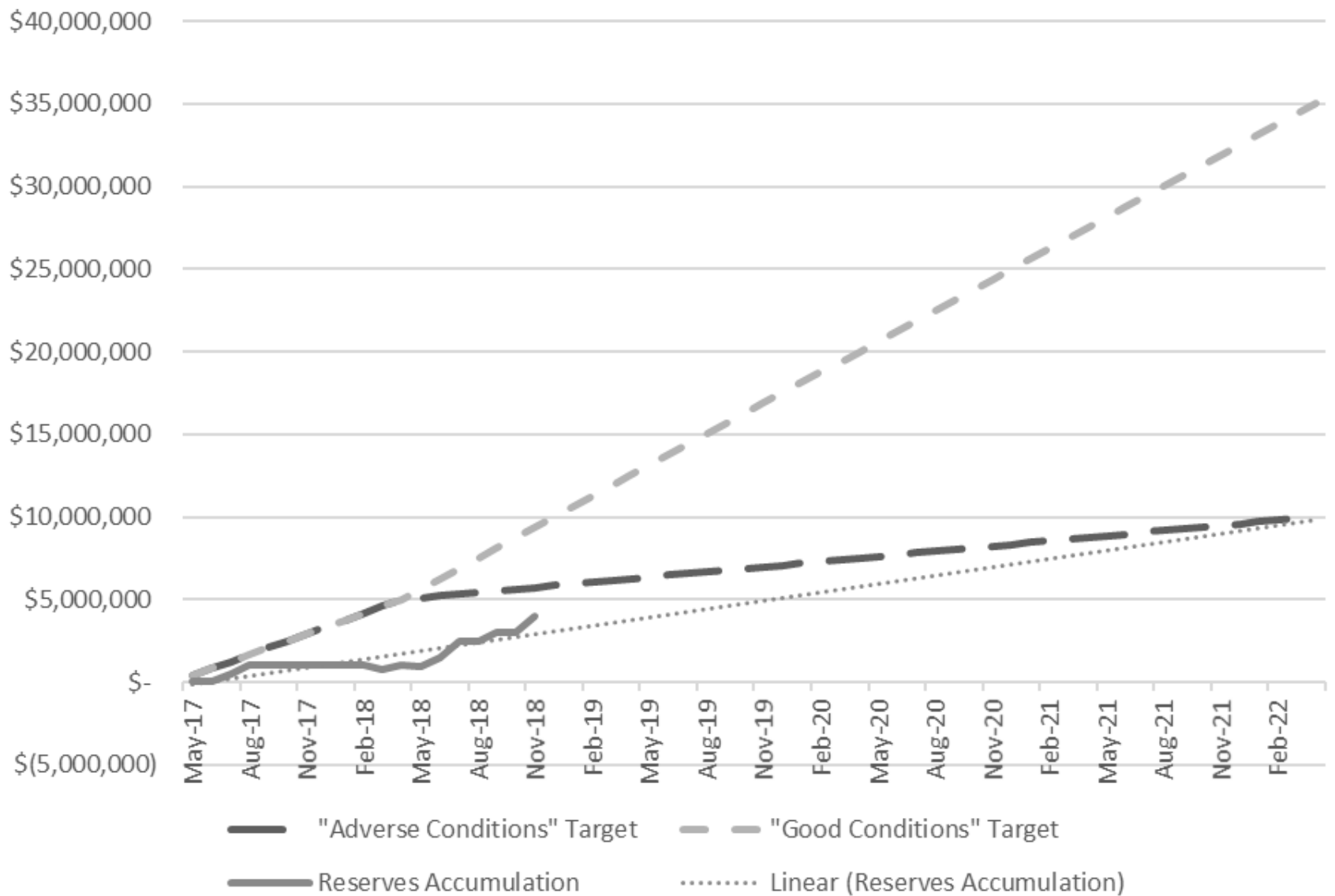
- Voluntary opt-up option for premium price (based on actual cost of service).
- Large hydro and system power components of base RCEA power mix replaced with renewable energy (non-local solar, wind, geothermal, etc).
- Evaluate 100% solar and/or 100% local renewable options in the near-term (in or after 2018, after launch and ramp-up of operations).

### Programs budget target of an initial allocation of up to \$1,000,000 per year for:

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- **Solar and Energy-storage Technical Assistance**  
Program emphasis will be on public-agency and community facilities, especially critical infrastructure such as water/wastewater treatment and emergency response.
- **Electric Vehicles and Charging Infrastructure**  
Supporting the adoption of electric vehicles provides multiple benefits aligned with CCE Program goals: significant reductions in greenhouse gas emission compared to petroleum-powered vehicles; lower \$/mile fuel costs compared to petroleum vehicles, increasing CCE customer-load base, and providing a flexible electricity demand load that has the future potential to be managed to support the integration of renewable energy.
- **Energy Efficiency, Fuel Switching, and Conservation**  
New programs that support and enhance the existing programs offered by RCEA, PG&E, the Redwood Community Action Agency, and others.
- **Match funding for State, Federal, and Foundation Energy Grants**  
The majority of grant funding opportunities require some level of local match funding, so tagging/reserving a flexible component of the CCE program budget to be available as-needed for use as energy-related grant match funding will support bringing resources into Humboldt County to pursue our community energy goals.

## Reserves Targets & Account Accumulation





# REDWOOD COAST Energy Authority

## STAFF REPORT Agenda Item # 9.3

AGENDA DATE:	November 19, 2018
TO:	Board of Directors
PREPARED BY:	Richard Engel, Director of Power Resources
SUBJECT:	Biomass Procurement Discussion

### SUMMARY

The California Public Utilities Commission's decision allowing investor-owned utilities including PG&E to increase the exit fee assessed to community choice energy (CCE) customers will significantly impact RCEA's CCE financial outlook for 2019 and beyond. Based on the current forecast of PG&E's 2019 generation rates, RCEA staff have notified biomass power provider Humboldt Sawmill Company (HSC)<sup>1</sup> in writing that the Material Change clause in our power purchase agreement with HSC (see attachment) will be implemented in early 2019. This clause allows RCEA to call for renegotiation of contract terms should our financial forecast show that RCEA will be unable to maintain a minimum 3% customer discount while adding at least \$2 million annually to our program reserves.

Based on the current forecast for PG&E's 2019 electric rates, including the exit fee (known as the Power Charge Indifference Adjustment or PCIA), conditions will require RCEA to exercise the Material Change clause in order to continue offering cost-competitive electric service. Staff intend to propose to HSC maintaining the volume (average MW of power) of the contract but adjusting the unit price (\$/MWh) downward, hopefully arriving at a mutually agreeable price that is closer to market value of the renewable power while still allowing HSC to operate profitably. The proposed contract adjustment is the single greatest cost-cutting measure currently available to RCEA.

There is a potential opportunity for both parties amid this challenge. The existing contract is set to expire in 2022. Staff would like to offer HSC a longer-term contract at a lower unit price. This could provide greater security to HSC, while helping RCEA reach compliance with Senate Bill 350's requirement that load-serving entities have at least 65% of required renewable power procurement under long-term (10+ year) contracts beginning in 2021. If negotiations are successful, staff will return to the Board with a contract modification for review and approval.

RCEA is also currently in a 12-month biomass power purchase agreement with DG Fairhaven Power, set to expire at the end of February 2019. This agreement allows for

<sup>1</sup> With RCEA Board approval, Humboldt Redwood Company (HRC) assigned its power purchase agreement with RCEA to HRC's newly created subsidiary Humboldt Sawmill Company in July 2018.

renewal in 12-month increments, and DG Fairhaven management have expressed interest in renewal. In this case, both the contract volume and the unit price are lower than in the HSC contract. However, there is still a modest potential cost savings to be had if plant management are amenable to accepting a price more in line with market power.

Staff propose to give first priority to renegotiating the HSC contract in recognition that they were the winning offeror in the 2016 request for offers that resulted in both biomass power contracts. Once this process is completed, staff will return to the Board with a proposal for extending our contract with DG Fairhaven.

#### **RECOMMENDED ACTION**

Authorize staff to enter into negotiations to amend the power purchase agreement with Humboldt Sawmill Company pursuant to the terms of that agreement's Material Change clause.

#### **ATTACHMENTS**

Material Change Language from RCEA's Power Purchase Agreement with Humboldt Sawmill Company

**Attachment to RCEA Board Item 9.3, November 2018**

**Material Change Language from RCEA’s Power Purchase Agreement with  
Humboldt Sawmill Company**

(a) A “Material Change” means any of the following:

(i) Buyer forecasts for the upcoming year that it is unable to meet both of the following program objectives:

(A) Offer competitive generation rates at least 3% lower than PG&E’s, including adjustment for Non-Bypassable Charges, as filed in the first week of January each calendar year; and

(B) Achieve a forecasted community choice energy program reserve accumulation of \$2 million per year;

(I) The forecasted reserve accumulation calculation for any year will assume Buyer offers generation rates that are: (1) 3% lower than PG&E’s after adjustments for Non-Bypassable Charges, and (2) are based on a portfolio that meets the minimum applicable federal, state, and local requirements, including the California Renewables Portfolio Standard and the requirements of California Public Utilities Code § 454.52. For avoidance of doubt, the forecasted reserve accumulation calculation for any year will not include new RCEA discretionary spending commitments for above-market procurement of energy products beyond what is necessary to meet the applicable minimum federal, state, and local requirements. For purposes of this Section 2.6, the individual year procurement requirement of resources meeting the requirements of California Public Utilities Code § 399.16(b)(1) for the California Renewables Portfolio Standard shall be equal to RCEA’s annual retail sales for the applicable year multiplied by the percentages specified in the following table:

Delivery Year	Renewable Portfolio Standard
2018	29%
2019	31%
2020	33%
2021	34.8%
2022	36.5%

(ii) Buyer experiences either of the following:

(A) cumulative opt-out exceeding 20% from program launch;

(B) incremental opt-out exceeding 10% for a calendar year beginning in 2018;

Opt-out will be measured on the basis of enrolled customer accounts vs. a baseline year of 2016. The opt-out calculation will use as a baseline the number of accounts that existed as of December 31, 2016, and will not include any Direct Access accounts.

(b) If a Material Change occurs, Buyer may provide notice to Seller and describe proposed terms and conditions for an amendment to this Agreement that would preserve or restore Buyer's ability to achieve the program objectives described in Section 2.6(a)(i) and (a)(ii) above. Within thirty (30) days of Buyer's notice, or such other time mutually agreed upon by the Parties, the Parties shall meet and attempt in good faith to negotiate such amendment. If the Parties are unable to agree upon such amendment within a reasonable period of time, as determined in good faith by Buyer, Buyer shall have the right to terminate this Agreement without further liability except with respect to payment of amounts accrued prior to termination. For avoidance of doubt, if Buyer terminates this Agreement pursuant to this Section 2.6, such termination shall not be an Event of Default and Buyer shall not be required to pay any Termination Payment.





# REDWOOD COAST Energy Authority

## STAFF REPORT Agenda Item # 9.4

AGENDA DATE:	November 19, 2018
TO:	Board of Directors
PREPARED BY:	Richard Engel, Director of Power Resources
SUBJECT:	2019 Customer Rate Setting and Notification Process

### SUMMARY

PG&E is expected to set its 2019 electric generation rates in January 2019. RCEA's generation rates are currently set at 3% below PG&E rates, and staff propose to maintain this rate discount for 2019. RCEA's power services provider TEA receives periodic forecasts of PG&E rates from MRW Associates, which TEA uses in its financial model for RCEA's procurement planning.

Using the most recent MRW forecast released earlier this month, we have developed proposed RCEA electric rates for 2019, provided as an attachment to this report. MRW's forecast indicates that PG&E will reduce their generation rates in 2019, putting pressure on RCEA and other community choice aggregators to reduce our own rates to remain competitive.

PG&E's 2019 generation rates are currently projected to decrease significantly relative to the current rates. However, the California Public Utilities Commission's (CPUC) recent decision on exit fees for unbundled electric customers, known as the Power Charge Indifference Adjustment (PCIA) will allow this fee levied on CCE participants by PG&E to increase significantly. This places further pressure on CCE programs such as RCEA's to reduce rates so overall electric charges for CCE customers remain competitive with PG&E's.

In 2016, RCEA filed an implementation plan with the CPUC prior to launch of our Community Choice Aggregation program. The plan states how customers will be notified of proposed rate changes and given the opportunity to comment on them. Specifically, the implementation plan says:

Program rates are adopted by the Board of Directors following the establishment of the first year's operating budget prior to initiating the customer notification process, which occurs in January of every year. Subsequently, RCEA will prepare an annual budget and corresponding customer rates and submit these as an application for a change in rates to the Board of Directors. The rates must be approved at a public meeting of RCEA no sooner than sixty days following submission of the proposed rates, during which affected customers will be able to provide comment on the proposed rate changes.

In keeping with the process set in our CCE implementation plan, staff proposes the following timeline for setting customer rates:

- Current meeting — We present our provisional rates to the board and public for discussion.
- On or about January 2, 2019 — PG&E publishes its final 2019 rates, allowing RCEA to propose its final 2019 rates based on the Board-approved percentage discount.
- On or about January 14, 2019 — RCEA staff send finalized rates to Calpine Energy Solutions, who require approximately two weeks to implement them.
- January 28, 2019 — Staff present final rates to the Board. Upon Board approval, staff direct Calpine to implement the rates. Calpine will coordinate with PG&E to include language on bills telling customers how their rates have changed.

Allowing time for Board review and public comment necessarily creates a lag between PG&E rate-setting and RCEA's process. In the event the Board requests any changes to the rates at its January meeting, Calpine will require additional time to implement the altered rates. Assuming PG&E reduces its rates significantly as expected, this could extend the time period during which RCEA is exposed to opt-out risk while PG&E rates are temporarily lower than RCEA's.

#### **RECOMMENDED ACTION**

Information only – no action requested.

#### **ATTACHMENTS**

Draft rate sheet

# RCEA Community Choice Energy Program

## 2019 Customer Rate Schedule - Effective January 2019

RCEA Rate Schedule	Season	Charge Type	Time of Use Period	RCEA Rate	RCEA Rate with PG&E Surcharges	PG&E Rate
E-1	All	Generation	Total	0.06825	0.10144	0.10457
E-6	Summer	Generation	On Peak	0.19014	0.22333	0.23023
E-6	Summer	Generation	Part Peak	0.08427	0.11746	0.12109
E-6	Summer	Generation	Off Peak	0.04107	0.07426	0.07656
E-6	Winter	Generation	Part Peak	0.06506	0.09825	0.10128
E-6	Winter	Generation	Off Peak	0.05317	0.08636	0.08903
E-EV	Summer	Generation	On Peak	0.19858	0.23177	0.23894
E-EV	Summer	Generation	Part Peak	0.07866	0.11185	0.11531
E-EV	Summer	Generation	Off Peak	0.02318	0.05637	0.05811
E-EV	Winter	Generation	On Peak	0.05361	0.08680	0.08948
E-EV	Winter	Generation	Part Peak	0.02116	0.05435	0.05603
E-EV	Winter	Generation	Off Peak	0.02517	0.05836	0.06017
E-TOU-A	Summer	Generation	On Peak	0.14583	0.17902	0.18455
E-TOU-A	Summer	Generation	Off Peak	0.07493	0.10812	0.11146
E-TOU-A	Winter	Generation	On Peak	0.06389	0.09708	0.10009
E-TOU-A	Winter	Generation	Off Peak	0.05048	0.08367	0.08626
E-TOU-B	Summer	Generation	On Peak	0.16635	0.19954	0.20571
E-TOU-B	Summer	Generation	Off Peak	0.06967	0.10286	0.10604
E-TOU-B	Winter	Generation	On Peak	0.06612	0.09931	0.10238
E-TOU-B	Winter	Generation	Off Peak	0.04849	0.08168	0.08421
E-TOU-C3	Summer	Generation	On Peak	0.12326	0.15645	0.16129
E-TOU-C3	Summer	Generation	Off Peak	0.06375	0.09694	0.09994
E-TOU-C3	Winter	Generation	On Peak	0.07030	0.10349	0.10669
E-TOU-C3	Winter	Generation	Off Peak	0.05404	0.08723	0.08993
A-1-A	Summer	Generation	Total	0.08006	0.11339	0.11689
A-1-A	Winter	Generation	Total	0.04475	0.07808	0.08050
A-1-B	Summer	Generation	On Peak	0.09141	0.12474	0.12860
A-1-B	Summer	Generation	Part Peak	0.07241	0.10574	0.10901
A-1-B	Summer	Generation	Off Peak	0.05044	0.08377	0.08636

A-1-B	Winter	Generation	Part Peak	0.06661	0.09994	0.10303
A-1-B	Winter	Generation	Off Peak	0.05112	0.08445	0.08706
A-10-A	Summer	Generation	Total	0.07392	0.10910	0.11248
A-10-A	Summer	Demand	Total	4.45946	4.49464	4.63365
A-10-A	Winter	Generation	Total	0.04715	0.08233	0.08487
A-10-A-P	Summer	Generation	Total	0.06572	0.10090	0.10402
A-10-A-P	Summer	Demand	Total	3.87421	3.90939	4.03030
A-10-A-P	Winter	Generation	Total	0.04238	0.07756	0.07996
A-10-A-T	Summer	Generation	Total	0.05763	0.09281	0.09568
A-10-A-T	Summer	Demand	Total	3.04167	3.07685	3.17201
A-10-A-T	Winter	Generation	Total	0.03731	0.07249	0.07473
A-10-B	Summer	Generation	On Peak	0.11833	0.15351	0.15826
A-10-B	Summer	Generation	Part Peak	0.07289	0.10807	0.11141
A-10-B	Summer	Generation	Off Peak	0.04976	0.08494	0.08756
A-10-B	Summer	Demand	Total	4.45946	4.49464	4.63365
A-10-B	Winter	Generation	Part Peak	0.05450	0.08968	0.09246
A-10-B	Winter	Generation	Off Peak	0.04167	0.07685	0.07922
A-10-B-P	Summer	Generation	On Peak	0.10854	0.14372	0.14816
A-10-B-P	Summer	Generation	Part Peak	0.06685	0.10203	0.10519
A-10-B-P	Summer	Generation	Off Peak	0.04490	0.08008	0.08256
A-10-B-P	Summer	Demand	Total	3.87421	3.90939	4.03030
A-10-B-P	Winter	Generation	Part Peak	0.05068	0.08586	0.08852
A-10-B-P	Winter	Generation	Off Peak	0.03874	0.07392	0.07621
A-10-B-T	Summer	Generation	On Peak	0.09680	0.13198	0.13606
A-10-B-T	Summer	Generation	Part Peak	0.05817	0.09335	0.09624
A-10-B-T	Summer	Generation	Off Peak	0.03731	0.07249	0.07473
A-10-B-T	Summer	Demand	Total	3.04167	3.07685	3.17201
A-10-B-T	Winter	Generation	Part Peak	0.04419	0.07937	0.08183
A-10-B-T	Winter	Generation	Off Peak	0.03323	0.06841	0.07053
A-6	Summer	Generation	On Peak	0.28232	0.31565	0.32541
A-6	Summer	Generation	Part Peak	0.08982	0.12315	0.12696
A-6	Summer	Generation	Off Peak	0.04299	0.07632	0.07868
A-6	Winter	Generation	Part Peak	0.05849	0.09182	0.09466
A-6	Winter	Generation	Off Peak	0.04553	0.07886	0.08130
E-19-S	Summer	Generation	On Peak	0.09489	0.12677	0.13069

E-19-S	Summer	Generation	Part Peak	0.05834	0.09022	0.09302
E-19-S	Summer	Generation	Off Peak	0.03415	0.06603	0.06807
E-19-S	Summer	Demand	On Peak	11.40281	11.43469	11.78834
E-19-S	Summer	Demand	Part Peak	2.81368	2.84556	2.93357
E-19-S	Winter	Generation	Part Peak	0.04707	0.07895	0.08139
E-19-S	Winter	Generation	Off Peak	0.03543	0.06731	0.06939
E-19-R-S	Summer	Generation	On Peak	0.22103	0.25291	0.26073
E-19-R-S	Summer	Generation	Part Peak	0.08769	0.11957	0.12327
E-19-R-S	Summer	Generation	Off Peak	0.03415	0.06603	0.06807
E-19-R-S	Winter	Generation	Part Peak	0.04707	0.07895	0.08139
E-19-R-S	Winter	Generation	Off Peak	0.03543	0.06731	0.06939
E-19-P	Summer	Generation	On Peak	0.08654	0.11842	0.12208
E-19-P	Summer	Generation	Part Peak	0.05195	0.08383	0.08642
E-19-P	Summer	Generation	Off Peak	0.02971	0.06159	0.06350
E-19-P	Summer	Demand	On Peak	10.17696	10.20884	10.52458
E-19-P	Summer	Demand	Part Peak	2.47637	2.50825	2.58582
E-19-P	Winter	Generation	Part Peak	0.04172	0.07360	0.07587
E-19-P	Winter	Generation	Off Peak	0.03107	0.06295	0.06489
E-19-R-P	Summer	Generation	On Peak	0.21032	0.24220	0.24969
E-19-R-P	Summer	Generation	Part Peak	0.08030	0.11218	0.11565
E-19-R-P	Summer	Generation	Off Peak	0.02971	0.06159	0.06350
E-19-R-P	Winter	Generation	Part Peak	0.04172	0.07360	0.07587
E-19-R-P	Winter	Generation	Off Peak	0.03107	0.06295	0.06489
E-19-T	Summer	Generation	On Peak	0.05647	0.08835	0.09108
E-19-T	Summer	Generation	Part Peak	0.04473	0.07661	0.07898
E-19-T	Summer	Generation	Off Peak	0.02919	0.06107	0.06296
E-19-T	Summer	Demand	On Peak	11.56735	11.59923	11.95797
E-19-T	Summer	Demand	Part Peak	2.90418	2.93606	3.02686
E-19-T	Winter	Generation	Part Peak	0.04110	0.07298	0.07523
E-19-T	Winter	Generation	Off Peak	0.03057	0.06245	0.06438
E-19-R-T	Summer	Generation	On Peak	0.20941	0.24129	0.24875
E-19-R-T	Summer	Generation	Part Peak	0.08080	0.11268	0.11617
E-19-R-T	Summer	Generation	Off Peak	0.02919	0.06107	0.06296
E-19-R-T	Winter	Generation	Part Peak	0.04110	0.07298	0.07523
E-19-R-T	Winter	Generation	Off Peak	0.03057	0.06245	0.06438
E-20-S	Summer	Generation	On Peak	0.08817	0.11881	0.12249
E-20-S	Summer	Generation	Part Peak	0.05472	0.08536	0.08800

E-20-S	Summer	Generation	Off Peak	0.03175	0.06239	0.06432
E-20-S	Summer	Demand	On Peak	11.11597	11.14661	11.49135
E-20-S	Summer	Demand	Part Peak	2.74376	2.77440	2.86021
E-20-S	Winter	Generation	Part Peak	0.04401	0.07465	0.07696
E-20-S	Winter	Generation	Off Peak	0.03302	0.06366	0.06563
E-20-R-S	Summer	Generation	On Peak	0.20199	0.23263	0.23983
E-20-R-S	Summer	Generation	Part Peak	0.08224	0.11288	0.11637
E-20-R-S	Summer	Generation	Off Peak	0.03175	0.06239	0.06432
E-20-R-S	Winter	Generation	Part Peak	0.04401	0.07465	0.07696
E-20-R-S	Winter	Generation	Off Peak	0.03302	0.06366	0.06563
E-20-P	Summer	Generation	On Peak	0.09176	0.12240	0.12619
E-20-P	Summer	Generation	Part Peak	0.05487	0.08551	0.08816
E-20-P	Summer	Generation	Off Peak	0.03218	0.06282	0.06477
E-20-P	Summer	Demand	On Peak	12.20187	12.23251	12.61083
E-20-P	Summer	Demand	Part Peak	2.88468	2.91532	3.00549
E-20-P	Winter	Generation	Part Peak	0.04416	0.07480	0.07711
E-20-P	Winter	Generation	Off Peak	0.03333	0.06397	0.06595
E-20-R-P	Summer	Generation	On Peak	0.21739	0.24803	0.25570
E-20-R-P	Summer	Generation	Part Peak	0.08250	0.11314	0.11664
E-20-R-P	Summer	Generation	Off Peak	0.03218	0.06282	0.06477
E-20-R-P	Winter	Generation	Part Peak	0.04416	0.07480	0.07711
E-20-R-P	Winter	Generation	Off Peak	0.03333	0.06397	0.06595
E-20-T	Summer	Generation	On Peak	0.05562	0.08626	0.08892
E-20-T	Summer	Generation	Part Peak	0.04450	0.07514	0.07746
E-20-T	Summer	Generation	Off Peak	0.02978	0.06042	0.06229
E-20-T	Summer	Demand	On Peak	14.43998	14.47062	14.91817
E-20-T	Summer	Demand	Part Peak	3.44006	3.47070	3.57805
E-20-T	Winter	Generation	Part Peak	0.04082	0.07146	0.07367
E-20-T	Winter	Generation	Off Peak	0.03084	0.06148	0.06338
E-20-R-T	Summer	Generation	On Peak	0.21155	0.24219	0.24968
E-20-R-T	Summer	Generation	Part Peak	0.07752	0.10816	0.11150
E-20-R-T	Summer	Generation	Off Peak	0.02978	0.06042	0.06229
E-20-R-T	Winter	Generation	Part Peak	0.04082	0.07146	0.07367
E-20-R-T	Winter	Generation	Off Peak	0.03084	0.06148	0.06338
AG-1-A	Summer	Generation	Total	0.06070	0.09070	0.09350
AG-1-A	Summer	Connected Load	Total	1.09221	1.12221	1.15691
AG-1-A	Winter	Generation	Total	0.04997	0.07997	0.08245

AG-1-B	Summer	Generation	Total	0.06307	0.09307	0.09595
AG-1-B	Summer	Demand	Total	1.64198	1.67198	1.72369
AG-1-B	Winter	Generation	Total	0.05004	0.08004	0.08252
AG-1-B-P	Summer	Generation	Total	0.06307	0.09307	0.09595
AG-1-B-P	Summer	Demand	Total	1.03357	1.06357	1.09646
AG-1-B-P	Winter	Generation	Total	0.05004	0.08004	0.08252
AG-R-A	Summer	Generation	On Peak	0.19554	0.22554	0.23251
AG-R-A	Summer	Generation	Off Peak	0.03503	0.06503	0.06704
AG-R-A	Summer	Connected Load	Total	1.05556	1.08556	1.11913
AG-R-A	Winter	Generation	Part Peak	0.04533	0.07533	0.07766
AG-R-A	Winter	Generation	Off Peak	0.03544	0.06544	0.06747
AG-V-A	Summer	Generation	On Peak	0.16872	0.19872	0.20486
AG-V-A	Summer	Generation	Off Peak	0.03284	0.06284	0.06479
AG-V-A	Summer	Connected Load	Total	1.09954	1.12954	1.16447
AG-V-A	Winter	Generation	Part Peak	0.04397	0.07397	0.07626
AG-V-A	Winter	Generation	Off Peak	0.03428	0.06428	0.06627
AG-V-B	Summer	Generation	On Peak	0.15434	0.18434	0.19004
AG-V-B	Summer	Generation	Off Peak	0.03316	0.06316	0.06511
AG-V-B	Summer	Demand	Total	1.42940	1.45940	1.50454
AG-V-B	Summer	Demand	On Peak	1.83989	1.86989	1.92772
AG-V-B	Winter	Generation	Part Peak	0.03380	0.06380	0.06578
AG-V-B	Winter	Generation	Off Peak	0.02564	0.05564	0.05736
AG-4-A	Summer	Generation	On Peak	0.10853	0.13853	0.14281
AG-4-A	Summer	Generation	Off Peak	0.03605	0.06605	0.06809
AG-4-A	Summer	Connected Load	Total	1.08488	1.11488	1.14936
AG-4-A	Winter	Generation	Part Peak	0.04377	0.07377	0.07605
AG-4-A	Winter	Generation	Off Peak	0.03416	0.06416	0.06615
AG-4-B	Summer	Generation	On Peak	0.07866	0.10866	0.11202
AG-4-B	Summer	Generation	Off Peak	0.03768	0.06768	0.06977
AG-4-B	Summer	Demand	Total	1.92053	1.95053	2.01085
AG-4-B	Summer	Demand	On Peak	2.03781	2.06781	2.13176
AG-4-B	Winter	Generation	Part Peak	0.04036	0.07036	0.07254
AG-4-B	Winter	Generation	Off Peak	0.03118	0.06118	0.06307
AG-4-B-P	Summer	Generation	On Peak	0.07866	0.10866	0.11202
AG-4-B-P	Summer	Generation	Off Peak	0.03768	0.06768	0.06977

AG-4-B-P	Summer	Demand	Total	1.44406	1.47406	1.51965
AG-4-B-P	Summer	Demand	On Peak	1.56134	1.59134	1.64056
AG-4-B-P	Winter	Generation	Part Peak	0.04036	0.07036	0.07254
AG-4-B-P	Winter	Generation	Off Peak	0.03118	0.06118	0.06307
AG-4-C	Summer	Generation	On Peak	0.09371	0.12371	0.12753
AG-4-C	Summer	Generation	Part Peak	0.04480	0.07480	0.07711
AG-4-C	Summer	Generation	Off Peak	0.02703	0.05703	0.05880
AG-4-C	Summer	Demand	On Peak	4.72801	4.75801	4.90517
AG-4-C	Summer	Demand	Part Peak	0.80633	0.83633	0.86219
AG-4-C	Winter	Generation	Part Peak	0.03569	0.06569	0.06772
AG-4-C	Winter	Generation	Off Peak	0.02719	0.05719	0.05896
AG-5-A	Summer	Generation	On Peak	0.10035	0.13035	0.13438
AG-5-A	Summer	Generation	Off Peak	0.04000	0.07000	0.07216
AG-5-A	Summer	Connected Load	Total	2.96875	2.99875	3.09150
AG-5-A	Winter	Generation	Part Peak	0.04762	0.07762	0.08002
AG-5-A	Winter	Generation	Off Peak	0.03749	0.06749	0.06958
AG-5-B	Summer	Generation	On Peak	0.09757	0.12757	0.13151
AG-5-B	Summer	Generation	Off Peak	0.02018	0.05018	0.05174
AG-5-B	Summer	Demand	Total	3.56983	3.59983	3.71117
AG-5-B	Summer	Demand	On Peak	4.47145	4.50145	4.64067
AG-5-B	Winter	Generation	Part Peak	0.04040	0.07040	0.07258
AG-5-B	Winter	Generation	Off Peak	0.01503	0.04503	0.04643
AG-5-C	Summer	Generation	On Peak	0.07763	0.10763	0.11095
AG-5-C	Summer	Generation	Part Peak	0.03679	0.06679	0.06885
AG-5-C	Summer	Generation	Off Peak	0.02158	0.05158	0.05318
AG-5-C	Summer	Demand	On Peak	8.29051	8.32051	8.57785
AG-5-C	Summer	Demand	Part Peak	1.56134	1.59134	1.64056
AG-5-C	Winter	Generation	Part Peak	0.02908	0.05908	0.06090
AG-5-C	Winter	Generation	Off Peak	0.02139	0.05139	0.05298
S-TOU-P	Summer	Generation	On Peak	0.08010	0.11074	0.11416
S-TOU-P	Summer	Generation	Part Peak	0.06570	0.09634	0.09932
S-TOU-P	Summer	Generation	Off Peak	0.04686	0.07750	0.07989
S-TOU-P	Summer	Reservation Charge	Total	0.34815	0.37879	0.39051
S-TOU-P	Winter	Generation	Part Peak	0.06002	0.09066	0.09347
S-TOU-P	Winter	Generation	Off Peak	0.04714	0.07778	0.08018
S-TOU-P	Winter	Reservation Charge	Total	0.30735	0.33799	0.34844



S-TOU-T	Summer	Generation	On Peak	0.06555	0.09619	0.09916
S-TOU-T	Summer	Generation	Part Peak	0.05359	0.08423	0.08684
S-TOU-T	Summer	Generation	Off Peak	0.03777	0.06841	0.07053
S-TOU-T	Summer	Reservation Charge	Total	0.29013	0.32077	0.33069
S-TOU-T	Winter	Generation	Part Peak	0.04897	0.07961	0.08207
S-TOU-T	Winter	Generation	Off Peak	0.03825	0.06889	0.07102
S-TOU-T	Winter	Reservation Charge	Total	0.25613	0.28677	0.29563
SL-1	All	Generation	Total	0.04440	0.07154	0.07375
TC-1	All	Generation	Total	0.03789	0.06503	0.06705

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# REDWOOD COAST Energy Authority

## STAFF REPORT Agenda Item # 9.5

AGENDA DATE:	November 19, 2018
TO:	Board of Directors
PREPARED BY:	Richard Engel, Director of Power Resources Allison Campbell, Power Resources Manager
SUBJECT:	Renewable Power Solicitation

### SUMMARY

RCEA's initial power procurement strategy for our Community Choice Energy (CCE) program has been to meet the majority of our state-mandated Renewable Portfolio Standard (RPS) requirements through short- to medium-term local biomass contracts and short-term purchases from non-local resources. This approach has allowed us to focus on building financial reserves.

This strategy cannot be maintained indefinitely. California's SB 350 requires that all load-serving entities, including CCEs, begin to procure at least 65% of their RPS power under long-term contracts of 10 years minimum duration, or from generating resources owned by the load-serving entity, by 2021. Furthermore, SB 100 ("The 100 Percent Clean Energy Act of 2018"), signed by the governor on September 10, calls for an aggressive increase in RPS requirements, with a target of 60% RPS by 2030.

As a result of the long-term contracting requirement of SB 350 and increased renewables requirement under SB 100, RCEA is now seeking to add to its renewable energy portfolio. Since program launch, staff have been approached by numerous renewable energy developers proposing projects to add to RCEA's renewable energy portfolio through long-term contracts that could potentially fulfill both the SB 350 and SB 100 mandates.

As new renewable projects can take several years to bring online, and recognizing that other load-serving entities face the same procurement requirements, RCEA is seeking to enter one or more contracts over the next few months, both for prudent planning and financial competitiveness reasons. RCEA's projected long-term contract requirements starting in 2021 are shown in the table on the following page.

(continued next page)

## Renewable Portfolio Standard Requirements by Year

	2021	2022	2023	2024	2025	2026	2027
RPS Requirement per SB100 as % of total portfolio	35%	38%	40%	42%	45%	49%	52%
Long term RPS contracts required per SB 350 as % of total portfolio	23%	25%	26%	27%	29%	32%	34%
RCEA projected retail sales (GWh)*	647	646	643	639	638	634	631
RPS power required to be under long-term contracts (GWh)	148	159	169	174	188	201	213

\*source: California Energy Commission Integrated Energy Policy Report, Form 1.1c. These projected load values are used here for general indicative purposes. The decline in projected retail sales accounts for behind the meter solar and energy efficiency improvements. Staff and consultants will re-assess RCEA's projected load prior to issuing the proposed solicitation.

Legal counsel has advised that, in order to provide fairness and ensure RCEA gets best value for its CCE procurement budget, all long-term contracting for power resources should be done through open and competitive solicitations. Staff have therefore begun the process of developing such a solicitation. This report outlines the proposed solicitation for Board review and comment.

Staff propose a solicitation that would seek to procure renewable energy from any or all of the following resource types:

- Solar photovoltaic
- Wind
- Small (RPS-eligible) Hydropower

Biomass procurement is not proposed for the solicitation, as we are currently fulfilling the biomass procurement goal in the Board's program guidelines. Referring back to agenda item 9.3 for the current meeting, in the event that RCEA and HRC renegotiate our biomass power contract for an SB 350-compliant 10-year term at the current volume (13.25 MW average), this would fulfill a substantial portion of our RPS requirement (78% in 2021, declining to 54% in 2027 as load grows). This outcome would of course be taken into account in making procurement decisions under the proposed solicitation.

The table on the following page summarizes the Board's procurement objectives for each renewable resource type, as reflected in the CCE program guidelines adopted in September 2016 (see attachment to staff report 9.2 for the current meeting). Based on the Board's goals for new resource development, but recognizing the economic and regulatory hurdles to developing some types of new projects, staff recommends setting different priorities for new vs. existing resource types, as shown in the table below. Similarly, staff recognizes the Board's desire to invest in local projects and proposes setting priority on local projects differently by resource type, as shown.

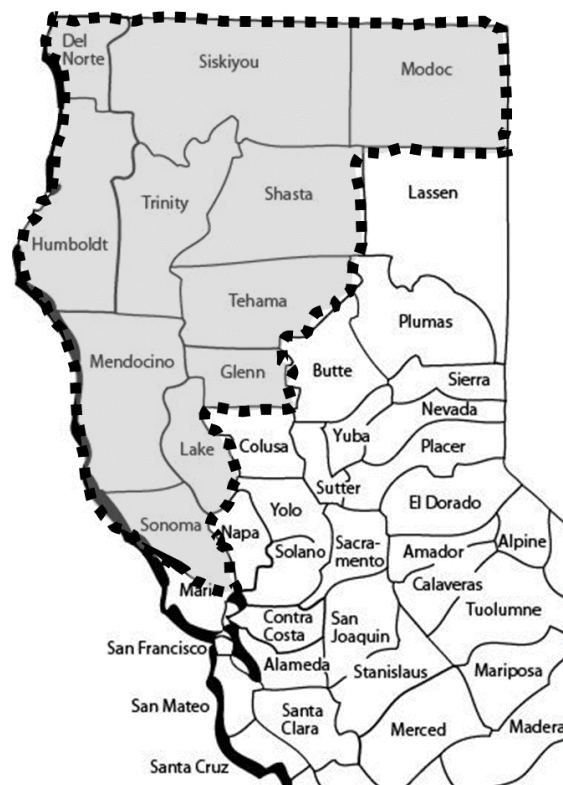
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### Proposed Criteria by Resource Type

Resource type	Procurement goal per 2016 Board guidelines	Estimated annual volume (GWh)	Local preference	New vs existing facility
Wind	up to 50 MW	150	Strong preference for local	Strong preference for new
Solar	15 MW by 2022	25	Strong preference for local	Strong preference for new
Hydro	2 MW	15	Northern California OK	Existing OK

**Location:** The solicitation will make it clear that RCEA strongly prefers projects built within Humboldt County and will use scoring criteria to reflect this. All projects would be required to be located in northwestern California. The map below proposes to limit this area to Humboldt County, counties adjacent to Humboldt County, and counties adjacent in turn to those counties.

### Proposed Project Procurement Area



**Project size:** Staff propose allowing developers to offer projects at varying sizes, subject to RCEA’s overall renewable energy procurement goals and the following minimum sizes for individual systems:

- Wind: 20 MW
- Solar: 5 MW
- Hydro: 1 MW

**Energy storage:** The proposed solicitation will not seek energy storage proposals, as RCEA has already committed to the ACV airport microgrid project, which is expected to fulfill RCEA’s statutory energy storage requirement for the foreseeable future.

**Solicitation schedule:** Staff propose the following schedule for next steps in developing and issuing the solicitation, assuming the Board directs staff to proceed.

Staff brings full solicitation to Board for approval	December 2018
Staff issues solicitation	January 2019
Proposals due	February 2019
Proposal shortlist announced	May 2019
Staff negotiates power purchase agreement(s)	May-July 2019
Board approves contract(s)	August 2019
Power purchase agreements are executed	August 2019

For purposes of proposal review and project selection, staff proposes to assemble a team including RCEA staff, TEA staff, and outside stakeholders, as was done successfully in 2016 for the biomass request for offers.

## FINANCIAL IMPACTS

The recommended actions presented to the Board in this report would not have any financial impact other than staff time to continue development of the proposed solicitation. Potential financial impacts of the solicitation itself will be analyzed by staff and consultants and presented to the Board along with the solicitation materials at an upcoming meeting. Staff expects offers from developers to show per-MWh cost premiums associated with:

- projects developed locally, as compared with projects built in locations more accessible to labor and material markets
- new projects, as compared to existing projects
- smaller scale projects
- projects with shorter term contracts

A key part of developing the solicitation will be production of a scoring rubric that appropriately weighs these tradeoffs, keeping in mind the values expressed by the Board in its CCE program guidelines adopted in 2016, and further input received from the Board in discussing the current proposal.

**RECOMMENDED ACTION**

1. Provide comments on staff's proposal to develop and issue a renewable power solicitation.
2. Authorize staff to develop all solicitation materials for Board review and approval.

**ATTACHMENTS**

None

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# REDWOOD COAST Energy Authority

## STAFF REPORT Agenda Item # 9.6

AGENDA DATE:	November 19, 2018
TO:	Board of Directors
PREPARED BY:	Mahayla Slackerelli, Account Services Manager
SUBJECT:	Feed-In Tariff Concept Presentation

### SUMMARY

#### Feed-In Tariff Board Goals

In 2016, the Board of Directors adopted a Feed-in Tariff (FIT) as a goal in the guidelines for the Community Choice Energy (CCE) program. A FIT was included in the guidelines to encourage the development of individual renewable energy projects of one megawatt or less. This program-level design includes a target of six megawatts of capacity built in Humboldt County. Market intelligence suggests a price of \$90 per megawatt-hour would entice developers to build community-scale renewables locally.

#### Feed-In Tariff Structures

FITs are a policy mechanism to accelerate small-scale wholesale generation. FIT programs offer power purchase agreements (PPA) at fixed terms, often at above market rates. This mechanism allows developers to acquire financing and build qualified renewable generation projects with confidence in receiving set rates over the contract period. FIT contracts are typically 20 years or longer. This standardized contract instrument minimizes administrative resources invested in local generation procurement.

FIT programs have been employed by several load-serving entities regionally and elsewhere. The two oldest CCE programs in California, MCE and Sonoma Clean Power (SCP), both employ FITs to procure a prescribed amount of community-scale renewable energy. While the two CCE programs have structured their FITs differently, they have both successfully completed several local projects. As a result of their FITs, MCE has 15 projects under contract and SCP is in partnership with six projects. Investor owned utilities, like Pacific Gas and Electric (PG&E), and municipal utilities, like Sacramento Municipal Utility District (SMUD), have also used FIT mechanisms. The PG&E FIT, ReMAT, employed a beneficial pricing mechanism discussed below; however, that

program is no longer in operation due to non-compliance with the Public Utility Regulatory Policies Act. The Energy Authority is currently researching RCEA's potential liability under this legislation.

## **Pricing**

The FIT's baseline price will likely determine the success of this procurement mechanism. Staff consulted with qualified vendors, including local developers, to gather market intelligence for a baseline rate. This research suggests that \$90/MWh would attract developers. This price is consistent with current baseline rates for FITs in the region. While the FIT program is open to all sources of renewable energy generation, these price estimates were based on the most likely technology, solar.

There has been some discussion of narrowing the scope of project locations for land use considerations. These limits would seek to protect open space, agricultural lands, and land that could be better used for other purposes. Considering the small capacity this FIT is seeking to fill, it is reasonable to constrain land options. However, the FIT's baseline price may need to increase to accommodate additional project expenses incurred under these requirements, for example remediation costs of developing on contaminated land.

Another crucial feature for program enrollment is market adjusting pricing. While staff has endeavored to propose a baseline rate that will interest developers and minimize costs, the true market price cannot be forecasted. Staff recommends market adjusting pricing as has been used in some other FITs; if, at the initial price, the program is under enrolled, after a prescribed interval the price would increase. Conversely, if there were a large interest in the program indicating that the price is too high, it would decrease. A price floor and ceiling of \$80/MWh and \$100/MWh would be included to minimize risk for all stakeholders. Staff recommends a \$2.5/MWh change for price adjustments occurring every two months as needed. While staff has included a price floor of \$80/MWh, the price of energy could only practically drop to \$82.50/MWh in the event of high enrollment, given current project design. Please see Attachment A for a market adjusting pricing flow chart, Attachment B for hypothetical market adjusting scenario and Attachment C for the lowest price scenario. While it was in operation, PG&E's ReMAT program employed market adjusting pricing to significant advantage. This mechanism decreased the price for variable resources, like solar, considerably. Market adjusting pricing would allow RCEA to refine the FIT baseline price to the advantage of all stakeholders.

## **Potential Features**

The FIT is designed to support community values. One way of further incentivizing desirable project characteristics in the FIT is offering adders to the base rate. Popular

adders include projects sited on the built-environment or specifically Environmental Protection Agency specified brownfields, small projects to encourage infill and projects using local labor. For example, SCP offers a \$10/MWh adder for projects built by a local business. Once the adders are selected, further analysis will be required to determine the appropriate price increase.

While researching other FITs, the importance of including a mechanism that exclusively encourages serious applicants became clear. Other programs have accomplished this by only providing a short window for applicants to arrange an interconnection agreement with PG&E before being removed from the queue, or by requiring deposits and evidence of site control before accepting the application. Requiring the developers to reach specified project milestones would be another safeguard for project completion. In addition, a mechanism for limiting the capacity that a single developer claims is crucial if the program's goals include supplier diversity. Please see attachment D for a list of mechanisms for ensuring serious applicants.

### **Next Steps**

With Board approval, staff will further develop the FIT program policy. Staff will create a tariff specifying programmatic details, a standardized PPA and an application for developers. Once complete, staff will bring back materials for final Board approval.

### **FINANCIAL IMPACTS**

The recommended actions presented to the Board in this report would not have any financial impact other than staff time to continue development of the proposed tariff.

Looking further ahead to tariff implementation, if RCEA offers a baseline rate at the suggested amount of \$90 MWh, six megawatts over the course of a 20-year contract would cost \$275,000 above market rates. For the purposes of this analysis, the assumed market rate for renewable electricity is \$50/MWh. Please see Attachment E for financial estimates at \$90/MWh at other capacity levels. If market adjusting pricing decreases the baseline rate as far as possible to \$82.5/MWh, which is the lowest it could practically drop, six megawatts over the course of a 20-year contract would cost \$186,000 above market energy rates. Given the present capacity and pricing recommendations even if the program was fully subscribed, indicating the price is too high, the price would only drop to \$82.50/MWh. Please see Attachment C for representation of this scenario. If the rate is set at the top end, \$100/MWh, the subsidy would be \$340,000 over the contract period. Please see Attachment F for ceiling and floor price estimates at other capacity levels.

## **RECOMMENDED ACTION**

Provide staff with feedback on the proposed FIT design.

Direct staff to draft project implementation materials for Board approval.

## **ATTACHMENTS:**

*Attachment A: Flow chart of RCEA's proposed market adjusting pricing FIT mechanism.*

*Attachment B: Hypothetical market pricing scenario.*

*Attachment C: Market pricing scenario resulting in the lowest possible prices.*

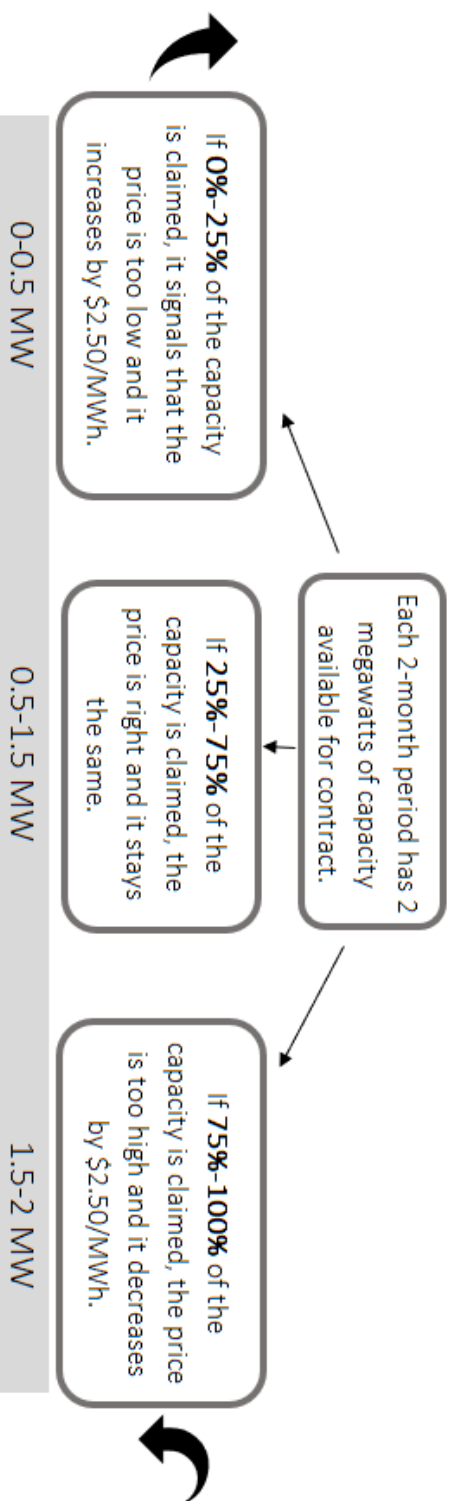
*Attachment D: Table of mechanisms for ensuring serious FIT applicants from the University of California, Los Angeles's study Best Practices for Implementing a Feed-in Tariff Program.*

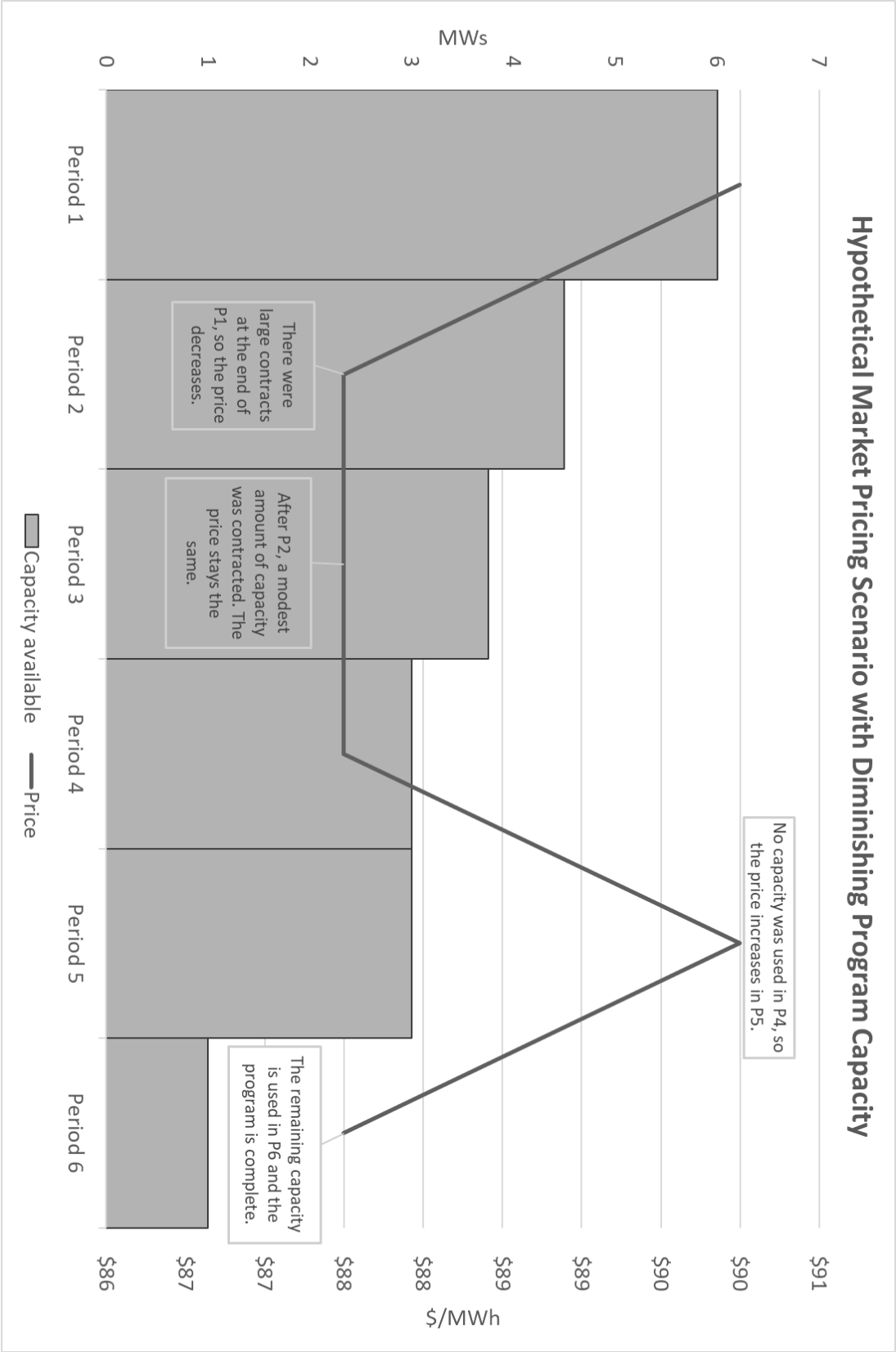
<https://luskin.ucla.edu/sites/default/files/Best%20Practices%20for%20Implementing%20a%20Feed%20in%20Tariff%20Program.pdf>

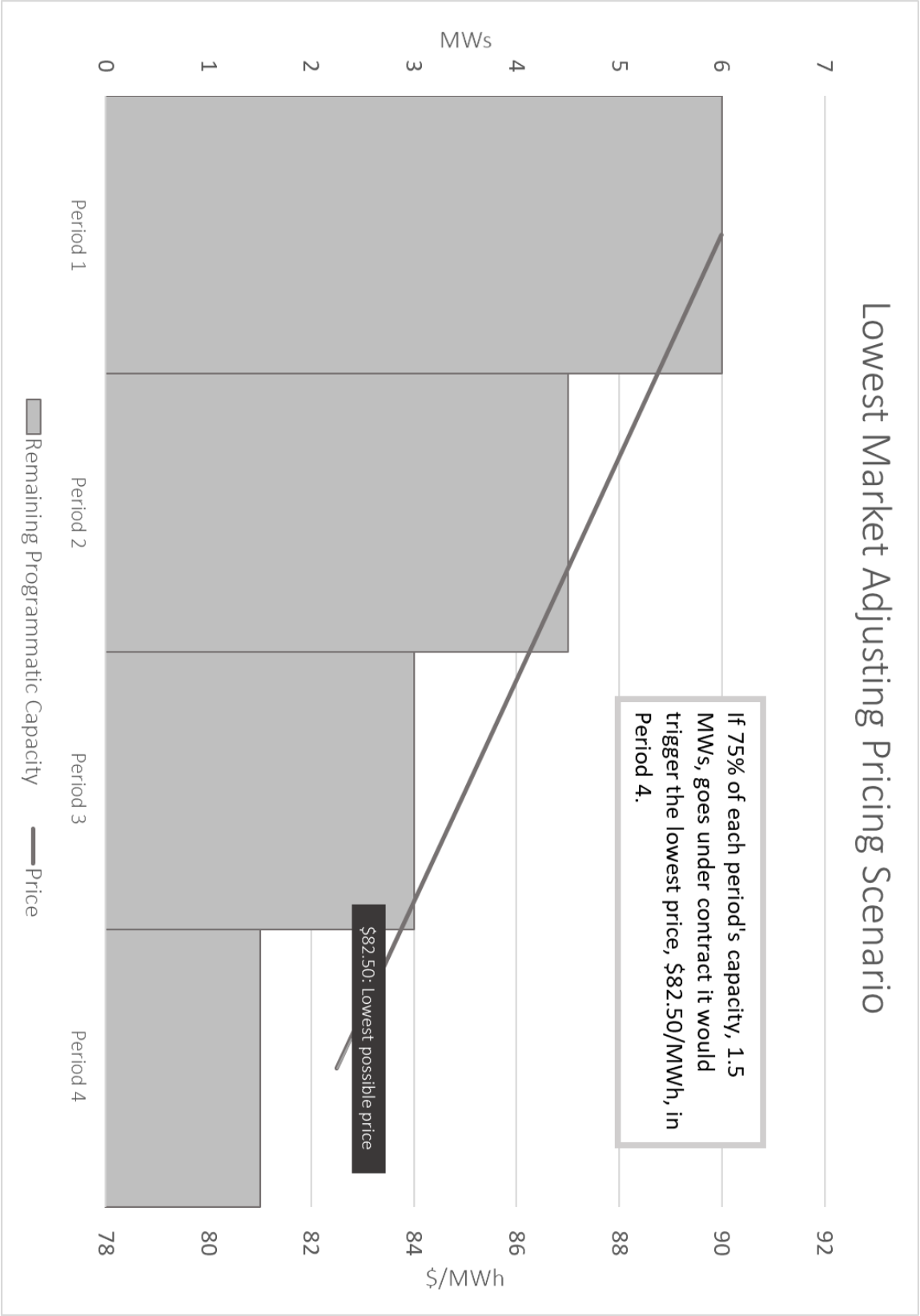
*Attachment E: Program costs at \$90/MWh over a range of capacities.*

*Attachment F: Program costs at \$80/MWh and \$100/MWh over a range of capacities.*

# FIT Market Adjusting Pricing



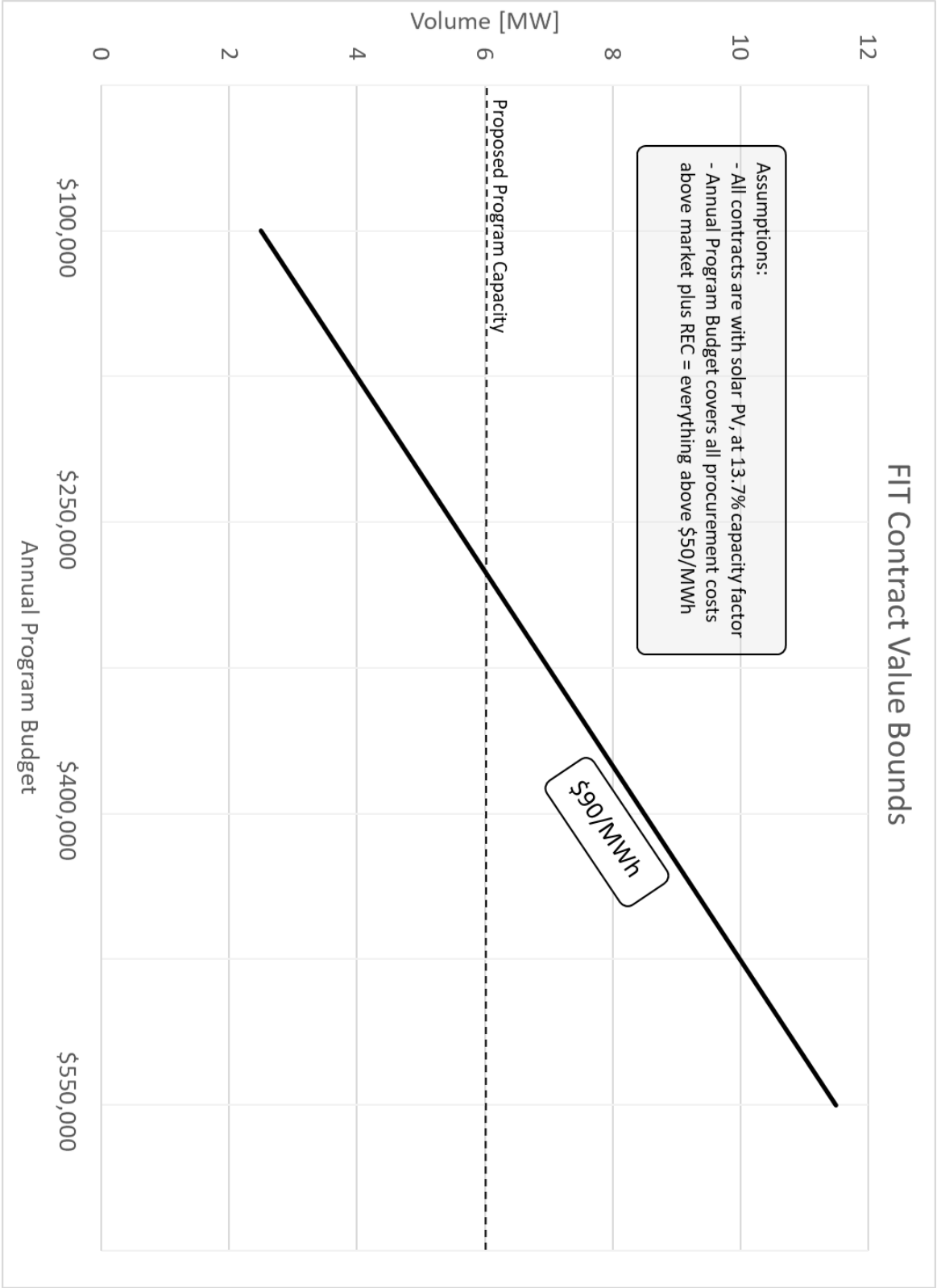


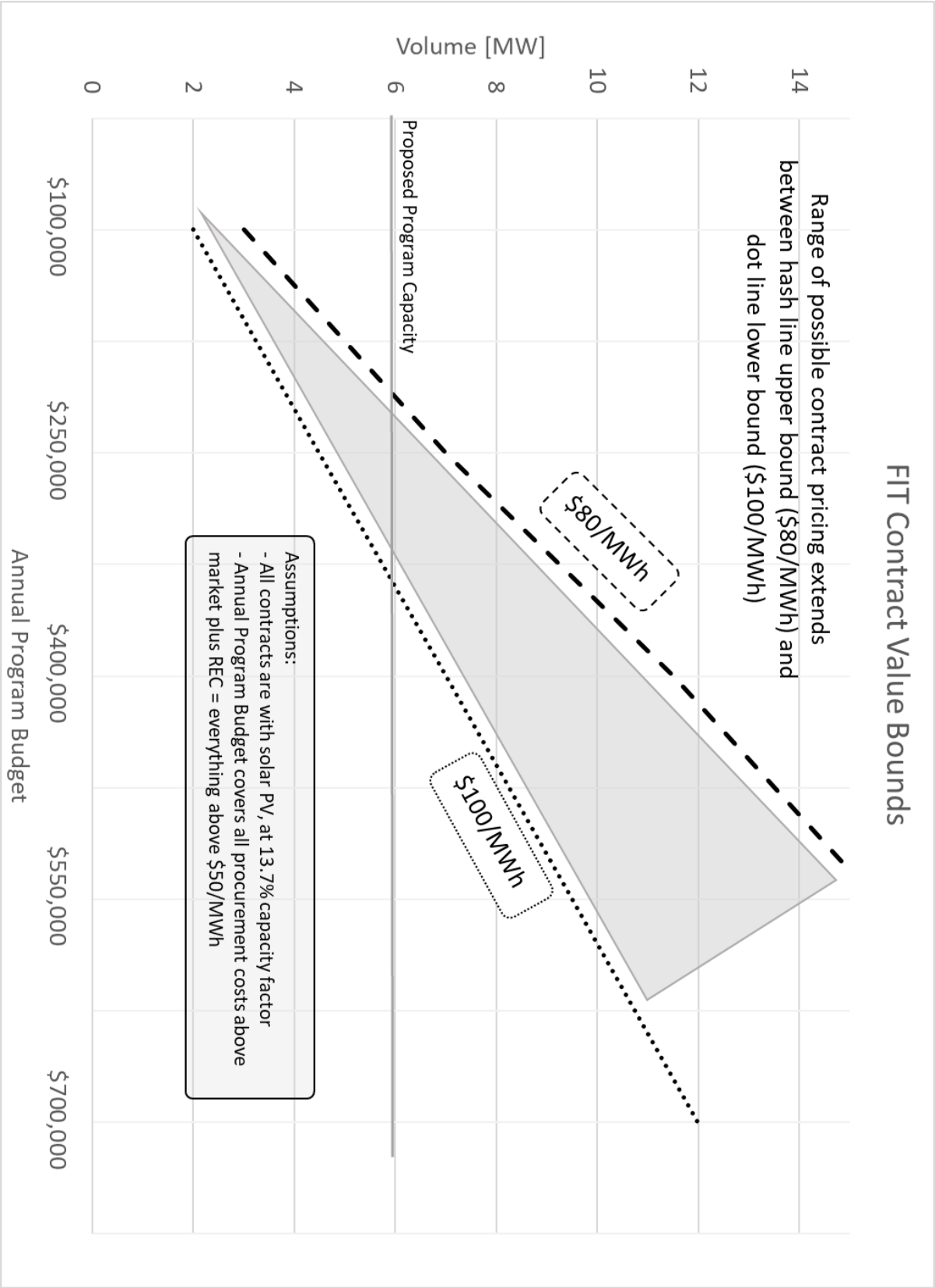


## Attachment D: Mechanisms for Ensuring Serious FIT Applicants

Jurisdiction	Fee	Deposit	Milestones
Ontario microFIT	None Required	None Required	Commercial Operation 12 months from Conditional Offer
Ontario FIT	Application fee of \$0.50 per kW up to \$5,000 (non- refundable)	Application security of \$20 per kW for Solar PV in cash or letter of credit (refundable with performance)	Commercial Operation 3 years from contract date
Vermont SPEED	Administrative fee of \$200 Due upon winning lottery queue selection (non- refundable)	Deposit of \$10 per kW of installed capacity (refundable)	Commissioned within three years of contract date
Sacramento (SMUD)	Interconnection Review fee of \$1,400 (refundable if not offered a queue position)	Reservation Deposit of \$20 per kW (refundable if not offered a queue position)	Commercial operation by end of 2012
Gainesville Solar FIT	Processing Fee \$500 for <10kW, \$1,200 for > 10kW (non- refundable)	Reservation deposit of \$30 per kW (refundable)	3 milestones 1 year to put into operation
San Antonio CPS Energy	Application Fee of \$200 (non-refundable)	I/C Evaluation fee of \$10 per kW (refundable if application is rejected)	Commercial Operation within 270 days









# Community Choice Energy *Feed-in Tariff Proposal*

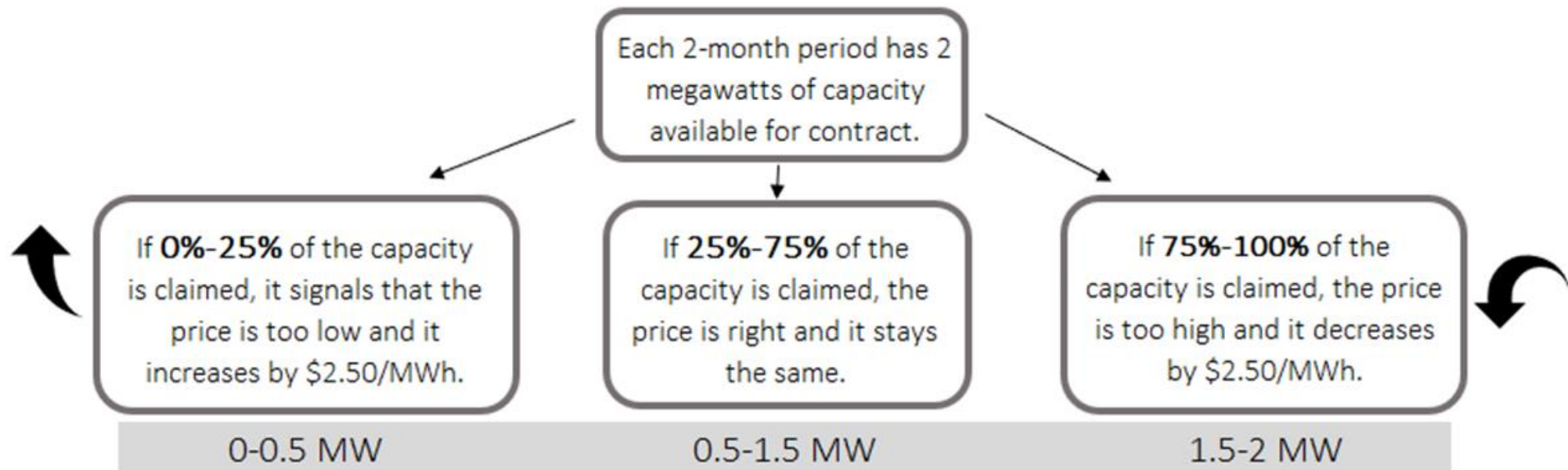
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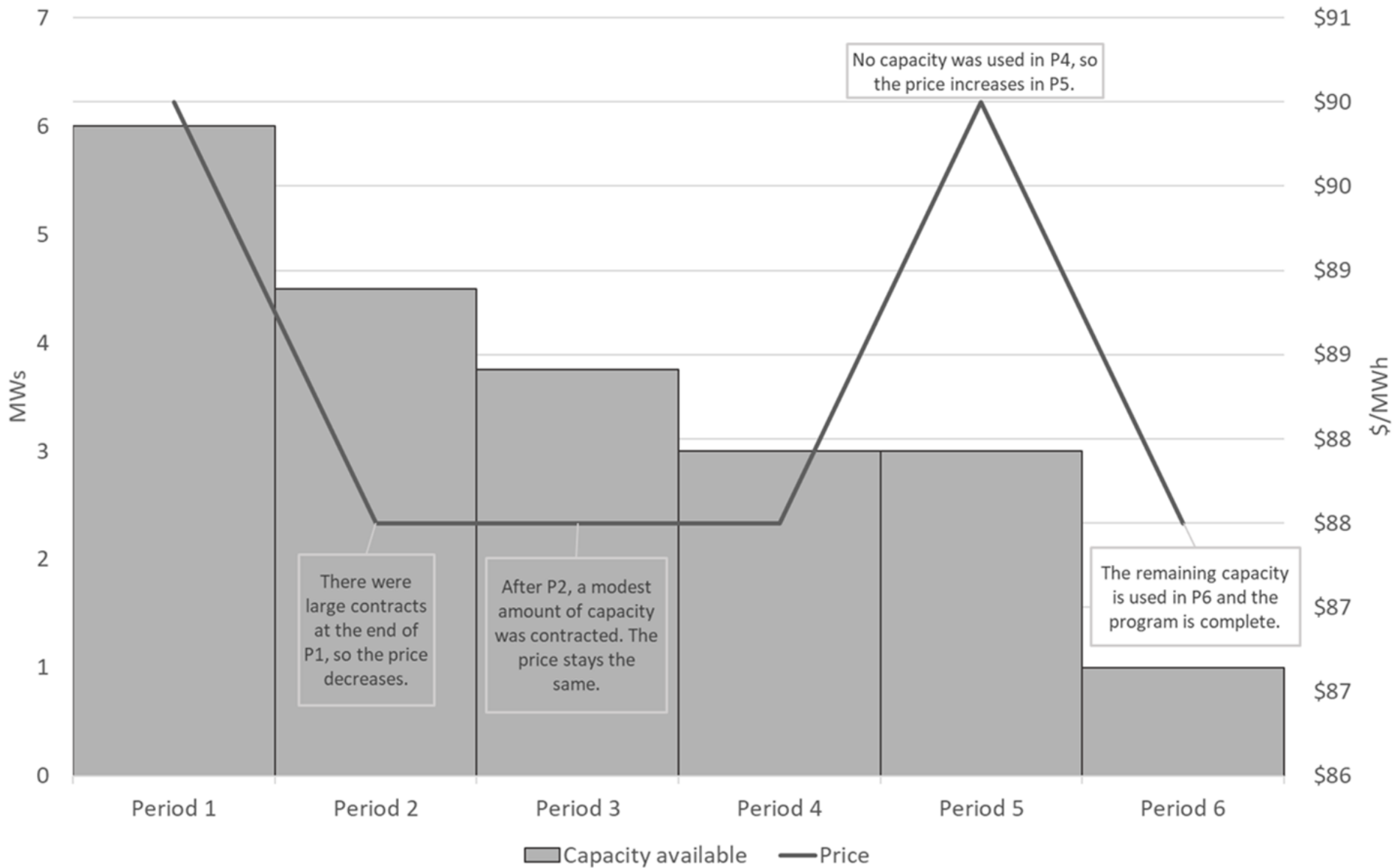
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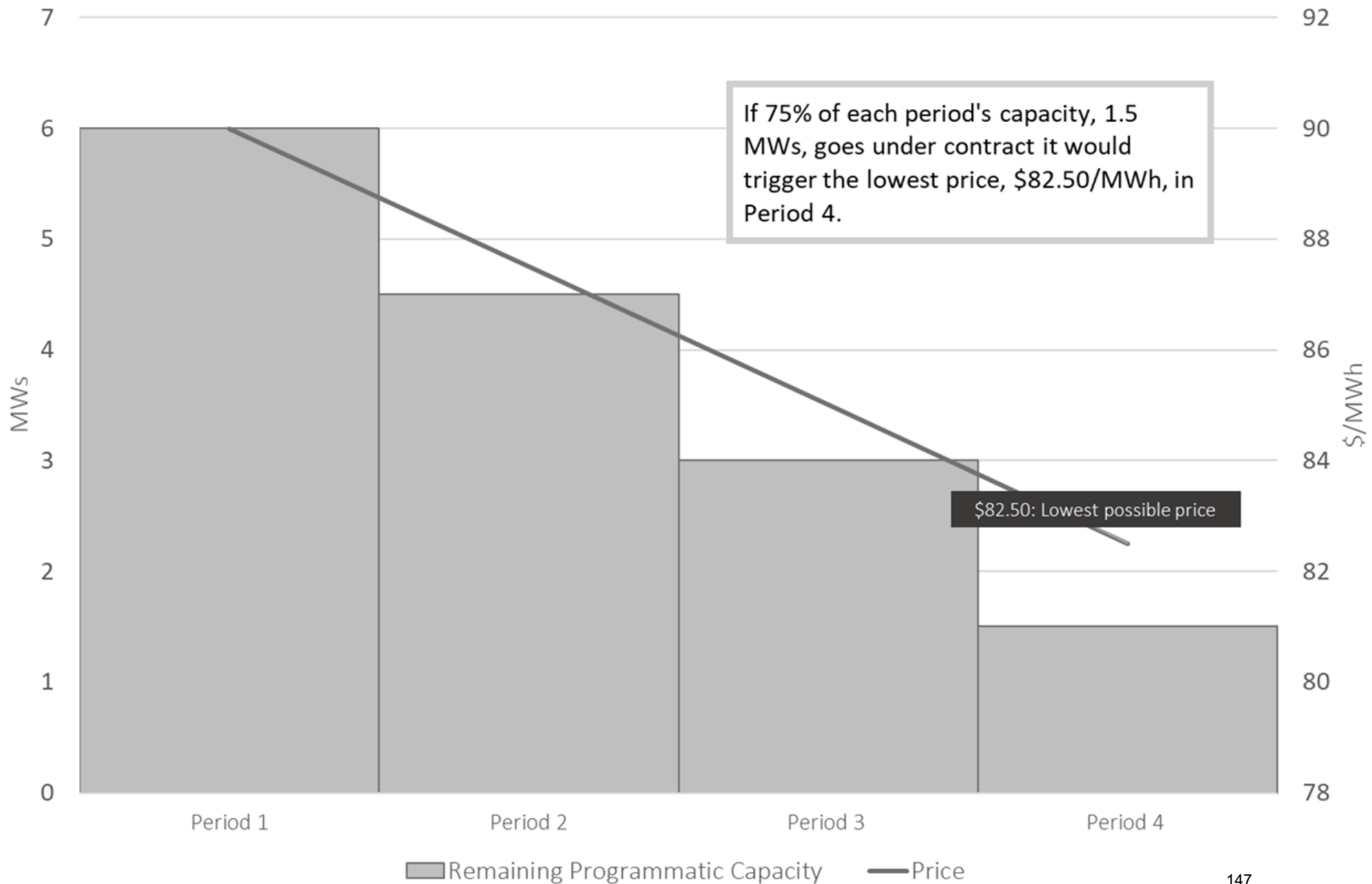
## FIT Market Adjusting Pricing



## Hypothetical Market Pricing Scenario with Diminishing Program Capacity



## Lowest Market Adjusting Pricing Scenario





## **Potential Features:**

Narrowing location parameters

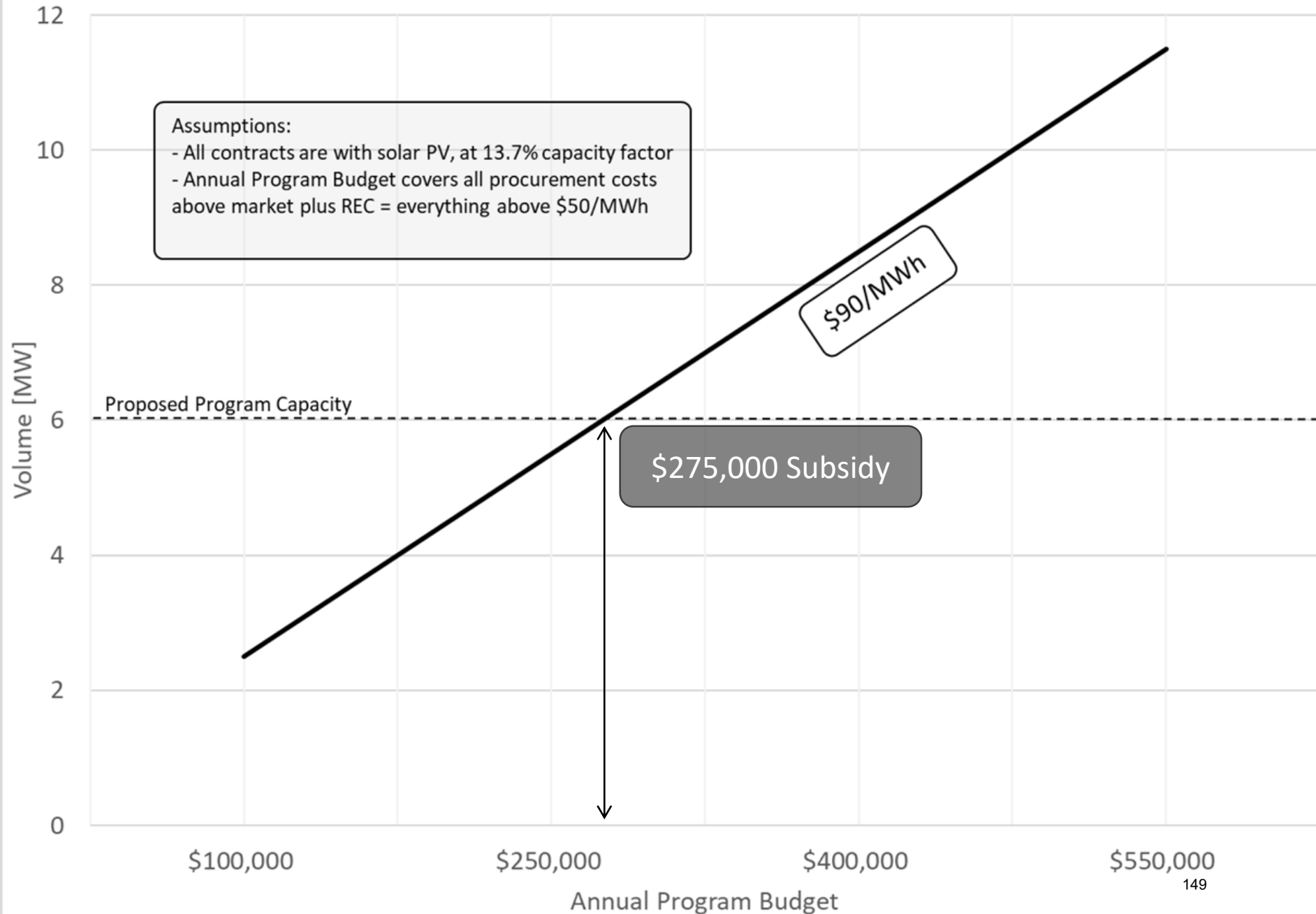
- Land use priorities

Price adders

- Promote other community values
- Examples from other CCA FITs:
  - local business
  - small projects
  - previously disturbed land

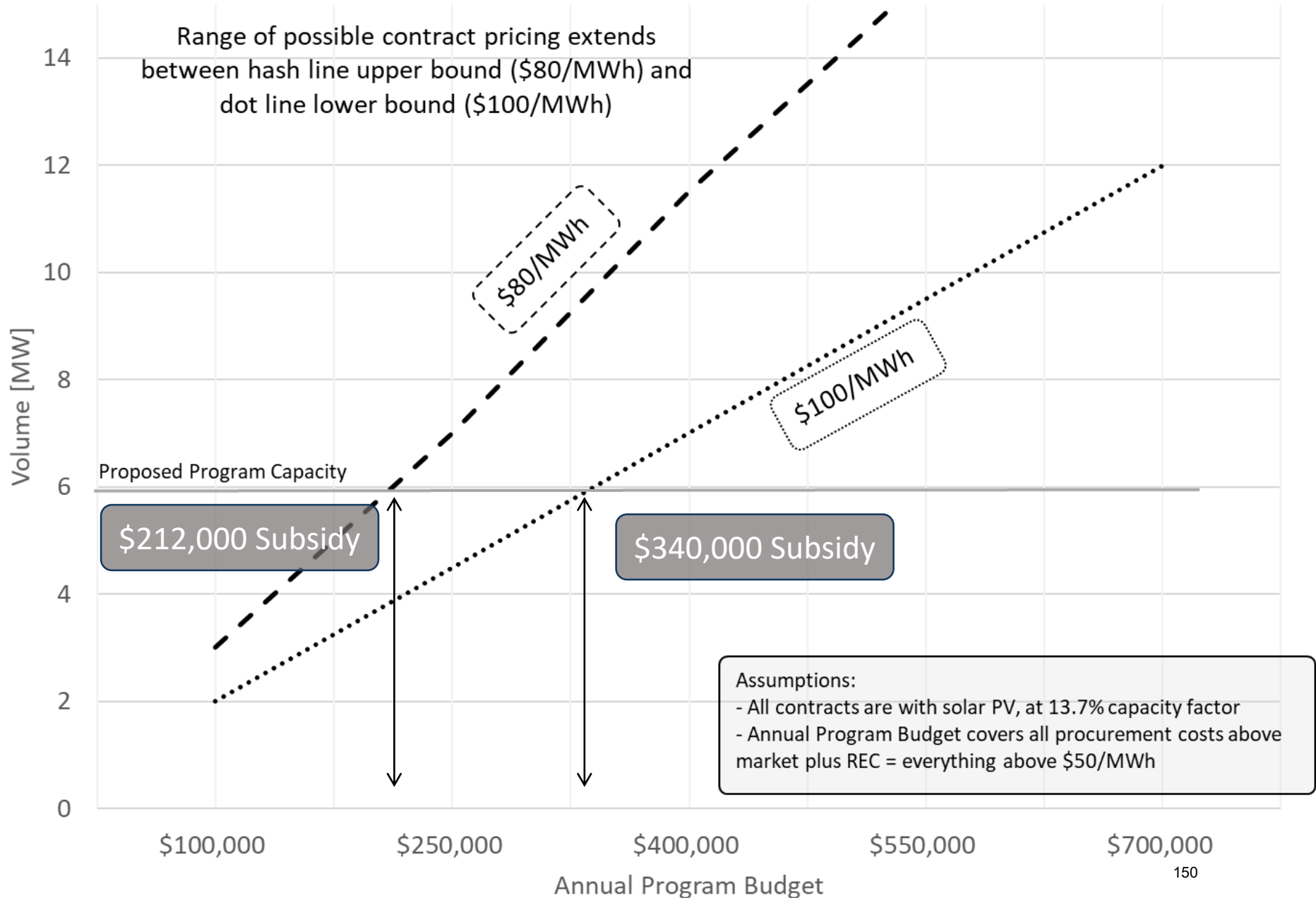


## FIT Contract Value Bounds





# FIT Contract Value Bounds





Thank you  
Questions?



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