



# Redwood Coast Energy Authority

633 3<sup>rd</sup> Street, Eureka, CA 95501

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## **MEETING AGENDA**

**Humboldt Bay Municipal Water District Office  
828 7th St, Eureka, CA 95501**

**May 15, 2017  
Monday, 3:15 p.m.**

RCEA will accommodate those with special needs. Arrangements for people with disabilities who attend RCEA meetings can be made in advance by contacting Barbara Garcia at 269-1700 by noon the day of the meeting.

### **I. ROLL CALL**

### **II. REPORTS FROM MEMBER ENTITIES**

### **III. 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 & 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.

### **IV. 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.

**A. Approve Minutes of April 17, 2017 Board Meeting.**

**B. Approve attached Warrants.**

**C. Accept attached Financial Reports.**

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

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

### **VI. NEW BUSINESS**

**A. Fiscal Year 2016-17 Budget**

Adopt proposed revisions to the FY16-17 RCEA Budget.

**B. Review Fiscal Year 2017-18 Budget initial draft**

Set date for special meeting or establish budget review subcommittee.

**C. Legislative & Regulatory Update**

Consider position on SB100.

### **VII. OLD BUSINESS**

**A. Community Choice Energy Program Updates**

- Timeline, Power Procurement, & Service Launch

**B. Fiscal Audits Update**

### **VIII. STAFF REPORTS**

**A. Executive Director**

**B. Director of Demand Side Management Programs**

### **IX. ADJOURNMENT**



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## **MEETING MINUTES**

Humboldt Bay Municipal Water District Office  
828 7th St, Eureka, CA 95501

April 17, 2017  
Monday, 3:15 p.m.

### **I. ROLL CALL**

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

Present: Michael Winkler, Bobbi Ricca, Austin Allison, Dan Brown, Dean Glaser, Frank Wilson. Estelle Fennell arrived at 3:18 p.m. Dwight Miller arrived at 3:24 p.m.

Absent: None.

### **II. REPORTS FROM MEMBER ENTITIES**

- Board Chair Woo reported that the Humboldt Bay Municipal Water District completed improvements at their hydroelectric plant in order to sell power to PG&E at around \$0.09/kWh.
- Director Winkler reported that the City of Arcata is performing an in-depth analysis on City Hall heating system to determine if replacing it with a heat pump is feasible, as well as considering opting-up into REpower+ service.
- Director Allison reported that the City of Eureka is exploring the idea of an infill incentive and will discuss rewarding energy efficiency upgrades as part of the incentive.
- Director Fennell arrives at 3:18 p.m.

### **III. ORAL COMMUNICATIONS**

None.

### **IV. CONSENT CALENDAR**

- A. Approve Minutes of March 20, 2017 Board Meeting.
- B. Approve attached Warrants.
- C. Accept attached Financial Reports.

**M/S/C: Ricca, Glaser: Approve consent calendar items B and C.**

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

- A. Approve Minutes of March 20, 2017 Board Meeting.

Board Chair Woo would like to commend staff on good minute taking, noting that the minutes capture the feeling of the meetings.

**M/S/C: Fennell, Glaser: Approve consent calendar item A.**

**Abstain: Brown.**

### **VI. NEW BUSINESS**

- A. Amendment No. 1 to Task Order No. 2 with The Energy Authority

Executive Director Marshall explained Congestion Revenue Rights (CRR) and the necessary \$500,000 security deposit that The Energy Authority (TEA) would need to pay

to the California ISO on RCEA's behalf to participate in the CRR market. The CAISO will refund the deposit once RCEA has a tangible net worth of \$1M. Director Fennell asked why this was only coming up now instead of included in TEA's original contract. Executive Director Marshall replied that CRR was a secondary concern to TEA's core services and that the net-worth requirements would be met fairly quickly, but that it would be beneficial for RCEA to not wait to participate in the CRR market. Director Ricca asked if there would be interest charged on the security deposit by TEA. Executive Director Marshall replied no, with confirmation from Jeff Fuller, TEA Client Services. Director Woo asked if RCEA would be able to pay back the deposit by the end of year. Executive Director Marshall affirmed that yes, by the end of 2017 calendar year RCEA should be on track to have more than \$4M in the reserve fund.

Director Miller arrives at 3:24pm.

**M/S/C: Fennell, Glaser, Approve Amendment No. 1 to Task Order No. 2 with The Energy Authority, and authorize the Executive Director to execute the Amendment and any other documents and necessary.**

**B. Legislative Update**

Executive Director Marshall presented an update to current state legislation relevant to RCEA. Senate Bill SB 618 would take away some local control from community choice aggregators, giving authority to the California Public Utilities Commission to review and approve integrated resource plans. Staff recommends opposing this bill. Director Fennell asked if staff had spoken with Senator McGuire about it. Executive Director Marshall replied no; RCEA was waiting for Board direction. Director Fennell asked if the intention would be to mirror the sample letter provided. Executive Director Marshall replied yes, probably just adding RCEA's name to the list of endorsements. Director Miller asked if staff would send the letter to Senator McGuire. Executive Director Marshall affirmed. Director Winkler mentioned that the local building decarbonization group is pushing to include fuel switching in another bill, SB 584, and requested the RCEA Board do the same. The Board wished to focus the conversation on SB 618 and discuss other legislation in a future meeting. RCEA Counsel Nancy Diamond reminded the board that discussion of SB 584 was not part of the noticed agenda.

**M/S/C: Fennell, Allison: Approve opposing SB 618.**

## **VII. OLD BUSINESS**

**A. Community Choice Energy Program Updates (informational-only item)**

Jeff Fuller, TEA Client Services, presented on power procurement processes. Director Fennell asked staff to send a copy of the presentation to the Board. Director Woo asked for public comment.

Community member Sara Turner asked if the same (as PG&E) rate tiers would be available under the CCE program. RCEA staff Richard Engel affirmed that the rate tiers won't change. Ms. Turner asked if there might be unintended consequences of this program. Board Chair Woo noted that RCEA is not the first to launch a CCE. Ms. Turner asked how the program could be cheaper than PG&Es. Board Chair Woo replied that public agencies do not make a profit. Executive Director Marshall replied that energy costs are higher for PG&E due to long-term contracts and overhead, and provided a local example, HSU, that is already buying less expensive power through a direct access contract. Director Wilson asked how much lower rates would be. Executive Director Marshall replied that rates would be, after factoring in PG&E's PCIA exit fees, 2.7% lower

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than PG&E rates and could be updated anytime the Board wishes though the planned schedule is to update RCEA rates every January.

## **VIII. STAFF REPORTS**

### **A. Executive Director**

Executive Director Marshall noted that staff would be sending an email invite to the Board for the CCE launch event. Other program developments include the planned addition of fast-chargers to RCEA's EV charging network, and continued collaboration with the North Coast Resource Partnership on regional planning. RCEA staff are continuing to work on getting caught up on financial audits. RCEA also recently hired someone in the Community Strategies Manager position who will begin with a part-time schedule and transitioning to full-time in July.

## **IX. ADJOURNMENT**

Board Chair Woo adjourned the meeting at 5:09 p.m.

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## Redwood Coast Energy Authority

## Warrants Report

As of May 8, 2017

Type	Date	Num	Name	Memo	Amount
<b>Apr 11 - 30, 17</b>					
Liability Check	04/11/2017	E-pay	EDD	499-0864-3 Q1 SDI/PIT QB Tracking # 445784167	-3,324.51
Liability Check	04/11/2017	E-pay	Internal Revenue Service	74-3104616 Q1 2017 March #2 QB Tracking # 4457	-18,085.70
Liability Check	04/11/2017	E-pay	EDD	499-0864-3 Q1 ETT/UI QB Tracking # 445811727	-298.40
Bill Pmt -Check	04/17/2017	EFT	Staples Charge Account	March Statement	-422.85
Bill Pmt -Check	04/18/2017	EFT	VISA	March Statement 2/22/17 - 3/21/17.	-2,230.86
Paycheck	04/24/2017	PR	Paychecks		-40,327.60
Liability Check	04/25/2017	E-pay	EDD	499-0864-3 April SDI/UI QB Tracking # 458109317	-2,952.58
Liability Check	04/25/2017	E-pay	Internal Revenue Service	74-3104616 Federal Withholding April 2017 QB Trac	-16,430.38
Liability Check	04/25/2017	E-pay	EDD	499-0864-3 ETT/PIT April 2017 QB Tracking # 4581	-102.29
Liability Check	04/25/2017	E-pay	EDD	499-0864-3 SDI/PIT April 2017 QB Tracking # 4581	-257.11
Liability Check	04/25/2017	E-pay	Internal Revenue Service	74-3104616 Federal Withholding April 2017 QB Trac	-1,033.68
Liability Check	04/25/2017	E-pay	EDD	499-0864-3 ETT/UI April 2017 QB Tracking # 45811	-7.24
Bill Pmt -Check	04/25/2017	7315	AM Conservation	LED Stock	-2,497.38
Bill Pmt -Check	04/25/2017	7316	Arcata Technology Center	Site Host Reimbursement 1/1/17 - 3/31/17 007-AR	-187.48
Bill Pmt -Check	04/25/2017	7317	AT&T	April Telephone Service	-896.52
Bill Pmt -Check	04/25/2017	7318	Blue Lake Rancheria	Site Host Reimbursement 1/1/17-3/31/17 003-BLU-	-157.09
Bill Pmt -Check	04/25/2017	7319	City of Arcata	Site Host Reimbursement 1/31/17 - 3/31/17	-472.69
Bill Pmt -Check	04/25/2017	7320	City of Blue Lake	Site Host Reimbursement 1/31/17 - 3/31/17	-29.39
Bill Pmt -Check	04/25/2017	7321	City of Fortuna	Electric Vehicle Signage	-518.00
Bill Pmt -Check	04/25/2017	7322	City of Rio Dell	Electric Vehicle Directional Signage	-1,590.72
Bill Pmt -Check	04/25/2017	7323	City of Trinidad	EV Site Host Reimbursement 1/1/17 - 3/31/17 006-1	-19.07
Bill Pmt -Check	04/25/2017	7324	County of Humboldt-Public Works	Electric Vehicle Signage	-588.00
Bill Pmt -Check	04/25/2017	7325	Darrimon, Jeremy	Refund - efficiency audit	-10.00
Bill Pmt -Check	04/25/2017	7326	FedEx	Return shipping.	-13.63
Bill Pmt -Check	04/25/2017	7327	Fischer, A.	March purchase reimbursements.	-90.10
Bill Pmt -Check	04/25/2017	7328	Greenway Partners	Strategic Planning March 2017	-1,625.00
Bill Pmt -Check	04/25/2017	7329	HSU Fdn EVCN ARV-13-029	Oct & Nov services - ARV13-029 00163/SP30641	-395.62
Bill Pmt -Check	04/25/2017	7330	Humboldt Builders' Exchange	Annual membership fees.	-414.41
Bill Pmt -Check	04/25/2017	7331	North Coast Unified Air Quality	EV Site Host Reimbursement 1/1/17 - 3/31/17	-9.06
Bill Pmt -Check	04/25/2017	7332	PG&E Utility Account	March utilities/lighting upgrade financing	-832.02
Bill Pmt -Check	04/25/2017	7333	Quill	Miscellaneous office supplies	-15.17
Bill Pmt -Check	04/25/2017	7334	Ramone's	Food Service - Homeowners' Workshop 4/19/17	-111.32
Bill Pmt -Check	04/25/2017	7335	Recology	March garbage service	-82.30
Bill Pmt -Check	04/25/2017	7336	SDRMA Medical	May premium.	-16,259.00
Bill Pmt -Check	04/25/2017	7337	Seward, J.	March mileage	-69.18
Bill Pmt -Check	04/25/2017	7338	St. Joseph Hospital	EV Site Host Reimbursement 1/1/17 - 3/31/17 013-E	-509.44
Bill Pmt -Check	04/25/2017	7339	Times-Standard	Legal Notice: Notices Inviting Bids.	-1,404.14
Bill Pmt -Check	04/25/2017	7340	Verizon Wireless	March tablet/cell service for field staff/mobile broadt	-114.75
Bill Pmt -Check	04/25/2017	7341	Winzler, John	Office Lease - May	-4,346.00
Bill Pmt -Check	04/25/2017	7342	City of Arcata	Electric Vehicle Signage	-1,900.00
Bill Pmt -Check	04/25/2017	7343	GHD	Site Host Reimbursement 1/31/17 - 3/31/17	-149.02
Liability Check	04/25/2017	7344	Umpqua Bank	74-3104616 HSA Contribution - April 2017	-558.36
Liability Check	04/25/2017	7345	Calvert	74-3104616 April 2017 IRA Contribution	-7,551.97
Paycheck	04/25/2017	7346	Buschkamp, Andrew	Payroll	-182.74

## Redwood Coast Energy Authority

## Warrants Report

As of May 8, 2017

Type	Date	Num	Name	Memo	Amount
Paycheck	04/25/2017	7347	Jacobson, Lou N.	Payroll	-2,583.20
Liability Check	04/25/2017	7348	Calvert	74-3104616 IRA Contribution April 2017	-338.88
Check	04/25/2017	7349	Redwood Coast Energy Authority	VOID: May Direct Deposit Payroll Advance	0.00
Check	04/25/2017	7349	Redwood Coast Energy Authority	May Direct Deposit Payroll Advance	0.00
Liability Check	04/26/2017	E-pay	Internal Revenue Service	74-3104616 FUTA Q1 2017 QB Tracking # 4591714	-1,010.46
Apr 11 - 30, 17					-133,005.31
<b>May 1 - 8, 17</b>					
Check	05/04/2017	7350	Redwood Coast Energy Authority	May Direct Deposit Payroll Advance	-32,513.75
Check	05/04/2017	7350	Redwood Coast Energy Authority	May Direct Deposit Payroll Advance	32,513.75
May 1 - 8, 17					0.00
<b>TOTAL</b>					<b>-133,005.31</b>

Redwood Coast Energy Authority

Visa

As of April 21, 2017

Type	Date	Num	Name	Memo	Amount	Balance
<b>2006 - VISA-3751</b>						<b>2,252.60</b>
Credit Card Charge	03/25/2017		Uberconference	Conference call subscription	11.06	2,263.66
Credit Card Charge	03/28/2017	7431428	Amazon.com	Quad ruled paper.	10.82	2,274.48
Credit Card Charge	03/28/2017	73525848	Amazon.com	Camera Batteries	17.98	2,292.46
Credit Card Charge	03/31/2017	MC02718217	MailChimp	Monthly plan 501-1000 subscribers.	15.00	2,307.46
Credit Card Charge	04/01/2017		Square	Card Reader Fee	20.00	2,327.46
Credit Card Charge	04/16/2017		U-Verse	May DSL	95.89	2,423.35
Bill	04/18/2017	March	VISA	March Statement 2/22/17 - 3/21/17.	-2,230.86	192.49
Total 2006 - VISA-3751					-2,060.11	192.49
<b>TOTAL</b>					<b>-2,060.11</b>	<b>192.49</b>

10:33 AM  
05/08/17

Redwood Coast Energy Authority  
Account QuickReport

As of April 25, 2017

Type	Date	Num	Name	Memo	Amount	Balance
2008 - CitiBank Travel Account	4/14/17	HWCDKR	TravelStore	Booking Fee: Lou Jacobson		12.00
Total 2008 - CitiBank Travel Account						12.00
TOTAL						12.00



**Redwood Coast Energy Authority**  
**Profit & Loss Budget vs. Actual**  
July 2016 through March 2017

	<u>Jul '16 - Mar 17</u>	<u>Budget</u>	<u>% of Budget</u>
<b>Ordinary Income/Expense</b>			
Income			
5 REVENUE EARNED			
Total 5000 · Revenue - government agencies	183,937.52	357,364.00	51.47%
Total 5100 · Revenue - program related sales	11,264.74	17,500.00	64.37%
5300 · Revenue - investments	0.00	200.00	0.0%
Total 5400 · Revenue-nongovernment agencies	904,508.19	1,553,570.00	58.22%
5 REVENUE EARNED - Other	773.72		
Total 5 REVENUE EARNED	1,100,484.17	1,928,634.00	57.06%
Total Income	1,100,484.17	1,928,634.00	57.06%
Gross Profit	1,100,484.17	1,928,634.00	57.06%
Expense			
7 EXPENSES - PERSONNEL			
7101 · Screening/Testing Services	218.12	600.00	36.35%
7102 · Safety	152.50	1,000.00	15.25%
7103 · Staff Training and Development	3,299.00	15,000.00	21.99%
7200 · Salaries, Wages & Benefits			
7210 · Salaries - staff	631,421.27	905,020.00	69.77%
7220 · Wages - interns	36,804.09	71,061.00	51.79%
7230 · Pension Plan Contributions	18,669.58	29,086.00	64.19%
7240 · Employee Benefits-Insurance	174,669.00	277,943.00	62.84%
7250 · Payroll Taxes Etc.	74,127.73	94,326.00	78.59%
7255 · Worker's Comp Insurance	6,985.75	7,400.00	94.4%
Total 7260 · Paid Time Off	115,295.25	142,331.00	81.01%
7265 · Jury Duty	249.41	500.00	49.88%
Total 7200 · Salaries, Wages & Benefits	1,058,222.08	1,527,667.00	69.27%
Total 7 EXPENSES - PERSONNEL	1,061,891.70	1,544,267.00	68.76%
8 NON-PERSONNEL RELATED EXP			
8100 · Non-Personnel Expenses			
8110 · Office Supplies	3,723.82	6,000.00	62.06%
8111 · Furniture & Equipment	2,270.40	2,800.00	81.09%
Total 8120 · Information Technology	5,917.46	25,000.00	23.67%
Total 8130 · Telephone & Telecommunications	6,863.53	6,500.00	105.59%
8140 · Postage & delivery	2,233.83	1,800.00	124.1%
Total 8170 · Printing & copying	7,461.98	7,500.00	99.49%
Total 8180 · Books, subscriptions, edu matls	775.72	1,000.00	77.57%
8190 · Exhibits & displays	0.00	1,800.00	0.0%
8195 · Tool bank	906.96	4,000.00	22.67%
Total 8100 · Non-Personnel Expenses	30,153.70	56,400.00	53.46%

**Redwood Coast Energy Authority**  
**Profit & Loss Budget vs. Actual**  
July 2016 through March 2017

	<u>Jul '16 - Mar 17</u>	<u>Budget</u>	<u>% of Budget</u>
<b>8200 - Facility Expenses</b>			
8210 - Office Lease	41,000.00	49,200.00	83.33%
Total 8220 - Utilities	9,468.46	11,500.00	82.33%
8230 - Janitorial	4,498.31	6,500.00	69.21%
8240 - Facility repairs & maintenance	2,791.60	3,500.00	79.76%
8250 - EV Station Repairs & Maintenan	2,227.55	5,000.00	44.55%
8200 - Facility Expenses - Other	156.09		
<b>Total 8200 - Facility Expenses</b>	<b>60,142.01</b>	<b>75,700.00</b>	<b>79.45%</b>
<b>Total 8300 - Travel &amp; Meeting Expense</b>	<b>10,515.55</b>	<b>17,000.00</b>	<b>61.86%</b>
<b>Total 8320 - Meetings, workshops &amp; events</b>	<b>5,102.56</b>	<b>12,000.00</b>	<b>42.52%</b>
<b>8500 - Other Expenses</b>			
8513 - Organizational Development	144.56	500.00	28.91%
Total 8510 - Interest Expense	1,106.24		
8520 - Insurance P&L	11,415.86	9,500.00	120.17%
8530 - Dues & Memberships	3,746.00	3,500.00	107.03%
Total 8560 - Website Expenses	90.00	1,000.00	9.0%
Total 8570 - Advertising & Marketing Expense	10,912.36	22,000.00	49.6%
8591 - Use Tax	0.00	300.00	0.0%
8592 - Service Charge	79.52	200.00	39.76%
8593 - Bank Charges	7,604.92	8,000.00	95.06%
8595 - Credit Card Processing Fees	506.94	500.00	101.39%
8596 - Flex Billing Service Fee	359.90	300.00	119.97%
8597 - EV Site Host Pmts	3,937.88	5,000.00	78.76%
<b>Total 8500 - Other Expenses</b>	<b>39,904.18</b>	<b>50,800.00</b>	<b>78.55%</b>
<b>8600 - Capital Development - Facility</b>	<b>2,407.95</b>	<b>1,000.00</b>	<b>240.8%</b>
<b>8700 - Professional Services</b>			
8710 - Contracts - Program Related Ser	113,916.32	261,005.00	43.65%
8720 - Accounting	23,866.80	45,000.00	53.04%
8740 - Legal	72,383.77	105,000.00	68.94%
8760 - Temporary Services	1,980.00		
<b>Total 8700 - Professional Services</b>	<b>212,146.89</b>	<b>411,005.00</b>	<b>51.62%</b>
<b>Total 8 NON-PERSONNEL RELATED EXP</b>	<b>360,372.84</b>	<b>623,905.00</b>	<b>57.76%</b>
<b>Total 9 INCENTIVES &amp; REBATES</b>	<b>140,706.30</b>	<b>460,000.00</b>	<b>30.59%</b>
<b>Total Expense</b>	<b>1,562,970.84</b>	<b>2,628,172.00</b>	<b>59.47%</b>
<b>Net Ordinary Income</b>	<b>-462,486.67</b>	<b>-699,538.00</b>	<b>66.11%</b>
<b>Other Income/Expense</b>			
Total Other Income	0.00	700,000.00	0.0%
Total Other Expense	1,431.36	19,008.00	7.53%
<b>Net Other Income</b>	<b>-1,431.36</b>	<b>680,992.00</b>	<b>-0.21%</b>
<b>Net Income</b>	<b>-463,918.03</b>	<b>-18,546.00</b>	<b>2,501.45%</b>

Redwood Coast Energy Authority

Balance Sheet

As of March 31, 2017

Mar 31, 17

ASSETS

Current Assets

Checking/Savings

1075 - Umpqua Reserve Account 2300	1,000.00
1070 - Umpqua Deposit Cntrl Acct 1687	1,000.00
1062 - Chase DD Checking	87,555.51
1060 - Umpqua Checking-9271	166,258.42
1000 - COUNTY TREASURY 3839	3,911.55
1010 - Petty Cash	108.29
Total 1050 - GRANTS & DONATIONS 3840	<u>15,037.26</u>

Total Checking/Savings 274,871.03

Total Accounts Receivable 230,295.75

Other Current Assets

1101 - Allowance for Doubtful Accounts	-7,260.54
1102 - Paypal Account Balance	19.87
1120 - Inventory Asset	71,592.60
1202 - Prepaid Expenses	28,238.08
1205 - Prepaid Insurance	21,540.26
Total 1210 - Retentions Receivable	50,962.11
1499 - Undeposited Funds	<u>1,186.38</u>

Total Other Current Assets 166,278.76

Total Current Assets 671,445.54

Fixed Assets

1500 - Fixed Asset	93,591.39
1600 - Accumulated depreciation	<u>-37,980.00</u>

Total Fixed Assets 55,611.39

Other Assets

1700 - Retained Deposits	<u>4,100.00</u>
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Total Other Assets 4,100.00

TOTAL ASSETS 731,156.93

Redwood Coast Energy Authority

Balance Sheet

As of March 31, 2017

Mar 31, 17

LIABILITIES & EQUITY

Liabilities

Current Liabilities

Total Accounts Payable 49,137.19

Total Credit Cards 2,561.39

Other Current Liabilities

2001 - Accounts Payable-Other 39,342.60

Total 2100 - Payroll Liabilities 65,698.40

Total 2210 - Retentions Payable 6,920.86

Total Other Current Liabilities 111,961.86

Total Current Liabilities 163,660.44

Long Term Liabilities

Total 2700 - Long-Term Debt 306,520.63

Total Long Term Liabilities 306,520.63

Total Liabilities 470,181.07

Equity

2320 - Investment in Capital Assets 49,090.75

3900 - Fund Balance 675,803.14

Net Income -463,918.03

Total Equity 260,975.86

TOTAL LIABILITIES & EQUITY 731,156.93

# Redwood Coast Energy Authority

## Profit & Loss

March 2017

	<b><u>TOTAL</u></b>
<b>Ordinary Income/Expense</b>	
<b>Income</b>	
<b>5 REVENUE EARNED</b>	
Total 5000 · Revenue - government agencies	33,103.82
Total 5100 · Revenue - program related sales	1,462.07
Total 5400 · Revenue-nongovernment agencies	112,261.40
<b>5 REVENUE EARNED - Other</b>	94.07
<b>Total 5 REVENUE EARNED</b>	<b>146,921.36</b>
<b>Total Income</b>	<b>146,921.36</b>
<b>Gross Profit</b>	<b>146,921.36</b>
<b>Expense</b>	
<b>7 EXPENSES - PERSONNEL</b>	
<b>7200 · Salaries, Wages &amp; Benefits</b>	
7210 · Salaries - staff	101,432.45
7230 · Pension Plan Contributions	2,803.70
7240 · Employee Benefits-Insurance	34,276.86
7250 · Payroll Taxes Etc.	10,217.42
7255 · Worker's Comp Insurance	1,003.63
Total 7260 · Paid Time Off	18,406.73
7265 · Jury Duty	0.00
<b>Total 7200 · Salaries, Wages &amp; Benefits</b>	<b>168,140.79</b>
<b>Total 7 EXPENSES - PERSONNEL</b>	<b>168,140.79</b>
<b>8 NON-PERSONNEL RELATED EXP</b>	
<b>8100 · Non-Personnel Expenses</b>	
8110 · Office Supplies	422.51
Total 8120 · Information Technology	358.64
Total 8130 · Telephone & Telecommunications	2,256.10
8140 · Postage & delivery	513.63
Total 8170 · Printing & copying	1,113.05
8195 · Tool bank	131.78
<b>Total 8100 · Non-Personnel Expenses</b>	<b>4,795.71</b>
<b>8200 · Facility Expenses</b>	
8210 · Office Lease	4,100.00
Total 8220 · Utilities	1,294.77
8230 · Janitorial	867.04
8240 · Facility repairs & maintenance	287.52
8200 · Facility Expenses - Other	156.09
<b>Total 8200 · Facility Expenses</b>	<b>6,705.42</b>
<b>Total 8300 · Travel &amp; Meeting Expense</b>	<b>847.60</b>
<b>Total 8320 · Meetings, workshops &amp; events</b>	<b>1,083.79</b>

Redwood Coast Energy Authority

Profit & Loss

March 2017

	<u>TOTAL</u>
8500 · Other Expenses	
8510 · Interest Expense	1,208.33
Total 8570 · Advertising & Marketing Expense	2,284.03
8595 · Credit Card Processing Fees	45.00
8597 · EV Site Host Pmts	1,533.24
Total 8500 · Other Expenses	<u>5,070.60</u>
8700 · Professional Services	
8710 · Contracts - Program Related Ser	150.00
8740 · Legal	563.50
Total 8700 · Professional Services	<u>713.50</u>
Total 8 NON-PERSONNEL RELATED EXP	19,216.62
Total 9 INCENTIVES & REBATES	<u>5,851.84</u>
Total Expense	<u>193,209.25</u>
Net Ordinary Income	-46,287.89
Other Income/Expense	
Other Expense	
9800 · Repayment of Debt	159.04
Total Other Expense	<u>159.04</u>
Net Other Income	<u>-159.04</u>
Net Income	<u><u>-46,446.93</u></u>



# REDWOOD COAST Energy Authority

## STAFF REPORT

AGENDA DATE:	May 15, 2017
TO:	Board of Directors
PREPARED BY:	Lori Biondini, Director of Business Development and Planning
SUBJECT:	Mid-Year Budget Adjustment

### SUMMARY

Attached are proposed revisions to the FY16-17 budget. These proposed revisions primarily related to incorporating the Community Choice Energy Program budget into the core RCEA operating budget. Key notable revisions include:

#### 5000 – Revenue – government agencies

This line item represents grants from the California Energy Commission and our contracts with Local Educational Agencies to perform energy upgrades under the state's Proposition 39 funding program. Staff did not spend the originally projected amount of time on our grant-funded Fuel Cell Electric Vehicle project this year. With the transportation program lead (Operations Director) out on medical leave, remaining staff were focused on wrapping up the Electric Vehicle Readiness Plan Implementation and the EV Charging Network projects, both scheduled to be completed by July 2017. The Fuel Cell EV project is still on track to be wrapped by the end of next fiscal year, and remaining funds will be expended in FY17-18. **Propose decreasing budget from \$357,364 to \$310,000.**

#### 5500 – Revenue – energy sales

This item includes retail electricity sales revenues in May and June, minus projected uncollectable accounts. **Propose increasing budget from \$0 to \$5,531,300.**

#### 6000 – Expenses – energy costs

This item includes all the associated costs of purchasing wholesale energy. **Propose increasing budget from \$0 to \$3,356,000.**

#### 8600 – Capital Development – Facility

A basic security system is being installed at the RCEA office at 633 3<sup>rd</sup> Street. It will include two entry key-pads to arm and disarm the system; window-break sensors, and motion sensors. Staff received two quotes from local companies and the lowest estimate is \$3,837.41, with a \$40 monthly monitoring fee. **Propose increasing budget from \$1,000 to \$5,000.**

## 8710 – Contracts – Program Related Services

This proposed budget increase captures the projected final CCA phase 1 and 2 start-up consultant services along with May and June CCA operational expenses, including:

LEAN service during Phases 1 & 2 and May-June:	\$294,000
TEA service during Phases 1 & 2:	\$254,762
CalCCA - PCIA regulatory engagement support:	\$6,250
TEA Phase 3 – Services and credit support for May & June:	\$178,411
Calpine Services during May and June:	\$171,254
<b>TOTAL:</b>	<b>\$904,667</b>

**Propose increasing budget from \$261,005 to \$1,165,700.**

To accommodate the launch of the CCE program in May, the following new budget line items were added:

### 9500 – Debt proceeds

This budget item represented the \$700,000 resulting from drawing down the Headwaters Fund line of credit; the Director of Finance and HR proposes moving the loan to the balance sheet to capture it as positive cash flow into checking as well as being captured as a liability. Repayment of principal on the loan will also just be recorded on the balance sheet, whereas interest paid on the loan will continue to appear in the budget. This is a more accurate way of capturing actual budget outcomes for the year rather than showing the loan draw-down as debt-proceeds income followed by loan principal payments as expenses.

**Propose decreasing budget from \$700,000 to \$0.**

## **RECOMMENDED ACTION:**

Adopt proposed revisions to the FY16-17 RCEA Budget.



**Redwood Coast Energy Authority**  
**Proposed Revisions to FY16-17 Annual Budget**  
 May 15, 2017

	<b>Jul 1, '16 - May 10, 17</b>	<b>Budget</b>	<b>Feb 23 Adjustment</b>	<b>May 15 Adjustment</b>
Ordinary Income/Expense				
Income				
5 REVENUE EARNED				
Total 5000 · Revenue - government agencies	184,416	357,364	357,364	310,000
Total 5100 · Revenue - program related sales	12,850	17,500	17,500	17,500
5300 · Revenue - investments	-	200	200	200
Total 5400 · Revenue-nongovernment agencies	1,008,035	1,553,570	1,553,570	1,553,570
Total 5500 - Energy Sales Revenue				5,531,300
5 REVENUE EARNED - Other	774	-	-	-
Total 5 REVENUE EARNED	1,206,074	1,928,634	1,928,634	7,412,570
Total Income	1,206,074	1,928,634	1,928,634	7,412,570
Gross Profit	1,206,074	1,928,634	1,928,634	7,412,570
Expense				
Total 6000 - ENERGY COSTS				3,356,000
7 EXPENSES - PERSONNEL				
7101 · Screening/Testing Services	218	600	600	600
7102 · Safety	153	1,000	1,000	1,000
7103 · Staff Training and Development	4,224	15,000	15,000	15,000
7200 · Salaries, Wages & Benefits				
7210 · Salaries - staff	788,838	905,020	905,020	905,020
7220 · Wages - interns	36,804	71,061	71,061	71,061
7230 · Pension Plan Contributions	22,828	29,086	29,086	29,086
7240 · Employee Benefits-Insurance	194,979	277,943	277,943	277,943
7250 · Payroll Taxes Etc.	89,013	94,326	94,326	94,326
7255 · Worker's Comp Insurance	8,491	7,400	7,400	7,400
Total 7260 · Paid Time Off	141,548	142,331	142,331	142,331
7265 · Jury Duty	249	500	500	500
Total 7200 · Salaries, Wages & Benefits	1,282,749	1,527,667	1,527,667	1,527,667
Total 7 EXPENSES - PERSONNEL	1,287,343	1,544,267	1,544,267	1,544,267
8 NON-PERSONNEL RELATED EXP				
8100 · Non-Personnel Expenses				
8110 · Office Supplies	3,726	6,000	6,000	6,000
8111 · Furniture & Equipment	2,270	2,800	2,800	2,800
Total 8120 · Information Technology	21,407	55,000	25,000	25,000
Total 8130 · Telephone & Telecommunications	6,970	6,500	6,500	6,500
8140 · Postage & delivery	2,207	1,800	1,800	1,800
Total 8170 · Printing & copying	7,462	7,500	7,500	7,500
Total 8180 · Books, subscriptions, edu matls	776	1,000	1,000	1,000
8190 · Exhibits & displays	-	1,800	1,800	1,800
8195 · Tool bank	907	4,000	4,000	4,000
8100 · Non-Personnel Expenses - Other	(2,173)	-	-	-
Total 8100 · Non-Personnel Expenses	43,554	86,400	56,400	56,400

**Redwood Coast Energy Authority**  
**Proposed Revisions to FY16-17 Annual Budget**  
May 15, 2017

	<b>Jul 1, '16 - May 10, 17</b>	<b>Budget</b>	<b>Feb 23 Adjustment</b>	<b>May 15 Adjustment</b>
<b>8200 - Facility Expenses</b>				
8210 - Office Lease	45,346	49,200	49,200	49,200
Total 8220 - Utilities	10,257	11,500	11,500	11,500
8230 - Janitorial	5,034	6,500	6,500	6,500
8240 - Facility repairs & maintenance	2,792	3,500	3,500	3,500
8250 - EV Station Repairs & Maintenance	6,824	5,000	5,000	5,000
8200 - Facility Expenses - Other	156	-	-	-
<b>Total 8200 - Facility Expenses</b>	<b>70,410</b>	<b>75,700</b>	<b>75,700</b>	<b>75,700</b>
<b>Total 8300 - Travel &amp; Meeting Expense</b>	<b>11,613</b>	<b>17,000</b>	<b>17,000</b>	<b>17,000</b>
<b>Total 8320 - Meetings, workshops &amp; events</b>	<b>5,207</b>	<b>12,000</b>	<b>12,000</b>	<b>12,000</b>
<b>8500 - Other Expenses</b>				
8513 - Organizational Development	145	500	500	500
<b>Total 8510 - Interest Expense</b>	<b>2,356</b>	<b>-</b>	<b>-</b>	<b>6,500</b>
8520 - Insurance P&L	11,416	9,500	9,500	9,500
8530 - Dues & Memberships	4,136	3,500	3,500	3,500
Total 8560 - Website Expenses	90	1,000	1,000	1,000
Total 8570 - Advertising & Marketing Expense	12,750	22,000	22,000	22,000
8591 - Use Tax	-	300	300	300
8592 - Service Charge	80	200	200	200
8593 - Bank Charges	7,605	200	8,000	8,000
8595 - Credit Card Processing Fees	547	500	500	500
8596 - Flex Billing Service Fee	360	300	300	300
8597 - EV Site Host Pmts	3,938	5,000	5,000	5,000
<b>Total 8500 - Other Expenses</b>	<b>43,422</b>	<b>43,000</b>	<b>50,800</b>	<b>57,300</b>
<b>8600 - Capital Development - Facility</b>	<b>2,408</b>	<b>1,000</b>	<b>1,000</b>	<b>5,000</b>
<b>8700 - Professional Services</b>				
<b>8710 - Contracts - Program Related Ser</b>	<b>142,307</b>	<b>261,005</b>	<b>261,005</b>	<b>1,165,700</b>
8720 - Accounting	23,867	45,000	45,000	45,000
8740 - Legal	78,533	48,000	105,000	105,000
<b>8760 - Temporary Services</b>	<b>1,980</b>	<b>-</b>	<b>-</b>	<b>2,000</b>
<b>Total 8700 - Professional Services</b>	<b>246,688</b>	<b>354,005</b>	<b>411,005</b>	<b>1,317,700</b>
<b>Total 8 NON-PERSONNEL RELATED EXP</b>	<b>423,301</b>	<b>589,105</b>	<b>623,905</b>	<b>1,541,100</b>
<b>Total 9 INCENTIVES &amp; REBATES</b>	<b>160,278</b>	<b>460,000</b>	<b>460,000</b>	<b>460,000</b>
<b>Total Expense</b>	<b>1,870,922</b>	<b>2,593,372</b>	<b>2,628,172</b>	<b>6,901,367</b>
<b>Net Ordinary Income</b>	<b>(664,848)</b>	<b>(664,738)</b>	<b>(699,538)</b>	<b>511,203</b>
<b>Other Income/Expense</b>				
<b>Other Income</b>				
<b>9500 - Debt proceeds</b>	<b>-</b>	<b>700,000</b>	<b>700,000</b>	<b>-</b>
<b>Total Other Income</b>	<b>-</b>	<b>700,000</b>	<b>700,000</b>	<b>-</b>
<b>Total Other Expense</b>	<b>1,590</b>	<b>19,008</b>	<b>19,008</b>	<b>19,008</b>
<b>Net Other Income</b>	<b>(1,590)</b>	<b>680,992</b>	<b>680,992</b>	<b>(19,008)</b>
<b>Net Income</b>	<b>(666,438)</b>	<b>16,254</b>	<b>(18,546)</b>	<b>492,195</b>



# REDWOOD COAST Energy Authority

## STAFF REPORT

AGENDA DATE:	May 15, 2017
TO:	Board of Directors
PREPARED BY:	Matthew Marshall, Executive Director
SUBJECT:	Draft/Preliminary 2017-18 Budget

### SUMMARY

Attached is a preliminary working draft of the 2017-18 RCEA Annual Budget; during the Board Meeting staff will provide a presentation on additional details of the components of the budget, including staffing updates, ongoing programs, and specific components of the Community Choice Energy Program budget.

The budget numbers provided are preliminary and are expected to be refined and updated for adoption in June; most significantly, staff is continuing to work with TEA to update the financial forecasts for the CCE program. Electricity retail sales and the associated wholesale power procurement costs are dependent on customer participation numbers and power procurement prices, so these numbers in particular are subject to revision and will also be key items that we will track and update closely on an ongoing basis.

While the attached draft budget numbers are subject to additional revision, they do convey the overall scope and scale of budget areas and programs in 2017-18. Some items of note:

- Going forward the CCE program will be by far RCEA's largest program, with annual electricity sales projected to be over \$40 million per year and with wholesale power costs making up the majority of expenses.
- Ongoing program budgets are fairly consistent with 2017-18, with RCEA's PG&E Energy Watch Partnership continuing as the dominant program outside of CCE.
- RCEA tracks general and administrative costs and allocates those costs across programs based according to the share of program-focused labor.
- These preliminary numbers suggest that net income will be sufficient for RCEA to achieve the year-one CCE reserve requirement of \$6 million. However it does not currently appear that there will be adequate additional revenue to allocate CCE funding toward programs in the start-up year.

### RECOMMENDED ACTION:

The Board may wish to schedule a special meeting for a budget study session prior to the June meeting and/or may wish to establish a budget-review subcommittee.

**Redwood Coast Energy Authority**  
**Draft/Preliminary Budget**  
For the 2017-18 Fiscal Year

	Community Choice Energy	Energy Watch & Other Demand Side Management	Electric & Hydrogen Transportation	General & Adminstrative (allocated across programs)	Total
<b>Ordinary Income/Expense</b>					
Income					
5 REVENUE EARNED					
Total 5000 - Revenue - government agencies	-	120,000	148,835	-	268,835
Total 5100 - Revenue - program related sales	-	11,000	5,000	-	16,000
Total 5400 - Revenue-nongovernment agencies	-	1,570,364	-	-	1,570,364
Total 5500 - Energy Sales Revenue	43,264,563	-	-	-	43,264,563
Total 5 REVENUE EARNED	43,264,563	1,701,364	153,835	-	45,119,762
Total Income	43,264,563	1,701,364	153,835	-	45,119,762
Gross Revenue	43,264,563	1,701,364	153,835	-	45,119,762
Expense					
TOTAL 6 POWER LOAD AND SUPPLY COSTS	32,420,905	-	-	-	32,420,905
Total 7 EXPENSES - PERSONNEL	1,176,957	827,873	67,029	493,783	2,565,642
8 NON-PERSONNEL RELATED EXP					
Total 8100 - Non-Personnel Expenses	32,400	36,000	408	78,000	146,808
Total 8200 - Facility Expenses	-	-	8,000	74,968	87,968
Total 8300 - Travel & Meeting Expense	27,720	15,800	3,097	2,000	48,617
Total 8320 - Meetings, workshops & events	14,000	7,500	525	3,000	25,025
Total 8500 - Other Expenses	245,200	22,500	3,116	36,800	307,616
Total 8700 - Professional Services	2,617,677	111,500	45,529	65,000	2,839,706
Total 8 NON-PERSONNEL RELATED EXP	2,936,997	193,300	60,675	264,768	3,455,740
Total 9 INCENTIVES & REBATES	-	460,000	-	-	460,000
Total Expense	36,534,859	1,481,173	127,704	758,551	38,902,287
Net Ordinary Income	6,729,704	220,191	26,131	(758,551)	6,217,475
Net Other Income	-	-	-	(19,008)	(19,008)
Net Income	6,729,704	220,191	26,131	(777,559)	6,198,467



## STAFF REPORT

AGENDA DATE:	May 15, 2017
TO:	Board of Directors
PREPARED BY:	Allison Campbell, Manager of Power Resources
SUBJECT:	Regulatory and Legislative Affairs Informational Update

### Regulatory Informational Update – PCIA/PAM

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The PCIA (Power Charge Indifference Adjustment) is an exit fee levied against CCA customers by investor-owned utilities to cover the above-market costs of power contracts previously entered into by the utility on behalf of CCA customers. Over the past several months, a PCIA Working Group has collaborated to address the PCIA methodology, including transparency and data access, capacity benchmark, and PCIA volatility. Stakeholders in the PCIA Working Group included representatives from the California Public Utilities Commission, all California CCAs, all California Investor Owned Utilities (IOUs), and other interested parties to discuss transparency, certainty, and access to data used in the calculation of the PCIA. The goal of the PCIA Working Group was to jointly file recommended changes to the PCIA methodology with the Commission as a Petition<sup>1</sup> (filing date April 6).

In the Working Group meetings, the IOUs presented their proposed pro-rata allocation alternative to the PCIA, the Portfolio Allocation Methodology (PAM). Non-IOU entities discussed their consensus for items in their Petition for Modification of the PCIA. These items include: (1) Uniform documentation of PCIA calculation methodology, (2) Uniform interpretation of confidentiality in the PCIA, and (3) Host location (CPUC website) and format of PCIA data.

On April 5, Joint IOUs and CCA Parties filed a Petition for Modification of the PCIA proceeding to direct the IOUs to include a common PCIA calculation methodology in their planning processes. On April 25, the IOUs filed a Joint Application<sup>1</sup> with Testimony for approval of the IOU's PAM, with the reasoning that the Working Group failed to reach consensus. The IOUs contend that the current PCIA methodology is not "indifferent" to their bundled customers, but rather disadvantageous. Responses to the Portfolio Allocation Methodology proposal are due May 30, and IOUs are allowed 10 business days to provide responses.

In light of the above activities, over the course of 2017 and 2018 it is expected that there will be revisions to the PCIA methodology and/or alternative methodologies will be established. The PCIA is one of the key variable that RCEA has to manage around and any changes to the PCIA process could have significant impacts on RCEA's CCA program. Consequently staff will be actively engaging in the PCIA reform process through CalCCA to ensure the interests of RCEA and its customers are represented.

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<sup>1</sup> In the PCIA Working Group, all stakeholders held a joint understanding that IOUs would file their recommendations as a Petition, not an Application. A Petition will allow the CPUC, not the IOUs, to set the framework for discussion.

## **Legislative Informational Update – SB 100, De León (formerly SB 584)**

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SB 584 has been renamed to SB 100. “This bill establishes a target of generating 100 percent of the state’s retail sales of electricity from renewable energy resources by 2045, accelerates and expands the existing Renewable Portfolio Standard, and requires state agencies to incorporate into existing climate programs the planning goal and regulatory requirement of achieving 100-percent reliance on renewable energy resources or zero-carbon resources by the end of 2045.”<sup>2</sup>

“Existing law:

1. Requires LSEs to purchase 50 percent renewable energy resources by Dec 31, 2030 (Renewable Portfolio Standard).”  
(see SB 100 for analysis on items 2 – 7)

“This bill:

1. Directs the CPUC, CEC and ARB to incorporate the “planning goal and regulatory requirement” of achieving 100 percent reliance of renewable energy resources or “zero-carbon” electric generating facilities to supply all electricity procured to serve California customers by the end of 2045.
2. Accelerates and expands existing targets, according to which the Legislature intends the CPUC and CEC implement the RPS, as follows:
  - a. Accelerate by four years, to 2026, the existing target of generating 50 percent of retail electricity sales from eligible renewable resources by 2030.
  - b. Establishes two new targets—60 percent by 2030 and 100 percent by 2045.
3. Revises RPS compliance periods and mandatory procurement amounts, as follows:
  - a. 45 percent by 2023.
  - b. 50 percent by 2026.”

CalCCA is in the process of drafting a letter to help clarify for Senator De León the progressive and adaptive role that CCAs play on the path to 100 percent renewable power. CalCCA’s legal counsel recommends supporting this legislation with pending amendments.

## **Attachments**

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Senate Committee on Energy, Utilities and Communications SB 100 Analysis

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<sup>2</sup> See SB 100 Analysis (attached) for reference text.

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**SENATE COMMITTEE ON ENERGY, UTILITIES AND  
COMMUNICATIONS**  
**Senator Ben Hueso, Chair**  
**2017 - 2018 Regular**

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**Bill No:** SB 100 **Hearing Date:** 5/9/2017  
**Author:** De León  
**Version:** 5/1/2017 As Amended  
**Urgency:** No **Fiscal:** Yes  
**Consultant:** Jay Dickenson, Nidia Bautista

**SUBJECT:** Energy policies and programs: California Renewables Portfolio Standard Program: biomethane procurement: reducing emissions of greenhouse gases: renewable gas fueled vehicles

**DIGEST:** This bill establishes a target of generating 100 percent of the state's retail sales of electricity from renewable energy resources by 2045, accelerates and expands the existing Renewable Portfolio Standard, and requires state agencies to incorporate into existing climate programs the planning goal and regulatory requirement of achieving 100-percent reliance on renewable energy resources or zero-carbon resources by the end of 2045.

**ANALYSIS:**

Existing law:

- 1) Requires retail sellers of electricity – investor-owned utilities (IOUs), community choice aggregators (CCAs), and energy service providers (ESPs) – and publicly-owned utilities (POU) to increase purchases of renewable energy such that at least 50 percent of retail sales are procured from renewable energy resources by December 31, 2030. This is known as the Renewable Portfolio Standard (RPS). (Public Utilities Code §399.11 et seq.)
- 2) Defines a “renewable electrical generation facility” as one that, among other requirements, uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and any additions or enhancements to the facility using that technology. (Public Resources Code §25741)
- 3) Requires the California Energy Commission (CEC), in consultation with the California Public Utilities Commission (CPUC) and the Air Resources Board (ARB), to develop recommendations for the development and use of renewable gas, including biomethane and biogas. (Health and Safety Code §39730.8)

- 4) Requires the CEC to hold public hearings to identify impediments that limit procurement of biomethane in California, including, but not limited to, impediments to interconnection, and to offer solutions. (Public Resources Code §25326.)
- 5) Requires CPUC to adopt policies and programs that promote the in-state production and distribution of biomethane. (Public Utilities Code §399.24)
- 6) Requires the CPUC to adopt standards that specify the concentrations of constituents of concern that are found in biomethane, and to adopt monitoring, testing, reporting, and recordkeeping protocols, to ensure the protection of human health and the integrity and safety of pipelines and pipeline facilities. (Health & Safety Code §25421 et seq.)
- 7) Defines “biomass conversion” to mean the production of heat, fuels, or electricity by the controlled combustion of, or the use of other noncombustion thermal conversion technologies on, the specified materials, when separated from other solid waste. (Public Resources Code §40106)

This bill:

- 1) Directs the CPUC, CEC and ARB to incorporate the “planning goal and regulatory requirement” of achieving 100 percent reliance on renewable energy resources or “zero-carbon” electric generating facilities to supply all electricity procured to serve California customers by the end of 2045.
- 2) Accelerates and expands existing targets, according to which the Legislature intends the CPUC and CEC implement the RPS, as follows:
  - a) Accelerate by four years, to 2026, the existing target of generating 50 percent of retail electricity sales from eligible renewable resources by 2030.
  - b) Establishes two new targets—60 percent by 2030 and 100 percent by 2045.
- 3) Revises RPS compliance periods and mandatory procurement amounts, as follows:
  - a) 45 percent by 2023.
  - b) 50 percent by 2026.



- c) 60 percent by 2030 and thereafter.
- 4) Authorizes the CPUC to establish a requirement that gas sellers procure a minimum percentage of biomethane or renewable gas, to be delivered via the pipeline system. Defines “renewable gas” to mean biogas, biomethane, or any gas that is produced by a process using electricity from an eligible renewable energy resource, including the renewable fraction of grid electricity, or produced directly using solar energy.
- 5) Requires the CPUC, in consultation with ARB and CEC, to direct gas corporations to file applications with the CPUC to implement programs to facilitate fueling with “renewable gas” to replace diesel-fueled heavy-duty trucks with “near-zero-emission vehicles,” which this bill defines as those with emissions of oxides of nitrogen no great than an amount yet to be determined. Limits fueling to vehicle types where zero-emission vehicles are “not available.”

## Background

***To One Hundred.*** Since early in the century, state law has required electric utilities to procure increasing amounts of electricity generated by renewable resources, a requirement known as the RPS. In 2015, the author of this bill introduced SB 350, which, now law, requires each of California’s electric utilities to procure at least 50 percent of its electricity from renewable resources.

Statute lists numerous goals of the RPS program, each of which, according to statute, independently justifies the program. Among those goals is meeting the state’s climate change goals by reducing emissions of greenhouse gases (GHGs) associated with electrical generation, meeting the state’s need for a diversified and balanced energy generation portfolio, displacing fossil fuel consumption within the state, and reducing air pollution, particularly criteria pollutant emissions and toxic air contaminants, in the state.

The state is well on its way to achieving its existing RPS targets. As shown in the table below, the state’s largest electric utilities generally have met current procurement goals and anticipate exceeding future procurement goals:

### Progress towards Meeting RPS Procurement Mandates

*Existing statute requires each electric utility to procure 50 percent of electricity from eligible renewable energy resources by 2030, with interim goals of 25 percent by 2016 and 33 percent by 2020.*

	2015	2020
Pacific Gas and Electric <sup>1)</sup>	29.5%	43.0%
Southern California Edison <sup>1)</sup>	24.3 %	41.4%
San Diego Gas and Electric <sup>1)</sup>	35.2%	45.2%
Los Angeles Department of Water and Power <sup>2)</sup>	21.0%	34.0%
Sacramento Municipal Utilities District <sup>2)</sup>	22.0%	39.0%

1) Source: CPUC ([http://www.cpuc.ca.gov/RPS\\_Homepage/](http://www.cpuc.ca.gov/RPS_Homepage/)).  
 2) Source: California Municipal Utilities Association.

This bill modifies the RPS program in several ways. First, it asserts new aspirational renewable procurement targets—60 percent by 2030 and 100 percent by 2045—according to which the CEC and CPUC are to implement the RPS program. Second, this bill accelerates existing compliance periods according to which electric utilities must procure certain quantities of electricity from renewable resources. Finally, this bill increases, from 50 percent to 60 percent, the quantity of renewable energy electric utilities must procure by 2030 and thereafter. The table below depicts these changes:

### SB 100 Accelerates and Expands RPS Program Aspirations and Mandatory Procurement Amounts

Existing Aspirational RPS Targets <sup>1)</sup>	SB 100 Aspirational RPS Targets	Existing RPS Compliance Dates and Minimum Mandatory Renewable Procurement Quantities <sup>2)</sup>	SB 100 Compliance Dates and Minimum Mandatory Renewable Procurement Quantities
20% by 2013		20% by 2013	
33% by 2030		25% by 2016	
50% by 2030	50% by 2026	33% by 2020	
--	60% by 2030	40% by 2024	45% by 2023
--	100% by 2045	45% by 2027	50% by 2026
		50% by 2030	60% by 2030

1) Public Utilities Code §399.11.  
 2) Public Utilities Code §399.15 and §399.30.

As shown above, SB 100 aspires to 100 percent renewable energy; however, it does not mandate achievement of that goal. Rather, elsewhere, the bill directs state agencies—ARB, CEC and CPUC—to incorporate into all their energy and climate programs the “planning goal and regulatory requirement” of achieving 100 percent reliance on eligible renewable energy resources or zero-carbon electric generating facilities to supply all California’s energy. This presents two issues.

First, as described above, this bill establishes the aspirational goal of the state receiving 100 percent of its electricity from renewable resources by 2045. However, this bill does not require achievement of this aspirational goal. Yet, the bill describes achieving 100-percent reliance on eligible renewable energy resources as a “planning goal and regulatory requirement.” *For accuracy, the author and committee may wish to amend this bill to remove reference to “100 percent reliance” as a regulatory requirement, as follows:*

**SEC. 7.**

*Section 454.53 is added to the Public Utilities Code, to read:*

**454.53.**

*(a) For all energy and climate programs subject to their jurisdiction, the commission, the Energy Commission, and the State Air Resources Board shall incorporate the planning goal and regulatory requirement of ~~achieving 100 percent~~ reliance on eligible renewable energy resources ~~or~~ and zero-carbon electric generating facilities to supply all electricity procured to serve California end-use customers no later than December 31, 2045.*

Second, this bill does not define “zero-carbon electric generating facilities,” so it is impossible to say for certain which generating facilities match the description. However, it seems likely the allowance of zero-carbon electric generating facilities is meant to accommodate, at least, large hydroelectric facilities, which do not qualify as renewable energy resources under the state’s RPS.

It seems wise to accommodate large hydro within the state’s clean energy goals. Achievement and progress towards RPS goals have come at a cost. The CPUC’s Energy Division estimates that the RPS has increased electricity rates by four to five percent, a range well within that contemplated by the Legislature during its deliberation of SB 2 X1.<sup>1</sup> And integration of large quantities of intermittent energy resources, such as solar and wind power, continue to challenge management of the energy system. This bill does not create those problems, and, despite the acceleration of RPS compliance mandates, the bill does not change the near-term

<sup>1</sup> See, for example, the Assembly Appropriations Committee analysis of SB 2 X1, which referenced a CPUC estimate that the 33 percent RPS might raise rates as much as 7.7 percent.

status quo. This is because, as described above, the electric utilities that represent more than 80 percent of the state's electricity customers are likely to meet or exceed the nearer-term mandates of the existing RPS and of SB 100.

Future costs to comply with the accelerated and expanded RPS are harder to predict. It may be that future price decreases and management adjustments make achievement of a 60 percent RPS by 2030 relatively low cost. However, a 100 percent RPS would likely exacerbate cost increases and integration challenges, possibly in the extreme. Allowing large hydroelectric facilities, their environmental harms notwithstanding, to meet a substantial portion of the state's demand for electricity will likely dampen costs and dilute the challenges of integration.

Nonetheless, it is unclear that large hydroelectric facilities are the only types of generation facilities that could qualify as “zero-carbon” resources. For example, the Sierra Club expressed concern that nuclear generation may qualify, though existing law would make it extremely difficult to site a new nuclear powerplant in California. *To avoid such confusion, that author may wish to amend this bill to state that a nuclear generating facility is not a “zero-carbon electric generating facility” for purposes of this section.*

Whatever zero-carbon electric generating facilities are meant to be, this bill makes clear they are not to be newly built. This bill emphasizes the need for new zero-carbon resources that displace fossil fuel use. More to the point, this bill explicitly directs the implementing agencies to exclude from the planning goal generation from existing zero-carbon resources not serving California customers as of January 1, 2018. Some have expressed concern this exclusion might prohibit existing renewable electricity generating resources with contracts that expire after January 1, 2018, from helping to meet the goal and regulatory requirement. This concern seems unfounded: such resources might not qualify as zero-carbon resources; however, they would nonetheless potentially qualify as RPS-eligible renewable resources.

***And Beyond.*** This bill includes a number of other components. These components are not integral to creation or achievement of more ambitious RPS goals and requirements. However, the components support achievement of many of the goals of the RPS program, including displacing fossil fuel consumption within the state, and reducing air pollution, particularly criteria pollutant emissions and toxic air contaminants, in the state. Those components are:

- Authorizes CPUC to require gas sellers to procure minimum percentages of biomethane or renewable gas, and directs the CPUC to require gas

corporations to deliver the biomethane or renewable gas from the producers to the pipeline system.

- Directs the CPUC to require gas corporations to file applications with the CPUC to implement programs to facilitate fueling to replace diesel-fueled heavy-duty trucks with “near-zero emission vehicles.”

In service of the biomethane/renewable gas standard, this bill revises the existing definitions of several key terms and provides new definitions of other key terms. Among the revisions, this bill recasts statutory definitions of “biogas” and “biomethane” so that the former includes the “noncombustion thermal conversion of eligible feedstock” and so that the latter means methane derived from the former.

In revising these definitions, this bill decouples the terms from the standards adopted by CPUC for biomethane to be injected into a common carrier pipeline. Some have expressed concern that the decoupling in this bill could affect the CPUC’s authority to adopt or enforce its standards for pipeline biomethane. Such concern is unfounded: the bill does not change Health and Safety Code §25421, from which the CPUC draws its authority to adopt biomethane pipeline standards.

Regarding “noncombustion thermal conversion of eligible feedstock,” the author intends this change to create another opportunity for the production of biogas. According to the author’s office, this change allows sanitation agencies and other entities to gasify the digestate that remains after organic material has been converted to biogas through anaerobic digestion. Currently, the author’s office describes, digestate from wastewater treatment plants is trucked to landfill sites, which results in local air pollution. The idea is that production of biogas from the digestate onsite reduces the pollution caused by trucking and produces a useful renewable energy resource. Such digestate could also result from biogas production at a dairy. The local air quality effects of the noncombustion thermal conversion of eligible feedstock are unknown to this analysis.

This bill also defines “renewable gas” as “biogas, biomethane, or any gas that is produced by a process using electricity from an eligible renewable energy resource, including the renewable fraction of grid electricity, or produced directly using solar energy.” It seems this definition of renewable gas could include conventional natural gas that is pulled from the ground (“produced”) by an electric pump powered by solar generation. It is unclear how inclusion of such conventional natural gas in the definition of renewable gas furthers the goals of this bill.

Many parties—mainly environmental organizations of various types—express concern with the biomethane/renewable gas standard. These organizations, while not opposing this bill outright, question the wisdom of requiring the CPUC to mandate procurement of biomethane/renewable gas. This is because, they accurately note, there exist only enough biomethane/renewable gas resources to supply a portion of the state’s natural gas demand. Without successful efforts to reduce demand for natural gas, the investments in renewable gas infrastructure this bill would foster would also be available for use by conventional natural gas. In this way, these organizations are concerned this bill’s renewable gas standard and related provisions may have the perverse effect of vitalizing use of conventional natural gas. And, it would do at great expense, because pipeline interconnections are costly and already subsidized by ratepayers. Better, these groups contend, to establish emissions standards against which various technologies can compete, rather than picking a technological winner—that is, methane, from one source or another.

***RPS and Trucking?*** This bill also includes a provision to require the CPUC to require gas corporations to file applications to implement programs to facilitate fueling to replace diesel-fueled heavy-duty trucks with “near zero emission vehicles.” This provision is not directly related to the renewable portfolio requirements of this bill, except that they support natural gas-related applications which might decline under a 100-percent renewable energy requirement.

***Heavy-duty Truck Pollution.*** Diesel fueled trucks emit large amounts of smog-forming oxides of nitrogen (NO<sub>x</sub>), and toxic soot (also known as particulate matter or PM). According to the ARB, trucks and buses, combined, account for about a third of the statewide emissions of NO<sub>x</sub>, and about 40 percent of diesel PM emissions from all mobile sources.<sup>2</sup> Additionally, the transportation sector accounts for the largest source of GHG emissions in the state (roughly 36 percent), largest contributors to the formation of ozone (80 percent of smog-forming NO<sub>x</sub> emissions), PM 2.5 (fine particulates), diesel PM (90 percent). As it relates to heavy-duty trucking operations, this bill appropriately acknowledges the significant air quality impacts and health risks associated with diesel exhaust from diesel-fueled trucks. These effects are well-established and include: increased risk of lung cancer, premature death, hospitalizations and emergency department visits for exacerbated chronic heart and lung disease, including asthma, increased respiratory symptoms and decreased lung function in children.

***Air Quality and Climate Goals.*** In light of the pollution associated with heavy-duty vehicles, California has adopted several strategies to reduce pollution from

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<sup>2</sup> Facts about Truck and Bus Regulation. Reducing Emissions from Diesel Vehicles. California Air Resources Board, July 2, 2012. <http://www.arb.ca.gov/msprog/onroaddiesel/documents/fsoverview.pdf>

this source, including instituting vehicle emission standards through the Statewide Truck and Bus and Port Drayage Rules, incentivized cleaner trucks with funds from various programs (Proposition 1B, AB 118, cap-and-trade auction revenues, and others) and adopted fuel standards, such as reducing the carbon intensity of fuels through the Low Carbon Fuel Standard. However, over the next 15 years, California will need to build upon its successful efforts to meet critical air quality and climate-related goals, including:

- Attaining federal health-based air quality standards for ozone in 2023 and 2031 in the South Coast and San Joaquin Valley (roughly 70 to 80 percent reduction from today's levels), and fine particulate matter (PM 2.5) standards in the next decade;
- Achieving GHG emission reduction targets of 40 percent below 1990 levels by 2030, with continued progress towards an 80 percent reduction by 2050;
- Minimizing health risk from exposure to toxic air contaminants; and
- Reducing our petroleum use by up to 50 percent by 2030.

***Enter Low-NOx.*** In recognition of the above challenges, ARB has developed a Mobile Source Strategy (May 2016) that for heavy-duty vehicles proposes California continue to lay the groundwork for reducing emissions from this source on multiple fronts: cleaner internal combustion engines, renewable fuels, and zero-emission technology. While ARB proposes to deploy more zero-emission technologies across a broad spectrum of sources, including targeted truck applications, ARB also proposes that the cleaner combustion technologies that are effectively 90 percent cleaner than today's current standards with clean, renewable fuels for heavy-duty trucks will provide the bulk of the smog-forming NOx reductions needed to meet the air quality standards for 2031. ARB has adopted an optional low-NOx emission standard that establishes a certification pathway for a new generation of requirements for heavy-duty engines that meet standards between 50 percent and 90 percent lower than current model year 2010 engine standards. A low-NOx natural gas 8.9 liter engine by Cummins has already been certified to the optional 0.02 grams per brake horsepower hour (g/bhp-hr). These efforts are laying the groundwork for a California low-NOx engine standard. However, because out-of-state heavy-duty vehicles are not covered by the California new engine emission standards, timely federal action to implement a national low-NOx performance standard is necessary to meet the ozone attainment goals. (Unfortunately, the current federal climate raises many doubts about the viability of timely federal action.)

Nonetheless, this bill's focus on low-NOx vehicles utilizing renewable natural gas fuel is consistent with strategies developed and proposed by the ARB, including those found in the State Mobile Source Strategy (2016), Sustainable Freight Plan

(2016), and others. ARB has particularly focused on this strategy where zero-emission technology may not be commercially available. However, ARB proposes a low-emission diesel fuel standard that enables multiple fuel types to meet the standard, not just renewable natural gas. Furthermore, ARB's Mobile Source Strategy mentions the need to work with other agencies, but doesn't specifically mention working with the CPUC to require gas corporations to provide fueling infrastructure for renewable natural gas. Many environmental organizations raise concerns that the required fueling investments in this bill could derail efforts to move towards zero-emission technology more rapidly. In fact, some are actively involved in current CPUC proceedings related to electrification of heavy-duty vehicles. It seems plausible that the proposed investments in this bill could delay some zero-emission technology. However, based on ARB's proposed strategy continued use of internal combustion engine for heavy-duty trucks is highly likely, through adoption of engine and fuel standards.

***Effect on Ratepayers.*** It is not clear why gas utility ratepayers should pay for renewable natural gas fueling to replace diesel-fueled heavy-duty trucks with "near-zero emission vehicles." Some may argue that this is consistent with electric utility ratepayers paying electrification of the transportation sector, as required under SB 350. One difference is the potential of transportation electrification to facilitate renewable energy integration, a benefit that natural gas fueling does not seem to provide to the natural gas system.

A better option may be to require the CPUC to work with ARB, other agencies and stakeholders to determine if ratepayer subsidy of renewable natural gas fueling is justified. In making such a determination, the CPUC should employ cost-causation rate-design principles. In this way, the CPUC can ensure costs are borne by those who cause them and not shifted onto other ratepayers.

Moreover, private companies that provide natural gas vehicle fuel want to ensure the utility activity never crosses into the customer side of the meter. Clean Energy Fuels points to the limited number of compressed natural gas stations developed by Southern California Gas (SoCalGas) since CPUC decision in 2011, compared to the over 30 stations Clean Energy Fuels has built in the same timeframe.

However, in the 2011 application decision, the CPUC noted there were already some exceptions where SoCalGas was providing services on the customer side of the meter, specifically mentioning TwentyNine Palms SoCalGas CNG installations. Questions of market competition and fairness are best dealt with at the CPUC via a proceeding, guided by legislative direction. Such direction would help ensure thoughtful consideration of the proper role of a regulated monopoly utility in unregulated markets, ratepayer interests and societal benefits.



*With this in mind, the author and committee may wish to amend the bill to authorize the CPUC to consider, but not require, gas corporations to file applications for renewable natural gas fueling, better define available zero-emission vehicles as “commercially available,” allow the ARB to determine the low-NOx standard, and ensure the cost-causation principles are maintained to ensure protections for ratepayers.*

**Prior/Related Legislation**

SB 350 (De Leon, Chapter 547, Statutes of 2015) established the goal of receiving 50 of California’s electricity from eligible renewable energy resources.

SB 2 x1 (Simitian, Chapter 1, Statutes of 2011) required retail sellers of electricity and POUs to procure at least 33 percent of their electricity from renewable resources by 2020.

**FISCAL EFFECT:** Appropriation: No Fiscal Com.: Yes Local: Yes

**SUPPORT:**

350 Sacramento  
8minutenergy Renewables  
California Wind Energy Association  
Clean Energy Fuels, if amended  
First Solar  
Large-Scale Solar Association  
Solar Energy Industries Association  
Westlands Solar Park

**OPPOSITION:**

None received

**ARGUMENTS IN SUPPORT:** According to the author:

California has one of the cleanest economies in the world. Since we passed AB 32 in 2006, we’ve grown our economy faster than the national average while reducing carbon intensity by nearly 40 percent compared to 1990. We’ve also lowered energy bills, improved air quality and created thousands of new, high wage jobs in the clean energy sector.

California already has the most ambitious climate targets in the world and the most aggressive renewable energy targets of any economy of its size. We lead the nation in renewable energy generation, clean tech venture capital investment, patent creation and clean car technology.

In 2015, The Legislature passed SB 350, The Clean Energy and Pollution Reduction Act (De León et al), which set a 50 percent clean energy standard by 2030. That bill also set new requirements for doubling energy efficiency and for wide scale transportation electrification deployment. Senate Bill 32, the Global Warming Solutions Act of 2016 (Pavley), requires the state to reduce overall greenhouse gas emissions by 40 percent by 2030...

California's experience over the last decade offers hard evidence that we can dramatically expand clean energy while also growing our economy and putting people to work. This measure will ensure that California remains the world's clean energy superpower and that we lead the nation in addressing the threat of climate change.

**ARGUMENTS IN OPPOSITION:** None received.

**-- END --**

## STAFF REPORT

AGENDA DATE:	May 15, 2017
TO:	Board of Directors
PREPARED BY:	Richard Engel, Director of Power Resources
SUBJECT:	Community Choice Energy Procurement and Enrollment Update

### BACKGROUND

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RCEA's contractors The Energy Authority and Calpine Energy Solutions have recently been engaged in energy procurement (TEA) and customer enrollment (Calpine) on RCEA's behalf. The following is a brief summary of these key activities.

Important milestones in the months ahead include:

- May 2017 – enroll customers (except Ferndale and net-metered customers with annual true-up dates between June 2017 and January 2018)
- July 2017 – enroll net-metered customers with June and July true-up dates
- October 2017 – begin procurement for calendar year 2018; enroll net-metered customers with August, September and October true-up dates
- January 2018 – set rates for 2018; enroll net-metered customers with November, December and January true-up dates
- Date to be determined – enroll Ferndale customers (pending city council vote and certification of revised Implementation Plan by CPUC)

### Procurement Overview

TEA has been procuring energy (including certified zero-carbon energy), Renewable Energy Credits (RECs), and Resource Adequacy (RA) on RCEA's behalf with RCEA approval (in accordance with RCEA's Energy Risk Management Policy) on each transaction since January. In addition, they supported RCEA staff in developing and negotiating the power purchase agreements (PPAs) RCEA recently executed with Humboldt Redwood Company for biomass power. Transactions completed to date are summarized in Table 1.

Energy – TEA procured initial supply in January. TEA/RCEA will assess in June/July based on realized opt-outs and market conditions whether to purchase additional fixed price supply or to meet residual needs directly from the CAISO daily market.

Renewable Procurement – RCEA is targeting to supply 40% of its electricity needs for 2017 from renewable resources, exceeding PG&E's forecasted renewable level by 5%. Of the forecasted ~180 GWh needed, ~140 GWh have already been procured. The residual need (20 GWh Bucket 1 and 20 GWh Bucket 2) will be filled by DG Fairhaven and/or other renewable resources.

Zero Carbon Power – procurement of zero carbon power (hydro) is complete and will represent 40% of RCEA’s forecasted electric needs.

Resource Adequacy (RA) – procurement through July will be completed Monday. Simultaneously, TEA is in the process of procuring supply for August through December. Most but not all needs will be met to allow the possibility of DG Fairhaven providing RA starting in August.

Figures 1 and 2, from TEA’s April 2017 presentation to the Board, show graphically how procurement is expected to be completed over the remainder of 2017. Note that this plan assumed a 10% opt-out rate; TEA has recently evaluated the better-than-expected opt-out rates to date and is now using an assumed 5% opt-out rate in their planning.

### **Enrollment Overview**

Calpine is enrolling customers on their meter read dates during May, meaning that enrollment will proceed more or less linearly day by day to full enrollment by the end of the month. RCEA staff have access to Calpine’s customer relationship management (CRM) portal, which provides individual and aggregate information on enrolled customers, including energy usage history. We receive daily day-ahead reports from the California Independent System Operator (CAISO) forecasting loads, unit power costs and total power costs each on an hourly basis; the total load and cost in each daily report reflects the steady increase as new customer accounts are enrolled. Figure 3 shows a sample daily CAISO report from the first week of enrollment.

Calpine provides weekly summary reports of customer opt-outs (customers who wish to keep PG&E as their generation provider) and opt-ups (customers who choose our optional 100% renewable energy REpower+ service). As of May 9, total cumulative opt-outs were 2,616 accounts, representing about 3.2% of total load. Our pro forma models have used an assumed 10% opt-out rate, in keeping with opt-out rates at existing CCAs. In the most recent week, opt-outs are down significantly compared to preceding weeks. However, Calpine has advised us that we can expect an additional spike in opt-outs in June when customers will begin receiving bills with line items for RCEA charges. Cumulative opt-ups were at 329 customers as of May 9, representing 0.25% of total load. We intend to increase marketing of our REpower+ service after completing the enrollment period; for now minimizing opt-outs is more critical to program success, and our marketing efforts remain focused on this objective.

### **STAFF RECOMMENDATION:**

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None – this staff report is for Board’s information only.

### **ATTACHMENTS**

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None

**Table 1. Summary of Procurement to Date**

<b>Energy</b>					
<b>Vendor</b>	<b>Resource</b>	<b>Location</b>	<b>Period</b>	<b>Quantity (MWh)</b>	<b>Quantity (MW)</b>
Calpine	HLH Energy	N/A	Oct-17	31,200	75
Calpine	HLH Energy	"	Nov-17	30,000	75
Calpine	HLH Energy	"	Dec-17	30,000	75
Citigroup	HLH & LLH Energy	"	Jun-17	15,200	50
Citigroup	HLH Energy	"	Jul-17	10,000	25
Citigroup	HLH Energy	"	Aug-17	10,800	25
Citigroup	HLH Energy	"	Sep-17	10,000	25
Macquarie	HLH Energy	"	Jun-17	11,138	50
Conoco	HLH & LLH Energy	"	Oct-17	16,400	50
Conoco	HLH & LLH Energy	"	Nov-17	16,050	50
Conoco	HLH & LLH Energy	"	Dec-17	17,200	50
Conoco	HLH Energy	"	Jul-17	20,000	50
Conoco	HLH Energy	"	Aug-17	21,600	50
Conoco	HLH Energy	"	Sep-17	20,000	50
Conoco	HLH & LLH Energy	"	Jul-17	17,200	50
Conoco	HLH & LLH Energy	"	Aug-17	15,600	50
Conoco	HLH & LLH Energy	"	Sep-17	16,000	50
<b>RECs (Category 1)</b>					
<b>Vendor</b>	<b>Resource</b>	<b>Location</b>	<b>Period</b>	<b>Quantity (MWh)</b>	
Blythe Solar	Solar	Riverside County, CA	Feb-Dec 2017	20,000	
<b>RECs (Category 2)</b>					
<b>Vendor</b>	<b>Resource</b>	<b>Location</b>	<b>Period</b>	<b>Quantity (MWh)</b>	
Portland General Elec	Wind	Dayton, WA & Sherman Cnty, OR	May-Dec 2017	70,000	
<b>Local Power</b>					
<b>Vendor</b>	<b>Resource</b>	<b>Location</b>	<b>Period</b>	<b>Quantity (MWh)</b>	
Humboldt Redwood Co.	Biomass	Scotia, CA	Jun-17	3,600	
"	"	"	Jul-17	3,720	
"	"	"	Aug-17	3,720	
"	"	"	Sep-17	3,600	
"	"	"	Oct-17	3,720	
"	"	"	Nov-17	3,605	
"	"	"	Dec-17	3,720	

(Continued next page)

**Table 1. Summary of Procurement to Date (continued)**

<b>Zero Carbon Power</b>					
<b>Vendor</b>	<b>Resource</b>	<b>Location</b>	<b>Period</b>	<b>Quantity (MWh)</b>	
Morgan Stanley	Hydro	Columbia River Basin	May-Oct 2017	135,000	
Powerex	Hydro	Columbia River Basin	May-Dec 2017	50,000	
<b>Resource Adequacy (RA)</b>					
<b>Vendor</b>	<b>Resource</b>	<b>Location</b>	<b>Period</b>		<b>Quantity (MW)</b>
Regents of Univ of CA	Solar	Coalinga, CA	May-17		44
Shell	Hydro	Yuba County, CA	May-17		64
NextEra	Nat Gas Turbine - Panoche	Fresno County, CA	Jun-17		4
NextEra	Nat Gas Turbine - Malaga	Fresno, CA	Jun-17		8
NextEra	Nat Gas Combined Cycle	Lodi, CA	Jun-17		30
Shell	Hydro	Yuba County, CA	Jun-17		5
"	"	"	Jun-17		15
Regents of Univ of CA	Solar	Coalinga, CA	Jun-17		45
Nextera	Nat Gas Combined Cycle	Tupman, CA	Jul-17		22
"	"	"	Aug-17		1
"	"	"	Sep-17		6
"	"	"	Oct-17		15
"	"	"	Nov-17		42
"	"	"	Dec-17		54
Dynegy	Combined Cycle	Moss Landing, CA	Jul-17		18
"	"	"	Aug-17		18
"	"	"	Sep-17		18
"	"	"	Oct-17		18
"	"	"	Nov-17		18
"	"	"	Dec-17		18

## Peak Hour (heavy load hours) Net Position w/ 5MW Biomass, 10% Opt-Outs & Proposed Hedges

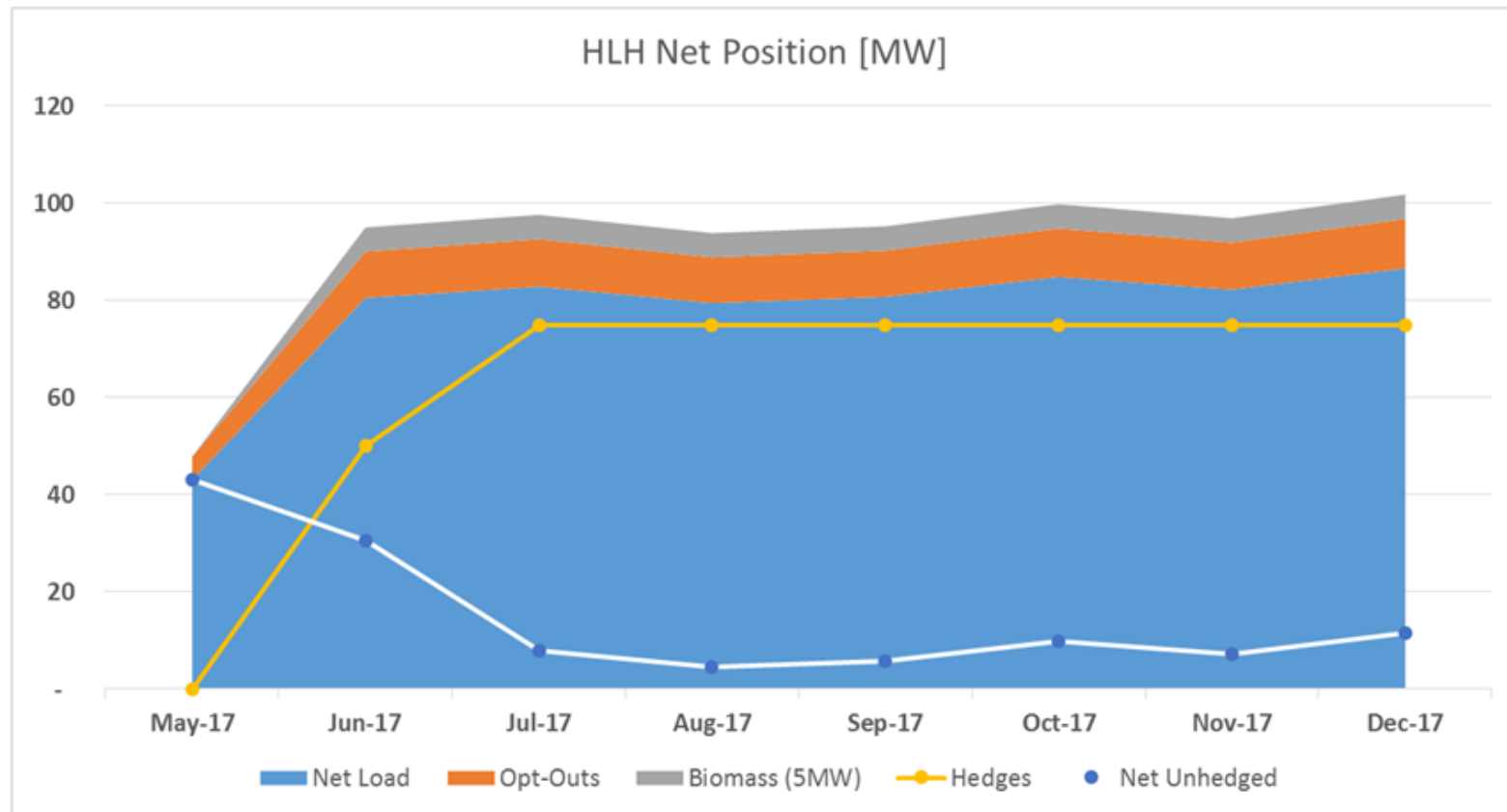


Figure 1. Heavy Load Hours net position

## Off-Peak Hour (light load hours) Net Position w/ 5MW Biomass, 10% Opt-Outs & Proposed Hedges

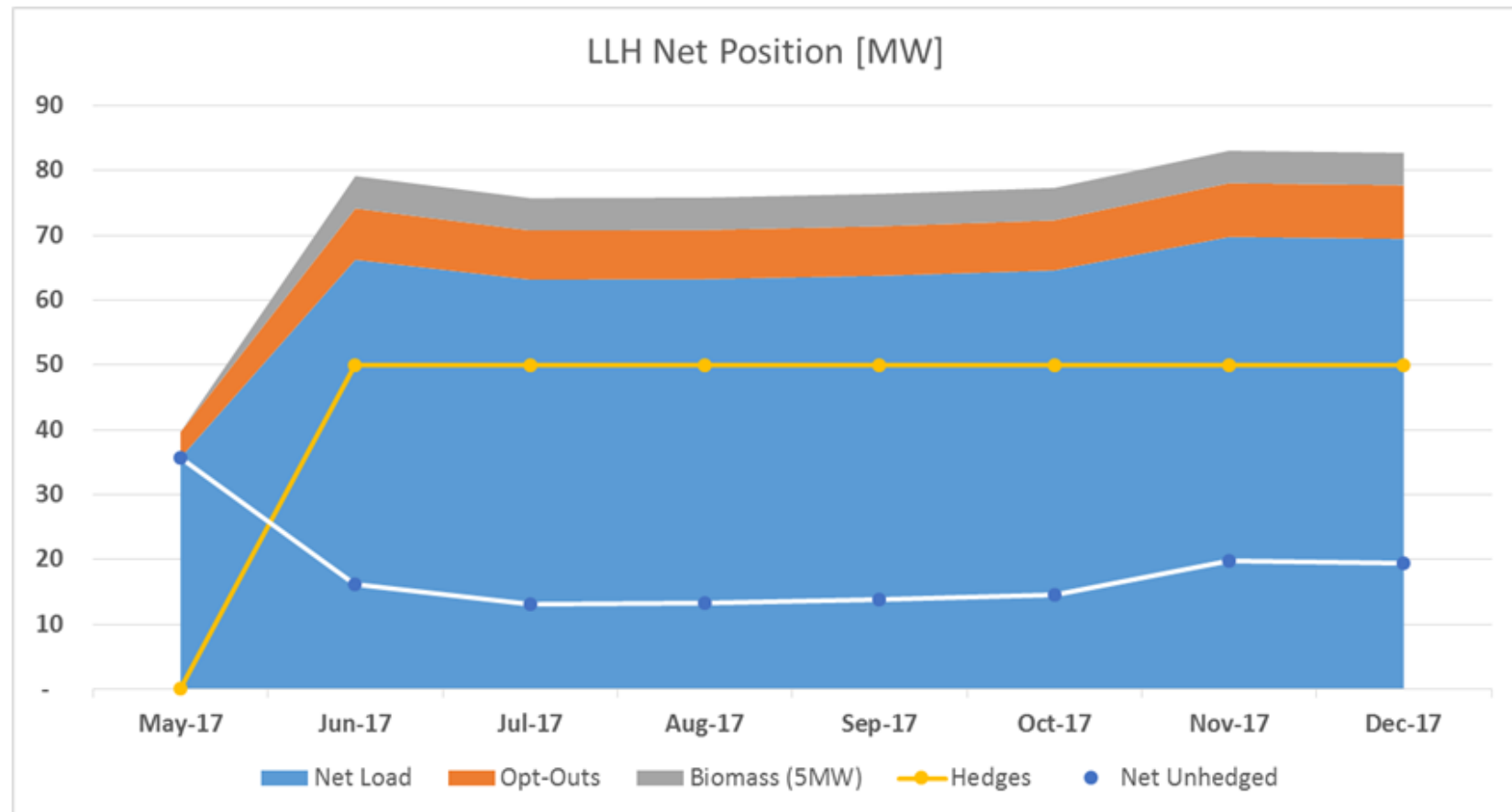


Figure 2. Light Load Hours net position



Fri, May 05, 2017

## RCEA End of Day Report

### RCEA Day Ahead Load Summary

Pricing Point	DLAP_PGAE_TEAH
Total Daily Load	354.1 MWh
Total DA Cost/Credit	12,621.27 \$
Average LMP	35.05 \$
Average OnPeak LMP	37.44 \$
Average OffPeak LMP	30.29 \$

HE	DAM LMP (\$/MWh)	Load (MWh)	DA Cost (\$)
1	31.87	12.1	386.93
2	28.64	11.4	325.29
3	26.04	10.9	284.40
4	25.47	10.7	273.33
5	26.56	10.8	286.62
6	38.00	11.5	435.06
7	42.47	12.9	546.14
8	35.69	14.1	504.70
9	25.89	14.9	384.43
10	25.29	15.7	396.27
11	23.66	16.3	385.21
12	23.51	16.6	390.34
13	24.59	16.8	411.96
14	26.40	16.9	446.19
15	30.67	16.8	515.87
16	32.82	16.6	545.44
17	31.82	16.4	523.11
18	39.21	16.3	638.41
19	51.08	16.1	820.84
20	80.01	16.5	1,319.42
21	59.53	17.5	1,042.90
22	46.32	17.1	791.15
23	34.57	15.5	536.16
24	31.15	13.8	431.10
TOTALS		354.1	12,621.27

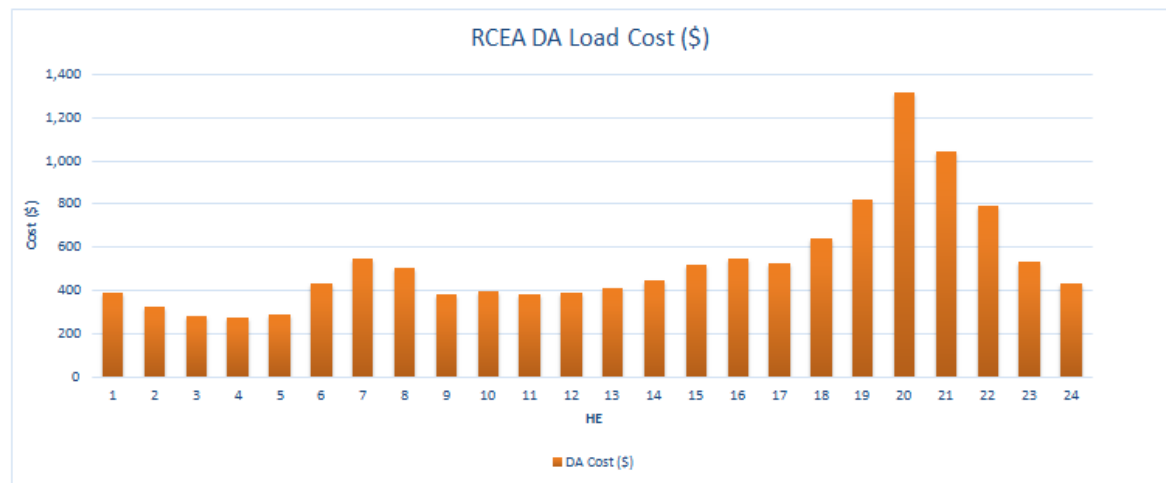
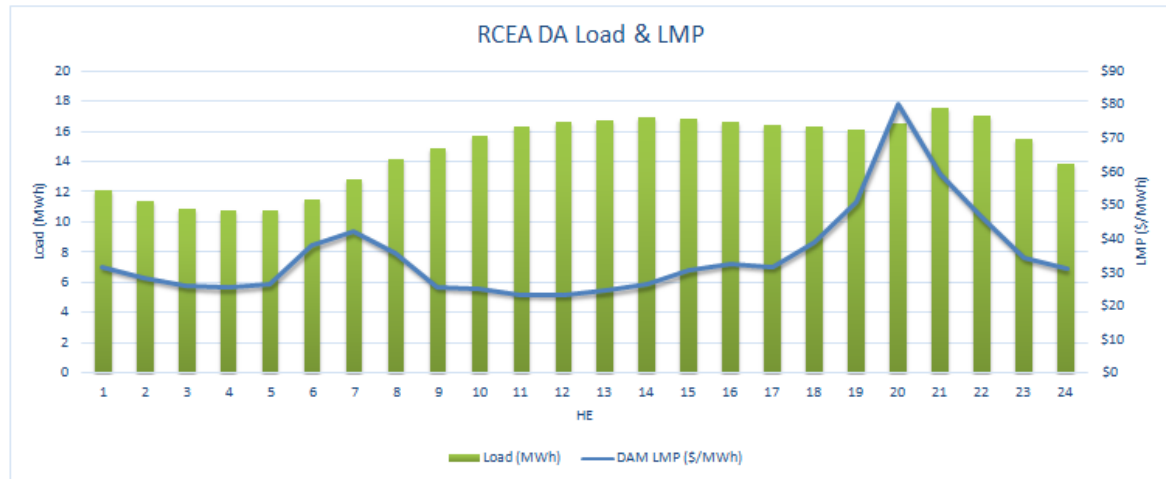


Figure 3. Sample CAISO end-of-day report